



Agency of Agriculture, Food & Markets

116 State Street

Montpelier, VT 05620-2901

www.Agriculture.Vermont.gov

Written and Electronic Public Comments Received Regarding First Draft RAPs
10/20/2015 – 12/21/2015

For more information, please visit <http://agriculture.vermont.gov/water-quality/regulations/rap> or contact the Vermont Agency of Agriculture, Food and Markets at (802) 828-3478.

Additional public comment on this RAPs draft should be submitted to AGR.RAP@vermont.gov

From: [Annie Claghorn And Catlin Fox](#)
To: [AGR - RAP](#)
Subject: Comments on draft RAP
Date: Thursday, December 17, 2015 9:31:28 AM

Dear Vt. agency of Ag.,

Our comments concern the provision in the draft plan about field stacking manure. It is our opinion that if manure is stacked in a dry, well drained location, far from open water, ditches, wetlands, etc., then there is no need to move it annually.

Also, if one stacks winter manure, composts it, and spreads it in the fall, then the requirement to move it before 180 days is up makes no sense. We stack our winter manure on pads designed by NRCS, compost it over the summer, and spread it in the fall. We've done it for years with no ill effects.

It seems to us there perhaps could be some sort of incentive program to convert crop land to sod. We are a grazing farm, and to us permanent sod for hay or pasture is very utilitarian and a beautiful thing to behold.

We've heard that there is a phosphorous component to roundup. This perhaps should be looked into and addressed.

Respectfully, Catlin Fox and Annie Claghorn

Sent from my iPad

From: [Blue Spruce Farm](#)
To: [AGR - RAP](#)
Subject: Blue Spruce Farm Comments
Date: Friday, November 20, 2015 3:32:56 PM
Attachments: [Blue Spruce RAP Comments 11-2015.pdf](#)

From: matthewmaxon@gmail.com on behalf of [Matthew Maxon](#)
To: [AGR - RAP](#)
Subject: 2015 UN year of the Soil
Date: Wednesday, December 16, 2015 6:34:47 PM

You guys are proposing the legislation of hyper-complex systems (i.e. nature) and legislating how farmers ought to work with that system. No small proposal.

If you want to improve water quality, we must approach the solution with holistic management. A holistic approach will **ensure that the ecology, economy and people** who interact with the soil and waterways **are all given equal voice.** .

I am a huge proponent of keeping soil as high up on the hill as possible. Really simple strategies exist to help us with this type of restructuring of agriculture. **Restructuring agriculture is perhaps our most important task if we are to address climate change and the future of humanity.**

We are losing soil that is washed into our rivers at an alarming rate -- this must stop.

However, I strongly urge you to seek the council of someone who has extensive experience re-designing farms and broad acreage.

The most accomplished person I know of for this task is Darren Doherty founder of Reagrarians. [Please, look at his CV](#) and decide for yourself who might be more qualified to guide Vermont in this process of ensuring that the ecology of this great state is protected.

If done correctly, we will be a world wide destination for people to learn how to address the failings of agricultural's current paradigm.

In summary, I agree with the need for change in agriculture. But I urge that we seek the best council for this, namely. The Reagrarians and perhaps some others too. Locally, Abe Collins is a great resource for this type of redesign as well.

Ask yourself: Do we have the consent of the farmers? If not, then ultimately, this somewhat myopic, fixing of a broken spoke in the wheel, is doomed to fail. The people must be on board.

Thanks for your consideration,
Matt Pich-Maxon

From: [LISA](#)
To: [AGR - RAP](#)
Subject: Address Change
Date: Wednesday, November 11, 2015 7:40:39 AM

To Whom it may concern:

Please note, I am receiving mailings from you with the incorrect name on them.

Currently you are sending correspondence to:

Mark & Lisa **Choiniere**

246 Choquette Road

Enosburg Falls, VT 05450

The correct name should be:

Mark & Lisa **Choquette**

246 Choquette Road

Enosburg Falls, VT 05450

Thank you for your attention to this matter.

Sincerely,

Lisa Choquette

From: [Katharine Hikel](#)
To: [AGR - RAP: miyantach@hotmail.com](mailto:miyantach@hotmail.com)
Subject: Ag practices comment
Date: Wednesday, December 2, 2015 10:09:53 PM

One item that should be included is to require farmers or anyone using common and widespread, persistent pesticides and herbicides - Roundup/glyphosate; 2,4D eg - to pay for well-water tests for these chemicals on all properties within 1 mile of the application sites, on a yearly basis.

That would initiate a shared-risk model that would keep Vermont safe and ahead of the pack!

Mike, thanks for posting this. Your updates are much appreciated.

My best,
Katharine Hikel, MD
350 Tyler Bridge Road
Hinesburg VT 05461

Draft Required Agricultural Practices Comment Period

MIKE YANTACHKA, MIYANTACH@HOTMAIL.COM, STATE REPRESENTATIVE, CHITTENDEN-4-1

The Vermont Agency of Agriculture, Food, and Markets (VAAFAM) was directed by the Legislature to draft the Required Agricultural Practices (RAPs) pursuant to Act 64, the Clean Water Bill. The Agency has released a draft copy of the Required Agricultural Practices for a period of public comment which will run through December 18, 2015. You can submit comments in writing and/or attend a public meeting (listed below). Please note this is a preliminary draft and that the final draft will have a formal comment period. The draft and other information can be found at <http://agriculture.vermont.gov/water-quality/regulations/rap>.

You can mail your comments to:

Chuck Ross, Secretary of the Vermont Agency of Agriculture, Food, and Markets
116 State Street
Montpelier, VT 05620

You can also send them via email to AGR.RAP@vermont.gov.

Public hearings:

12/3 White River Junction- Hotel Coolidge, 39 S Main St, 9am-11am
12/3 Brattleboro- Fraternal Order of the Eagles, 54 Chickering Drive, 2pm-4pm
12/8 Saint Johnsbury- Comfort Inn and Suites, 703 Route 5 South, 9am-11am
12/8 Newport- Eastside Restaurant, 47 Landing St # 3, 2pm-4pm
12/10 Montpelier- Room 11 @ Vermont State House, 9am-11am
12/10 Randolph- Chandler Music Hall, 71 Main St 2pm-4pm

[EMAIL AUTHOR](#)

[REPLY TO FORUM](#)

From: [Larry Hamilton](#)
To: [AGR - RAP: Sierra Club - Vermont Chapter](#)
Subject: Agriculture and water quality
Date: Monday, December 14, 2015 4:38:01 PM

Dear Secretary Ross:

Count this citizen, voter, as one favoring fair but strict and enforceable rules governing farm practices that negatively impact water quality in Vermont. I am a supporter of farming as a desirable and needed land use, if it is done sustainably and with minimal negative effects on other natural resources. Local food production and consumption is high on my list. I carry a car bumper sticker "No Farms---No Food". But for too long we have been allowing farmers to escape their obligations to our land and waters.

Even the proposed changes lack some strong measures. For instance, buffer strip width is minimal at 25 ft. And it provides for harvesting of the vegetation in it, without the qualifier of maintaining all the functions it provides. These strips are essential to water quality and to wildlife. Any harvesting must be done with real controls over "how".

This is a step forward, and I trust you and Department will not retreat from what is proposed as a start toward clean water.

Sincerely

--

Professor Lawrence S. Hamilton
Senior Advisor
IUCN World Commission on Protected Areas
Editor Mountain Protected Areas UPDATE
342 Bittersweet Lane, Charlotte, VT 05445 USA

From: [AGR - RAP](#)
To: [AGR - RAP](#)
Subject: Automatic reply: comments on Draft RAP
Date: Tuesday, December 15, 2015 9:21:49 AM

Thank you for your public comment.

The Agency will seriously consider all comments received during this pre-filing period, though there may be no formal response to comments received.

For additional information, please visit our water quality webpage:

<http://agriculture.vermont.gov/water-quality/regulations/rap>

From: [Polly Smith](#)
To: [AGR - RAP](#)
Subject: Clean Water act
Date: Monday, December 7, 2015 1:44:11 PM

I am writing to you to encourage you to change the number of horses on what would be considered a small farm from 15 to 30. Why should you allow the cattle people 30 cows and 30 calves. You will drive many horse people out of the state with the small number that you have given us.

Horse people spend a great deal of money in this state. Please reconsider this number that you have arbitrarily picked.

Polly Smith
Little Brook Farm
www.littlebrookfarmmorgans.com
lbfvaquero@icloud.com

From: [William Magnus](#)
To: [AGR - RAP](#)
Subject: Comment - Tile Drainage
Date: Monday, November 30, 2015 7:19:42 PM

Considering tile drainage is proposed to be acceptable until 2018 seems counter intuitive to our efforts to save the lake. It was my understanding from an engineer it takes 7 feet of soil to cleanse water percolating through it. True or not it seems to me from my observations, fields where drainage is targeted have more than likely never been productive or less so than optimal. Now to get in under the wire there is a tremendous push to get all fields tiled before the ax falls. Knowing, from our common sense, this is a direct funnel of excess fertilizers, pesticides and micro organisms to the lake wouldn't it be prudent to install a moratorium till we know this is not compounding our lake/water shed problem. Taxpayers, I suspect, are helping the farmers through subsidies to put the tile drainage in, shouldn't we have the benefit of knowing that we are not compounding the problem? What is the benefit of continuing the process till 2018?

--



Best Regards,

Bill Magnus, Broker, [CRS](#), [ABR](#), [SRS](#), [GREEN](#), e-PRO

Call/Text 802-363-5000

Mobile URL: <http://app.kw.com/KW2LYFPDU>

KWVERMONT-KELLERWILLIAMS, REALTY

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A Veteran Helping Veterans

Vermont Consumer Information Disclosure

Unless you have **signed** a contract (not a 'Disclosure') for **KW**Vermont to be your representative, keep your personal information confidential. Ask me to explain.

From: [Owczarski, Danielle](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Friday, December 18, 2015 11:01:10 AM
Attachments: [Summary of Comments on Required Agricultural Practices Pregulations For The Agricultural Non-point Source Pollution Control Program_Owczarski.pdf](#)

Comments are on page 13. Good luck!

Danielle Owczarski, Watershed Coordinator

Vermont Department of Environmental Conservation

1 National Life Drive, Main 2

Montpelier, Vermont 05620-3522

Danielle.Owczarski@vermont.gov

802-490-6176



VERMONT DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
WATERSHED
MANAGEMENT DIVISION
MONITORING, ASSESSMENT &
PLANNING PROGRAM

From: [Steve Hall](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Thursday, December 17, 2015 12:39:46 PM

To the Agency of Agriculture,

I am a visitor of Vermont from Massachusetts and a small farmer. Farmers that do not spread synthetic fertilizer, use growth-hormone, or use pesticide or herbicide are the type of farmers that are regenerating the environment and sequestering carbon in the ground by timed grazing of pastures. Each paddock has a different amount of feed on it depending on weather and location. Telling farmers how to graze land is wrong and shows a lack of understanding by government on the techniques and art of grazing efficiently. I look to Vermont as leading the way for the modern farmer; not tying the hands of innovation so that large companies can continue to dominate with sub par food. Please allow small/medium sized graziers to do what they do best; produce the best most nutritious food, heal the land, and keep consumer's spending local.

--

Stephen J. Hall
Stevehall829@gmail.com

(978) 996-9675

From: [Kelly, John T CIV PORTS, 982](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Thursday, December 17, 2015 5:51:50 AM

To the Agency of Agriculture:

The proposed Required Agricultural Practices (RAPs) rules in Vermont are going about it all wrong and will have many unintended consequences that are destructive to small farms and local agriculture without solving the water quality issues.

It is fundamentally wrong to be changing the definition of a small farm. The small farms under the old definition are not the cause of the water quality problems. The threshold between medium and small farms should not be lowered.

Farms that are not spreading manure, fertilizer, pesticides nor herbicides should be completely exempt from these rules. They are not contributing to the problem. In fact, farms like ours are the solution. Our land filters the air and water, cleaning it and making up for others. The added paperwork the RAPs will create are an unnecessary and undue burden for us.

RAP should not be telling farmers how to graze their livestock. That is the farmer's business and will vary with many conditions that are outside the scope of rules handed down by bureaucrats and legislation. Some times a farm needs to do mob grazing, sometimes light grazing, depending on the goals for the paddock.

Inspectors and any other government officials going farm to farm are a prime vector of disease. The RAPs are going to create problems by transmitting disease from farm to farm. Inspectors should be required to take maximum biosecurity precautions at their cost which means completely new clothing, boots and equipment at each farm, disposable coveralls changed between each farm, vehicles parked off farm, vehicles washed between each farm including tires sanitized. Biosecurity is very serious and an event can wipe out a farm.

The RAP rules are a serious overextension of government that will be an onerous burden on small farms driving many out of business, making it less profitable for those who remain, destroying the farming future for the next generation and driving further development of farm land as farms close. The RAP rules are destructive to Vermont's food sovereignty by destroying local farm production.

Thanks
John Kelly

From: [Walter Jeffries](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Wednesday, December 16, 2015 3:49:19 PM

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Sincerely,

Walter Jeffries
Sugar Mountain Farm LLC
252 Riddle Pond Road
West Topsham, VT 05086
(802) 439-6462
Pastured Pigs in Vermont
<http://SugarMtnFarm.com>

http://agriculture.vermont.gov/water-quality/regulations/rap?utm_source=12%2F1%2F15+-+Finale+recap%2C+YEA%2C+Act+Trng&utm_campaign=4-14-15+Email+Update+-+FTTS+Recap&utm_medium=email

From: [robert goodell](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Monday, December 14, 2015 1:04:56 PM

I am concerned about the fee to farm it is not fair that the mid and large farms are the only ones that have to pay it should be all farms as the small farms are part of the problem too . and they should pay their fair share

It should be on a sliding scale , the easiest way to do this is so much per cow based on the annual permitted cow numbers a starting point in my opinion would be \$ 2.00 per cow.

I also think that it is probably not so much the large farms that are the biggest problem as they have lfo's to follow . if you are going to charge a fee than everybody should have to pay something

It is also my prediction that these new regulations will cause a reduction in the number of farms by 10-15 % in the next 2 years is this what you want! I do not think so.

Robert goodell Westminster vt.

From: [Kathy Callan-Rondeau](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Friday, December 4, 2015 9:11:09 AM

As a horse owner of 3 equines, I am not effected by these changes HOWEVER, I fail to see why the regulations are different for cows and horses. Why is a farm a small farm with those regulations for 30 cows plus calves = 60 yet the number of horses is 15 ? This seems very unfair. I would suggest that you seriously reconsider and make the number of horses equal to the number of cows for the same regulations.

Sincerely,
Kathy Callan-Rondeau
Reading, VT

From: [Peter Burmeister](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Tuesday, December 1, 2015 5:31:16 PM

From Times Argus letter to the editor Dec. 1 2015. Please contact me if you would like to discuss my concerns in more detail. I will happy to meet with the appropriate person(s).

Peter Burmeister
Burelli Farm
Certified Organic, government inspected beef, pork and poultry
269 Burelli Farm Drive
Berlin, VT 05602
(802) 595-2572
www.burellifarm.com

Agency overreach

December 01,2015

[Email Article](#)

[Print Article](#)

The Vermont Agency of Agriculture, Food and Markets has prepared a series of “draft required agricultural practices” designed to help reduce water pollution due to agricultural runoff.

Currently the required practices are the topic of a series of hearings being held around the state in order to solicit public comment before they go into effect.

The new practices involve registration of all the farms in the state, followed by

inspections to ensure compliance.

This is a huge overreach by the Agency of Agriculture.

With 7,338 farms in Vermont, comprising more than 1.25 million acres, according to the most recent USDA census, the agency would need to field an entire army in what would ultimately be a futile attempt at enforcement.

An inspection on any given day will not ensure that within hours the practices are not being breached.

Considering the impending budget deficit, it is highly unlikely this incredibly costly project will actually go into effect as designed. And if it does, there will be widespread opposition and open bypassing of these regs by many of the state's farmers.

And what are the ramifications if a farmer is found not in compliance? Fines? And if they aren't paid, then what? Jail? Shall we start arresting farmers?

We all want clean water, but not at a

phenomenal drain of dollars and sense.

Agricultural runoff does pollute our waterways when farms abut streams and lakes. The majority of the pollution is the result of the vast amounts of liquid manure being spread by a relatively few large dairy farms.

In recent days I have observed several instances of this practice on fields bordering various branches of the Winooski, which we all know drains directly into Lake Champlain. In two instances, the tankers spreading their loads were literally within a couple of yards of the riverbank.

A relatively modest effort to curtail the most blatant and obvious polluters would solve almost the entire problem, at a fraction of the cost of the proposed practices, which are designed to target every one of the 7,000-plus farms in the state.

The current proposal is far too ambitious and unwieldy in its scope to accomplish its

goals.

Peter Burmeister

Berlin

Peter Burmeister
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Peter Burmeister
Individual Psychotherapy and Organizational Behavior Consulting
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peter@burellifarm.com

www.burellifarm.com

From: [Champlain Valley Farmer Coalition](#)
To: [AGR - RAP](#)
Cc: [Nathaniel Severy](#); briankemp@shoreham.net; jeff.carter@uvm.edu
Subject: Comment Concerning Draft RAPs
Date: Wednesday, November 25, 2015 5:44:34 AM
Attachments: [RAP Comments_Nov2015.pdf](#)

The Champlain Valley Farmer Coalition appreciates the opportunity to comment on the first draft of the Required Agricultural Practices. Please find our comments attached.

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<!--[if !vml]--><!--[endif]-->

Champlain Valley Farmer Coalition Inc.

Farmers Working Together for a Clean Lake Champlain & Thriving Agriculture in Vermont

23 Pond Lane, Suite 300 | Middlebury, VT 05753

(802) 388-4969 x347

info@champlainvalleyfarmercoalition.com

www.champlainvalleyfarmercoalition.com

From: [Jacoby-Stevenson Family](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Thursday, November 19, 2015 3:34:34 PM

Hi,

I am a small farmer in Castleton VT, been farming here for 12 years since we finished college. We own 13 acres but currently manage about 35 total including free rented hay ground. We grow 5 acres of produce, sell raw milk from 4 cows, 2 sows and feed out 8 feeder pigs for retail, 60 layer flock, and a 300 tap sugaring operation.

I find Raps confusing and hard to understand. I find it unrealistic to lump all small farmers together. I feel field stacking manure for only 180 days per location (only once in four years) unrealistic for small farmers. We have always stacked Dec 15-April 1 but wheelbarrowing to a new location every year on limited barnyard space does not make sense, and composting heavy bedding takes longer than 180 days. Also completing a nutrient management plan is a burden and expense I do not need. We are good farmers who used good rotations and cover crops. We have no surface water on our farm. Raps makes it seem like all farmers are polluters. Small farms are the backbone and future of this state; many are young with families just trying to scratch out a living. Please don't overburden us.

Thanks

Concerned Farmer

From: [Philip Ackerman-Leist](#)
To: [AGR - RAP](#)
Subject: Comment Concerning Draft RAPs
Date: Friday, December 18, 2015 10:35:21 PM

As a “small farmer” by definition and a grass-farmer by choice, as co-chair of the Poultney-Mettowee NRCD, and as an educator and advocate for beginning farmers, I simultaneously appreciate the intent and the amount of work that underlies the draft RAPs even as I shake my head at the diverse unintended consequences of the RAPs in their current form. While the ecological goals are admirable and generally appropriate, the draft RAPs will almost certainly impede the continuation and the development of ecological innovation on our state’s small farms, while concurrently making it extremely difficult for new farmers to establish and build out ecologically-oriented operations that can sustain themselves financially, much less increase their financial solvency over time.

In general, many of my responses and concerns are already covered by the concerns put forward from Rural Vermont. I think their analysis is, overall, exceptionally astute and constructive, and I hope that their critiques and suggestions will be examined carefully.

I have made editorial notes in my copy of the RAPs, but instead of sharing them at this time, I would prefer to offer a different kind of suggestion to VAAFMM, one that might make a critical difference for our current and forthcoming farmers.

The RAPs have been developed thus far with particular attention to ecological impacts, but I have not seen evidence of the same kind of careful attention to the likely economic outcomes of these draft regulations. Therefore, before things go any further, I would strongly urge the VAAFMM to take 20-30 different farms from around the state that will fall under the new definition of “small farm” and break them into two categories: well-established and fiscally sound operations and new farm operations. I would suggest that VAAFMM (perhaps with the help of UVM Extension and, of course, the farmers themselves) do a rapid but detailed economic analysis of 1) what fiscal resources and estimated timeframe it will take for the **established farms** to *transition* into compliance with current ownership and 2) what capital outlay it will take for the **less-established and financially-strapped new farmers** to *transition* into compliance. If such an analysis is not viable within the given timeframe, then select 20-30 farms to participate in a one-day “RAP-hack” to get at the numbers on the various required practices as they relate to their specific farms. Until the likely economic impacts are really understood, the prospects of the policy are far from clear.

In my view, the primary problems posed by the draft RAPs can be summarized as follows:

- <!--[if !supportLists]-->•<!--[endif]-->A lack of clear understanding of the economic impacts of the RAPs for existing and new farmers
- <!--[if !supportLists]-->•<!--[endif]-->The absence of a “transitional model” (even transitional language) that gives farmers 5-10 years to implement challenging and costly modifications

• The unintentional squelching of viable economic opportunity for new farmers who must grow their farms and their capital simultaneously

• The impedance of innovation on our small farms, often the hotbeds of new ideas and approaches, simply due to the fact that “best practices” will begin to supersede what are actually the “wisest practices” for these small and diverse entities in our landscape.

I fear that a rush to the goal line at this point may mean the diminishment both of the dream and the reality of the experimental small farm in Vermont for those of lesser means—and perhaps an intensified gentrification of our cherished landscape.

Sincerely,

Philip Ackerman-Leist

From: [April Weeks](#)
To: [AGR - RAP](#)
Subject: Comment on Act 64
Date: Friday, December 18, 2015 1:11:53 PM

December 18, 2015

To Whom it May Concern,

I am writing to express my deep concern and disappointment with Act 64. While everyone can surely agree that water quality is valuable and important, this law is punitive, sweeping, and misdirected. At the heart of my concerns are questions about the fundamental assumptions of the lawmakers regarding what ecology means.

Vermont is one of the few states remaining that has any hope of retaining its agricultural heart. Because of the challenges of topography and climate, its farms have remained small, diverse, and family-owned. The Lake Champlain area may be an exception. However, because of the challenges of topography, climate, economics, infrastructure, centralized markets, and burdensome regulation, small, diverse, and family-owned farms and homesteads are marginal and marginalized. Most of us are barely hanging on. Many of us are gone.

When you drive out the medium and small farms and homesteads, what will this state be? A wilderness? A ski resort for the rich? A colony of second homes? Or, a conglomerate of mega farms that can afford thousands in annual registration fees and a staff member dedicated solely to legal hassle? Or, a lot of land which becomes available to developers? In the first instances, you may have water quality, but you will have an empty land. In the second, you will have vast monocrop and confinement farms, and they may conform to the letter of the law, but it surely will not improve the ecology or the economy of this state. In the third instance, you will only have asphalt devastation. If you do not believe it can happen here, take a road trip through California, Carolina, New Jersey. There are an awful lot of worse things that can be done with good land than a network of medium and small farms and homesteads.

Ecology is an art that can only be created in practice. It is a co-operation between humans, animals, plants and minerals. We belong in it. We cannot see it as something separate and isolate, to be enjoyed only on vacation, while we go on with our plastic and concrete daily lives. Much as we hear from the legislature about the need to increase the state's population and available work, you should surely know, this is why people come to this state. They come looking for good land, good laws supporting small farms, interdependence with their neighbors, and independence from Big Brother's ham-handed meddling.

There is no farm that is just like any other. There is no watershed like any other. While farming previously in Massachusetts, I have tried to follow NRCS rules and university recommendations, and found them written one-size-fits-all, for Iowa's flat forty-foot loam. They do not have the flexibility to fit into the pattern of a particular land; that can only be proved out, with attention and time. Whenever I have interacted with someone appointed to enforce these sorts of rules, such as an NRCS agent, that person has proven to be a pencil-pushing bureaucrat who has never built a fence, or hauled a heavy load on a sidehill, or done the daily work of manure handling and harvest. Accordingly, their recommendations and requirements have been simply impossible – just plain not possible. It may be that I have been simply unfortunate in which agents I have met. But any law structured to give that sort of power to agents runs the inevitable risk of putting that power in the hands of a stupid person. I am not the first farmer to turn down NRCS grants and cost-shares on the grounds that they are much more expensive and exhausting than doing the work alone. So I am deeply troubled by the notion of a Vermont bureaucrat issuing orders for me to apply to a Federal bureaucrat about a fertility cycle that already fits into the surrounding ecology, because of its small scale. The world is not sanitary. If you wish it to appear so, move to one of those states that is already paved over.

The role of the Agency of Agriculture should be to represent the interests of the farmers, not to assume they are criminals and must be threatened and scolded and supervised. If you have a problem with the thousand-cow dairy near Lake Champlain, take it out on them, not on the thirty-cow dairy in the hills, let alone the five cow homestead. If you wish to offer education, that's great. Don't follow it up with the billyclub of inspection and certification and

registration fees and punitive assaults. The medium and small farms and homesteads are not on firm enough financial footing to absorb the weight of the State slamming down on their backs.

Sincerely,

April Weeks
PO Box 151
Marlboro, VT 05344

From: bruceki@bigpig.net
To: [AGR - RAP](#)
Cc: [Walter Jeffries](#)
Subject: Comment on draft RAP
Date: Friday, December 18, 2015 1:04:17 PM

I have used google maps and a local farm, sugar mountain farm, in topsham, vt as an example of the potential impact that these regulations will have. You can see that writeup on my blog, at blog.bigpig.net

I'm a small farmer who raises pigs on pasture; my farm is located in washington state. Having reviewed the proposed rules/regulations, what strikes me is that there are no floors for any of the proposals, and the record and bookkeeping requirements basically the same for any size business.

I would suggest that either a gross sales amount be instituted (farms with sales of less than xxx per acre) or size (farms with less than yyy animal units per acre) be added to this to provide a place for micro farms or very expansive (read: likely low impact) to be able to be compliant.

Yes, the department can ignore the smaller farms, but you're going to see a lot of resistance from people who say "I sell tomatoes from my back yard and now I have to do a 590 plan because i compost my coffee grounds!!!" and that public outcry will allow larger farms with more significant impact to escape regulation. Just in sheer numbers, coffee ground farmers are going to be able to lobby, vote and pressure either no regulation or very little. take their concerns off the table and you have a much smaller group affected. This sort of regulatory issue could also be solved by providing boilerplate applications where for smaller farmers they need only pay a small fee and fill out a page or less and be done with the process. yes, they'll grumble about even that, but if it's \$50 or less there isn't much sympathy. "What, you aren't willing to pay \$50 for clean water?"

Another concern is that the buffers are fixed distances that are regardless of property lines. Now if my neighbor digs a ditch on their property I may be required to then change the use of my land to comply with this new use on their land. As an example, if I disagreed with a farms use of their land within 200' of a property line, I could dig a ditch or create a pond or drill a well, and by doing so create the conditions that would require a 200' setback which I could then complain about and get enforced by the RAP regulations. This could be remedied by language allowing approved farm plans to be a defense against that sort of conditions. If I go through the process of making a farm plan, that farm plan, on approval, would then prevent this sort of activity and this would make farm plans more attractive and compliance more attractive to farmers. I'm speaking here primarily to the normal conflict between agricultural use of land and residential use of land, where residential users will move next to a farm because they appreciate the scenery and then do their best to remove the farm because of perceived nuisance issues.

From: [suzanne Long](#)
To: [AGR - RAP](#)
Subject: comment on manure stacking
Date: Friday, December 18, 2015 8:58:16 AM

We have a hoop barn that we make a bedded pack in over the winter and cleanout in the early summer put into a windrow and compost . We have been doing this for the past 10 years with good results, but are limited by space available to do this that is too wet or cuts into cropland as we don't have alot of flat acreage for cropping . It would be a great benefit to continue to use this location yearly but make provisions to limit any minimal runoff by covering the compost with a compost cover or plastic while it is composting and until we spread on our fields. Thank you Tim Sanford

--

Tim Sanford and Suzanne Long ... Luna Bleu Farm
96 Boles Rd (sometimes called Luna Bleu Rd on the web)
South Royalton, VT 05068 ... 802-763-7981
www.lunableufarm.org ... www.facebook.com/lunableufarm

From: [Bruce Shields](#)
To: [AGR - RAP](#)
Cc: lyn.desmarais@gmail.com; [Chris O"Keefe](#)
Subject: Comment regarding draft RAP
Date: Friday, December 18, 2015 10:24:39 AM

Two potential confusions in the Draft Required Agricultural Practices Regulations.

1) The proposal increases rather than resolves uncertainty concerning Maple Sap operation. Suppose the operator of a maple finishing facility leases 200 acres of taps with a Reverse Osmosis concentrator on site. I have no idea whether such an operation would classify as Farm (subject to RAP) or Forest (subject to AMP) or both. That needs to be resolved before the first prosecution is attempted.

2) The mention of viruses seems ambiguous. Sec 2:20 defines Pesticides, which are designed to kill a variety of pests including viruses "except viruses on or in living humans or other animals." Possibly that is meant to exempt medicines from the definition of Pesticide. Sec. 2:27 Wastes then includes viruses as "waste." Since Avian Influenza is spread by wild fowl, some conflict between the waste disposal regulations and the Pesticide regulation appears possible.

Bruce P. Shields
6405 Garfield Rd
Wolcott VT 05680
(802) 888 5165
bshields@pwshift.com

From: [Lucinda Kayhart](#)
To: [AGR - RAP](#)
Subject: comment to proposed RAP
Date: Friday, December 11, 2015 11:25:49 AM

My name is Cindy Kayhart from New Haven. I understand where all this is coming from and where it will hopefully go but....I feel like the man power it is going to take to police this will be tremendous and if it is not policed then how is it fair to the people who do use the RAP? My other comment is that you mentioned addressing concerns by complaints. I wish there was some way to educate the public as to what is accepted and not. As it is right now WCAX uses a video of a nice tractor and liquid spreader, spreading on a nice green hayfield on a sunny day when they talk about the bad condition of the lake. To the general public when they see that now they are going to think the farmer is in violation. It has become very hard to farm, I am pretty confident that our farm will not be in operation very soon, not by choice of occupation but by choice of not being able to be in compliance with everyone, especially financially!
Thank you for your time
Cindy Kayhart

From: [Chris Paterson](#)
To: [AGR - RAP](#)
Subject: comment
Date: Tuesday, December 1, 2015 1:40:52 PM

As the daughter of an organic gentleman farmer who died over 40 years ago, I'm not a farmer, but do eat organic foods and support organic causes. My father also taught us the value of good water and said that some day the water situation would be very critical. Please do your best to ensure fair and safe RAP for all farms: protect our water.
Thank You!

From: [Andrew Bahrenburg](#)
To: [AGR - RAP](#)
Subject: Comments concerning draft RAPs
Date: Friday, December 18, 2015 1:33:40 PM
Attachments: [Rural Vermont Comments on Draft RAPs.pdf](#)

Greetings,

Please find the attached written comments from Rural Vermont concerning the draft RAPs.

Thank you for your attention to these, and we look forward to hearing from you.

Best,
Andrew

--

Andrew Bahrenburg
Organizer & Advocate
Rural Vermont
[\(802\) 223-7222](tel:(802)223-7222)
15 Barre St., Suite 2, Montpelier VT 05602
www.ruralvermont.org

Do you care about real food, real farms, and real change? Support your values by supporting Rural Vermont. [Make your contribution today!](#)

From: [Bob Parsons](#)
To: [AGR - RAP](#)
Subject: Comments concerning draft RAPs
Date: Thursday, December 17, 2015 5:56:38 PM

The proposed regulations are reasonable and seek to allow farms develop plans to meet proposed regulations. I see that One group wants financial incentives. Farms should not need incentive to clean up their act and clean up the state's water and waterways. Besides the state does not have money to provide incentives. And if the state (taxpayers) provide financial incentives to small farms, we need to provide scale equivalent incentives to larger farms.

- bob parsons

--

Bob Parsons
Professor - Extension Ag Economist
University of Vermont Extension/
Department of Community Development and Applied Economics
203 Morrill Hall
Burlington, VT 05405-0106
Phone: 802-656-2109
Fax: 802-656-1423
Email: bob.parsons@uvm.edu

"Extension brings the knowledge gained through research and education to the people who need it most".

"...opportunity only knocks, it doesn't kick the door down to get your attention!" Author unknown.

From: [Drew Slabaugh](#)
To: [AGR - RAP](#)
Subject: Comments Concerning Draft RAPs
Date: Monday, December 21, 2015 5:22:31 PM

I am concerned about how "field stacking manure" is to be regulated by RAPs. We are about 10 acres with a couple cows, a few dozen sheep, three camelids, and two dozen layers. We also have about 1/2 acre in vegetable production. We compost our cow and sheep manure produced in the winter and apply the finished compost to our vegetable gardens in spring and throughout the summer as needed. As I understand it, RAPs would require us to move our compost pile every 180 days and not keep it in the same spot for four years. Which would mean we would need at least 8 sites for making compost. I am concerned not just because of the difficulty in moving the compost pile (it won't always finish composting in 180 days), but because of our small size, we cannot have so many locations for our compost pile. The compost pile is an important part of our farm because it is a way for us to create value from our manure. It is impractical for a small farm such as ours to be moving the compost pile.

--

Drew Slabaugh
ShakeyGround Farm
289 Converse Bay Rd
Charlotte VT 05445
www.shakeygroundfarm.com
cell: (802)377-5127

From: [Jaime Tibbits](#)
To: [AGR - RAP](#)
Subject: Comments concerning draft RAPs
Date: Friday, December 18, 2015 2:14:12 PM

I am writing to express my concern and confusion related to certain portions of the DRAFT RAP's as written.

I am a landowner and sometimes homesteader with 10.1 acres. One of my first points of confusion is around what the definition of a small farm is. Vermont has a tradition of homesteading which often includes multiple species of animals at various stages of development/growth and life on the homestead. I also know of individuals who keep multiple species of "livestock" as pets.

As it is written in the draft RAP's specifically referring to the different level of small farm or what is considered a farm to certify under the draft RAP's, there are assigned numeric values to species of livestock used to determine what size category of farm you fall into. How was this determination made? I am assuming it is based on average manure production per species and unit of animal however manure management varies widely from farm to farm just as the impact on water quality can vary based on that manure management.

Second point to this is it that is very unclear what is the definition of small farm. There are references to sections and subsections that have no clear definition of small farm. Also, if you have over 10 acres of hayed land with no livestock you still must certify? Is this even if you lease the land, does the land not then fall under that farms permit or responsibilities to the RAP's?

I am also very concerned that we are going to lose focus of the bigger picture with these RAP's. There is already MFO and LFO permitting and oversight and existing AAP's that are supposed to be monitored as part of this. On an almost daily basis I see a lack of enforcement on obvious violations of the existing AAP's, how do we expect to increase regulation when we are not regulating the existing violations? Now we want to increase oversight on more farms that are much more diverse, harder to define and often implementing more stringent water quality practices because many of these small farms answer directly to the consumer, unlike wholesalers which many MFO and LFO farms are.

I appreciate living in a state where citizens can have a voice, thank you for taking the time to read my comments and I will await the release of the revised RAP's

Jaime R. Tibbits

From: [Pomykala Farm](#)
To: [AGR - RAP](#)
Subject: Comments concerning draft raps
Date: Tuesday, December 15, 2015 11:02:46 PM

Greetings from Grand Isle, Vt; Here are some concerns that I have with the proposed RAPs

There are no specific definitions of compost or fertilizer vs. manure; or of what quantity of material qualifies as an 'application' of waste/manure. (Section 2)

Will small applications of 'manure' (as with compost in potting mix or as a fertilizer ingredient) qualify as an 'application' of manure that requires farms over 10 acres to become certified? (Section 4.10 d)

If a farm has an ideal site for making compost does the requirement that manure stacks not be in the same place more than once every 4 years mean that compost sites also have to be moved around? Can steps be taken to prevent erosion / leaching, instead of moving the site? (Section 5.2 e.)

Will an NRCS '590' nutrient management plan be required for all farms over 10 acres that apply any amount of 'manure' products? Can a simpler and more useful form of a nutrient management plan be allowed instead? (Section 5.3)

It will be a challenge for farmers to calculate erosion loss using the universal soil loss equation. Is it necessary to ask them to do this, or instead could it be required to adopt practices that reduce erosion, such as using cover crop strips? Even with such practices, it may be difficult to limit erosion to the T value with production of annually tilled, spring-planted crops like most vegetables. Is the expectation that farmers will stop growing vegetables on sloping land? (Section 5.4 b)

The requirement to plant to a cover crop by October 1 in flood plains will make it difficult to grow late season, high-value root crops and leafy greens on many fields. Will exemptions be allowed for some acreage, or can alternative methods of erosion control be allowed instead? (Section 5.4 c)

If 'manure application' is prohibited on soils with P level over 20 ppm, can vegetable farmers with P above that level still use transplants grown in potting soil containing manure-based compost? Can they use fertilizer containing small amounts of processed manures or animal by-products? (Section 5.5 e)

If intermittent waters means water that "may occur periodically and infrequently such as during and immediately following a rain" and a 10-foot perennial buffer is required around these areas, this could mean taking many vegetable fields out of production if strictly interpreted. (Section 5.7)

There is no discussion of nutrient management in high tunnels or greenhouses; will they be exempt from this rule? If not, how will the nutrient management planning requirements apply,

since tunnel soils are typically higher in P than field soils but also are covered which protects against erosion?

Are high tunnels and greenhouses considered to be 'farm structures' and if so do they have to comply with the 50-foot setback from top of stream banks, regardless of their size? (Section 9.0 c)

Sincerely, Bob Pomykala, former President, Vermont Vegetable and Berry Growers Association

****new email address!****

Bob and Jane Pomykala

pomykalafarm@gmail.com

802-372-5157 (home)

802-363-3369 (mobile)

www.pomykalafarm.com

Like us on Facebook!

www.facebook.com/pomykalafarm

From: [Bridget Howrigan Rivet](#)
To: [AGR - RAP](#)
Subject: Comments from Mike Howrigan
Date: Friday, December 18, 2015 4:44:03 PM
Attachments: [MHInput_DraftRAPs_12182015.docx](#)

Sent from Windows Mail

From: [Scott Greene](#)
To: [AGR - RAP](#)
Subject: Comments of RAPs
Date: Friday, December 18, 2015 10:48:20 AM

Dear Secretary Ross,

I offer the following as comments on the RAPs.

I am a long time diversified farmer, a graduate of the Plant and Soil science program at UVM , a former cheese maker, I live on the lake, and am a Vermont environmentalist.

I actively participate in food production and pay specific attention to the trends that effect environmental health and the well-being of people and animals.

Protecting the water quality of the Lake is a very high priority of mine, and I am not afraid to identify dairy animals are hugely significant contributors to biological growth in the lake; in my eyes, the most significant.

I also am very concerned with the entire gamut of pollutants; coliform, antibiotics, estrogen disruptors, benzene, motor oil, and the effluent of industrial production.

To the point, I believe it would be more direct and effective to tailor regulations with Cost considerations as a priority. Regulations should improve practices for demonstrable and significant results. Create enforceable procedures and rules where the most ecological improvement per dollar spent is achieved. For the next Ten years, target the proven top offending practices of Direct and Non point phosphorous agricultural pollution.

For instance

- Scrutinize the significant seepage from areas where a large number of animals aggregate and the manure lagoons adjacent to waterways.
- Scrutinize significant land application of effluent
- Scrutinize significant application of high phos fertilizers regardless of soil analysis.
- Scrutinize uncovered manure piles with more than 100 yards of material.

Prescribe pointed enforcement.

- Create a significant stream quality monitoring system, permanent reporting stations, with paid staff and volunteers, when E coli, N and P are found in excess send individuals up stream to visually scout enforceable violations.
- Employ water quality farm advisors who do drive bys and follow up engagements, advising or otherwise with farmers who from the road are obviously disregarding the rules.
- Enforce cash penalties to existing, and new regulations when improvements are not made. Create a process where the agency can monitor farms with previous infractions.

Beyond the specifics of individual rules and regulation I offer the following:

The Agency's efforts to control Phosphorous pollution should Not:

- Compromise our food sovereignty and food independence, as in requiring all producers to register and pay fees to grow on a small scale. It is a necessity to grow food for ourselves and communities, not a privilege.
- Create cumbersome systems of registration and egalitarian inspection, (inspection should be targeting sectors with proven polluting records).
- Create a process where the agency has the arbitrary authority to enter someone's premises.

The agencies efforts to control pollution Should:

- Enable concerned citizens, the folks who work to protect and improve our environment.

- Create economic opportunity, for instance design and installation of whole farm, waste filtration systems; Manure dewatering and treating the resulting water. Composting under cover.
- Respect the inspection systems in existence, (organic certification regulates pollution).
- Target other offending nutrients and compounds
- Partner the necessary funding to improve on farm infrastructure.

Thank you,

Scott Greene, Orwell, Vermont 802-948-2062

From: [mike bald](#)
To: [AGR - RAP](#)
Subject: comments on Draft RAP
Date: Monday, December 14, 2015 1:17:28 PM
Attachments: [ag_best_practices_nov2015.docx](#)

Comment document attached.
Thank you, please acknowledge.

Mike

--

Mike Bald
Got Weeds?
<http://choosewiselyvt.wordpress.com>
Royalton, VT

From: [Alan & Linda Shelvey](#)
To: [AGR - RAP](#)
Subject: Comments on Draft RAPs
Date: Monday, December 14, 2015 10:50:03 AM
Attachments: [Draft RAP Comments - Shelvey.pdf](#)

Hello -

Attached are comments on the Draft RAPs.

I appreciate the opportunity for comment and also appreciate the way that the Agency has handled the discussions regarding this topic.

I attended two public meetings. It was obvious that the Agency is listening. The second hearing was much more refined and many of the questions asked at the first were covered in the initial presentation at the other.

- Alan Shelvey
Shrewsbury, VT

From: [Don Meals](#)
To: [AGR - RAP](#)
Subject: comments on draft RAPs
Date: Friday, November 20, 2015 3:17:07 PM
Attachments: [Meals comments on draft RAPs November 20.docx](#)

Attached please find my comments on the current draft of the Required Agricultural Practices.

Don Meals
Burlington, VT

From: [Robert Baird](#)
To: [AGR - RAP: Robert Baird](#)
Subject: Comments on draft RAP's
Date: Friday, December 18, 2015 10:19:02 AM
Attachments: [draft RAP commentso.docx](#)

We attended the hearing in Rutland on November 19 and would like to add our written comments on the draft RAP's.

We own a 560 acre livestock and maple farm in Chittenden that has been continuously farmed by our family since 1918. Our 90 acres of tillable land and 30 acres of pasture have historically supported a small dairy operation and until recently a commercial heifer raising business. As we are near retirement, we no longer have livestock year round. Our cropland is presently rented to a neighboring dairy farmer. We use our pastures for grazing dairy heifers during the growing season. Our farm was conserved with the Vermont Land Trust in 1996. In 1999, we were chosen "Conservation Farm of the Year" by Vermont's Natural Resources Conservation Districts and Department of Agriculture. We have always tried to operate our farm in an environmentally sound manner as well as make a profit.

We are looking to the future. Our youngest daughter has recently returned to the farm and we are considering various options to keep our operation financially viable. She is now the fourth generation working on this land, and we have all have concerns about the proposed RAP's.

As we mentioned at the hearing, our home farm has hillside fields, consisting of about 45 tillable acres, that are almost evenly divided by a small year round stream. Much of this land has a slope in excess of 10%. These fields have been in permanent grass since we started managing the farm in the 1970's. We have been spreading liquid manure on these fields since 1981. We have always been careful about how and when we spread. We do not think that we have ever had any significant negative impact on water quality.

The proposed rule that requires a 100 foot buffer for manure spreading on land with slopes in excess of 10% would severely limit our ability to use our land. About half of these fields would fall into that restricted area where we would not be allowed to spread manure, severely limiting our ability to make a living on farmland that the Vt Housing & Conservation Board felt was worth conserving with public money. We would be required to spread the manure at other locations or not allowed to use our liquid manure infrastructure that was designed and built with the assistance of public funds.

This rule does not differentiate the various ways farmland with a 10% slope could be managed for manure application. There is no difference in the buffer whether the land is tilled and exposed every year or if it is in continuous grass. There is no consideration as to whether the land slopes towards the stream or away from it. And it doesn't matter whether the manure is spread in June when the grass is growing or in November when it is dormant. We think this proposed rule should be modified to be much more flexible and reflect different management practices. All of the rules should allow farmers to manage their land in a way that is appropriate to their specific properties.

"One size fits all" regulations do not make sense. There are many different farming methods that take care of the land and protect water quality. RAP rules need to reflect that

and be adaptable and flexible. The rules are often drafted by people who have little experience with working the land. Then it is left up to landowners to comply or get variances/permission. We'd like to cite a personal example:

We have a pasture that has been used by our family for grazing livestock for almost 100 years. Ten years ago our neighbors drilled a well about 15 feet from our pasture boundary. They have a 3 acre lot but said they chose to drill their well next to our pasture because it was the least expensive place to drill. Now we have to get permission from our neighbors to pasture our cattle on our land (Draft RAP's, page 13, section 5.7 c). Where is the protection for the farmland owner's interest in these rules? We strongly feel that sound agricultural activities should be protected from encroaching residential use.

We have always tried to be good stewards of our land. For the past 3 years we have tried to be proactive, by working with NRCS and VACD, trying to sign up for programs to install exclusionary fences and cattle crossing on streams in our pastures. Working unsuccessfully with 3 different staff members of VACD, for the past two years has been extremely frustrating. Ryan Patch knows about this. We think he understands our frustration. Based on this experience, we have concluded that farmers who need financial and/or technical assistance to comply with RAP's should have a single person who advocates for them, helping them get through application process with the complicated government programs with various agencies. Most small farmers don't have the time or resources to deal with the bureaucracy and if there was a single advocate that can help them get through the process, the RAP's, if well written, simple, flexible and fair will not become an excessive burden on small farmers.

We understand the need for rules to protect the waters of the state. We appreciate the opportunity to share our ideas and opinions about the draft RAP's.

Sincerely,

Robert & Bonnie Baird

Baird Farm

65 West Road

N Chittenden, VT 05763

From: [Steve Reynolds Shoreham.net](mailto:Steve.Reynolds@Shoreham.net)
To: [AGR - RAP](#)
Subject: Comments on Draft Required Agricultural Practices
Date: Monday, December 7, 2015 8:38:38 PM

Good evening,

My name is Steve Reynolds, I am a resident of Cornwall, Vermont, and I have an interest in the water quality of Vermont waters. I have two areas of comment that are inter-related.

First, I do not believe that the requirements as set forth in the new RAP's will have a significant impact on improving Vermont's water quality. Specifically, the buffers stipulated are too small to be effective as filtration zones to capture water-borne pollutants and prevent them from entering waterways. Ten feet from a ditch that borders a 30 acre field that gets heavily manured will still allow manure to enter the ditch and proceed downstream. There must be other techniques of controlling runoff than a simple 10-foot buffer, or, 25 foot buffer around permanent waterways. More importantly, in my area (Lemon Fair valley, Otter Creek valley), very significant acreage is cultivated in annual flood plains. While the rules stipulate cover crops, these may or may not be adequate to prevent pollution from flood plain farming activities. Buffer zones in flood plains need to be larger than otherwise, and given more consideration in the rules. To summarize my first comment : Buffer zones need to be bigger and also not harvested (as allowed in rules).

Second, I object to the assertion that compliance with the rules will equate to meeting the intention of the law, which is improved water quality. The Purpose of the RAP's as defined in Section 1.1 states that the RAP's will control non-point-source pollution. If one accepts that statement, then it follows that a farmer who is in compliance is controlling non-point-source pollution, as the rules state. I think the rules should be evidence-based, that there ought to be baseline data documenting the current pollution levels and that on-going monitoring should be used to determine whether implementation of the RAP's has had an adequate effect. If a stream enters a floodplain from the mountains containing zero E. coli and comes out on the other side of the farm with off-the-chart E. coli counts, there needs to be action taken even if the farmer is obeying all the rules. It may be that, in that case, the rules need to be modified. There ought to be provision within the rules to allow for them to be adjusted, either in a more lenient or strict direction, based on real evidence over time. I agree that the farmer should not be held necessarily responsible if in full compliance, but the rules themselves need to be reassessed so the farmer now needs to obey new rules. Comment two summary : Compliance should be evidence-based and rules need to be self-assessing over time.

Thank you for considering my comments. I applaud the effort to move towards better water quality and hope to see it within my lifetime. I would appreciate a simple response to this email so I know it got to the right place.

Steve Reynolds
Cornwall, Vt

From: [John Whitman](#)
To: [AGR - RAP](#)
Subject: Comments on Draft Required Agricultural Practices
Date: Tuesday, December 8, 2015 11:22:36 PM

Gentlemen:

In my review of the Draft RAP, I've become concerned with what appear to be ambiguities in the definitions of "Farm", "Farming", and "Small Farm".

The Section 2.07 definition of "Farm" includes the phrase "devoted primarily to farming". The Section 2.08 definition of "Farming" includes "the use of land for growing ... fiber..." [etc.]. Section 2.25 defines "Small Farm" in a way that requires a determination of whether "10 or more acres are used for farming" [among other things].

The word "primarily" in Section 2.07 invites interpretation and subjectivity. The inclusion of "fiber" in Section 2.07 appears to include every aspect of forestry. Section 2.25's use of the phrase "used for farming", instead of "used primarily for farming" as the reader of Section 2.07 might expect to see, creates uncertainty that surely is not intended.

To give you a specific context for my remarks, let me note that my residence occupies a small portion of a 240 acre parcel which is almost entirely forested. I do have about 4 acres of pasture on which I graze 2 horses and one goat. I certainly don't think of myself as engaging in "farming" in the sense that I believe the RAP intends. I don't store manure, spread fertilizer, or engage in any of the agricultural practices given in Section 3.2 of the draft RAP (except for fencing the three animals). I have a couple of barns, but they aren't considered farm structures. I don't tap my maples or produce syrup. I don't maintain an orchard. I don't grow Christmas Trees. I don't grow horticultural crops. I don't apply pesticides. I have no income from selling agricultural crops. I don't have a farm management plan. I don't file Form 1040 Schedule F.

But I sure do grow fiber -- in the form of sawlogs and cordwood from my managed forest -- and every few years I conduct timber stand improvement and sell stumpage that gives me income (which I report on Form 1040 Schedule C).

Per Section 2.08, my growing of "fiber" seems to make clear that I am "farming". Since I don't do anything else on my property except to live there and grow my trees, Section 2.07 seems to suggest that I'm devoting the property "primarily to farming". And since the trees are growing on (much) more than 10 acres of my land, it sounds like Section 2.25 classifies me as a "Small Farm". All this leads me to think that I fall under Section 4 of the RAP and may be required to annually certify compliance with the requirements of Sections 5 through 10, provide timely notifications of changes in ownership or land base, meet the training requirements of Section 4.12(a), and perhaps more. As I read the draft, my 2 horses and 1 goat mean that I "manage livestock" and thus don't qualify for the certification exemption permitted by Section 4.10(d).

I feel confident that this is not what you intend, and I'm not personally concerned. But it's very difficult to read the draft differently. And it is the words in the final version of the RAP that will govern its application and its enforcement. So please take another look at the definitions and adjust them as necessary to avoid an unintended consequence.

It seems to me that the draft RAP has expanded -- deliberately or inadvertently -- the concept of "agricultural practices" to embrace all "silvicultural practices". Since 1987, Vermont silvicultural practices have been governed by the so-called "Orange Book", or "Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont", a book that has quite recently undergone updating. Also, the Vermont Department of Forests, Parks and Recreation

(FP&R) responded in 2015 to legislative requirements (Act 24, 10 VSA 2750) by publishing "Voluntary Harvesting Guidelines for Landowners in Vermont", one chapter of which is devoted to Protecting Water Resources. Moreover, recent studies of dozens of actual logging jobs in Vermont by FP&R have found that compliance with the AMPs has been remarkably good and improving and that there have been very few instances of water quality degradation.

I do understand the importance of doing the best possible job of protecting the quality of Vermont's waters. I also understand the necessity of imposing and tightening standards on the kinds of farming practices that, improperly conducted, could threaten that goal. As written, however, the draft RAP would seem to impose new certification and notification requirements on thousands of woodlot owners in Vermont who may "grow fiber", but to which the great majority of RAP requirements seem inapplicable.

I urge you to consult with Commissioner Michael Snyder, Mr. Steve Sinclair and others on the staff of the Department of FP&R as you proceed with the completion of the RAP. I am confident that their expertise will be valuable to you in mitigating the concerns that I have shared with you here while fully meeting your primary objectives.

Sincerely,

John G. Whitman, Jr.

PO Box 177

Readsboro, VT 05350

(802) 423-9917

From: [Brooke](#)
To: [AGR - RAP](#)
Subject: Comments on RAP ruling
Date: Friday, December 18, 2015 4:39:12 PM
Attachments: [Draft RAP Comments.docx](#)
[ATT00001.htm](#)
[Microsoft Word - Draft RAP Comments.docx.pdf](#)
[ATT00002.htm](#)

Draft RAP Comments

Dec 18 2015

To Whom It May Concern:

Thank you for addressing the very important issue of Water Quality in the state of Vermont.

I understand this is a great challenge and will take due diligence on behalf of the state to remedy the problem.

I also understand the intent of the ruling but the broad stroke regulations are unreasonable and put undue burdens on and barriers to Vermont's small-scale agriculture community.

After a grueling and head-scratching read through the draft rules, I have the following comments, questions and concerns.

General:

Very difficult to read and understand!

Item 2.17-

When does composted manure become by definition compost?

Does compost from non-animal manure sources fall under the same definition of "compost"?

Item 2.25 Definition of Small farm:

This is about as clear as mud! I am left terribly confused. Farming systems based on natural systems do not fit in tidy little boxes. How do small-scale diversified farms fit into this?

Section 4: Small Farm Certification:

Are non-profits exempt from this ruling?

I plan to be farming small scale with maximum of 20 – 30 sheep, 5-6 cattle, a dozen or so chickens, a couple pigs, an acre vegetable garden, on more than 10 acres. I plan to do rotational grazing such that the animals do not return to the same piece of ground within a 6-month period. I will use the winter bedding/manure with vegetable scraps for compost to add nutrients to my vegetable production. This seems to put me into a certified farm category?

Even if I prescribe to highly managed and conscious practices that do not contribute to any runoff into waterways, I will be required to spend a tremendous amount of time, and resources to annually register to comply with the law. Where as a person with less than 10 acres can house up to the animal number threshold, in a more confined and poorly managed system that increases erosion, manure build up and loss of vegetation without the need to comply with the law.

I agree that trainings are important and should be required. As long as they are 1. Offered at no cost to the farmers, 2.offered at multiple times per year 3. Applicable to farmers with hillside farms with no surface water.

Item 5.2:

Field Stacks should not be located in the same location more than once every 4 years-

this is next to impossible.

What size determines a field stack? 1 cubic yard? 400 cubic yard?

Define location...

Define actual composition of material- ie actual manure vs bedding.

Field Stacks cannot remain in one location for more than 180 days:

We turn our compost weekly and move it about 20 feet each time, back and forth in the same area. Does this constitute changing location?

5.3: Nutrient Management Planning

This sounds like a simple activity that could benefit farmers. But from what I hear it is a gargantuan undertaking that large scale farmers usually hire out for.

Small scale farmers do not have the funding, resources or time for such a huge project.

I would suggest a Plan based on scale of the farm. Small, medium and large, based on farm size.

A small NMP would be a simple document that has to be submitted once every 3-5 years, based on soil tests that prove to have high P, proximity to wetlands/surface water, and practices (rotational grazing vs confinement)

A small NMP could be submitted after spending no more than 4 hours of time composing the document. This scale is manageable for small farmers, can be educational and does not burden the small scale farmer.

5.4

b Do not have any idea what this means....

Seems like a vegetable farmers would never comply.

c.

Farmers harvesting late season crops will never be able to covercrop before September 15th...

5.8)c

this should not be a bullet under animal mortality-

it should be its own category.

Compost is not defined, and it very different than manure.

is this 1000 cubic yards per year?

6.0

thank you for acknowledging rotational grazing. Maybe a rotational grazing plan could suffice for a nutrient management plan. Though I do not know what either entail

In summary,

I understand the intent of the ruling, but in practice it will prove to be a tremendous amount of paperwork and bureaucracy with little to know change in water quality. The draft rule is also very poorly written. It is very difficult to understand and leaves a part-time small scale diversified farmer with land in the same category as a full time confinement Dairy operation.

Confinement operations operate very differently than small scale rotational grazing operations and Vegetable operations. There is not a one size fits all solution to the problem.

I understand that there are few large scale farms in this state and they have a loud voice in the statehouse. But they are the number one polluter in the state. Until we change the allowable farming practices to more sustainable ones based on true rotational grazing, not confinement,

we will not be able to change the water pollution problem.

Hopefully you have received comments from a wide range of diversified farms and take their comments seriously. We are all tremendously strapped for time. I know I would have liked to write a more in depth response to the draft report, but there are only so many hours in the day.

In a state such as Vermont, where farming is supposedly promoted and supported, this draft rule does the opposite.

I like to think of solutions and not just be a complainer, so heres another one that comes to mind as I scramble to finish this document.

I would recommend a required educational training for small scale farms, it could be once yearly for those farms in higher risk areas or every three years for those not in those high risk areas- like floodplains. A simple NMP could be filled out and submitted at this workshop. And good local, organic, grass-fed meal can be served to all the hard working farmers that are working their tails off to make this world a better place.

Thank you

Brooke Decker

Andover VT

From: [Jericho Settlers Farm](#)
To: [AGR - RAP](#)
Cc: [Andy Jones](#); [Mary Skovsted](#); [Vern Grubinger](#)
Subject: Comments on RAP Rules from VT Vegetable and Berry Growers Association
Date: Friday, December 18, 2015 8:17:03 AM
Attachments: [2015 VVBGA_RAPScComments.pdf](#)

Please see attached comments on the draft RAP Rules. Thank you for the opportunity to comment. We look forward to continuing to work with VAAFV on this important set of rules.

--

Christa Alexander, President
Vermont Vegetable and Berry Growers Association

From: [Andy Jones](#)
To: [AGR - RAP](#)
Subject: comments on RAP
Date: Friday, December 18, 2015 3:59:15 PM
Attachments: [20151215 Draft_RAPS_Comments_ICF.pdf](#)
[ATT00001.txt](#)

Hello-

Attached are my comments on the draft Required Agricultural Practices Rules.

Sincerely,

Andy Jones
Intervale Community Farm
281 Intervale Road
Burlington, VT 05401
andy@intervalecommunityfarm.com
802.658.2919x4

From: [James H. Maroney, Jr.](#)
To: [AGR - RAP](#)
Cc: [DiPietro, Laura](#)
Subject: Comments on RAPs
Date: Tuesday, November 17, 2015 12:32:00 PM

The agency's fixation on the contribution by manure to excess nutrients coming off farm production areas and fields ignores the contribution made by NPK fertilizer of which you made no mention today. I have heard the secretary say on numerous occasions that this is a different lake than it was when he was a child. In 1955 when the secretary was a child, Vermont farmers housed over twice as many cows and used little to no NPK and the lake was not polluted. Could there be any truth in the imputation that this difference, which the agency seems to want to ignore, is at the crux of the issue?

James H. Maroney, Jr.
(802) 236-7431

From: [Jana Lovejoy](#)
To: [AGR - RAP](#)
Subject: comments on raps
Date: Friday, December 18, 2015 5:55:41 PM

Dear Agency of Ag, thank you for taking water quality seriously. My wife and I and our two children farm 50 acres of fertile ledgy hilltop land in Coventry. We are grass based meat producers. We strive to improve the soil, water, and fertility on our farm. We practice rotational grazing and are avid composters. We compost all the manure produced on our farm in the winter. I have a few comments regarding the proposed water quality regulations.

1. The proposed setbacks seem quite arbitrary. It seems that the size of the buffer between cropped ground and surface water should be a function of the characteristics of the cropped ground. For example, a thousand feet of conventional corn on low carbon soil and not protected by a cover crop should require a bigger buffer than a hundred feet of vegetables in constant rotation with cover crops. Note also that the constant buffer width will be a larger fraction of land for the smaller farmer.
2. Why are the setbacks for animal mortalities the same for when they are composted as when they are buried? I believe that proper composting should be less likely to adversely affect water quality.
3. The document should define "compost" and make a clear distinction between manure and compost.
4. Drain tile effluent needs to be addressed seriously.
5. What are the current estimates for the contribution of "small farms" to the water quality problem in Vermont. Does this justify the cost?

All the best, Ned Lovejoy

From: [Karen Freudenberger](#)
To: [AGR - RAP](#)
Subject: Comments on the proposed RAP
Date: Thursday, October 29, 2015 1:17:10 PM

Greetings,

We are pleased that the State is making progress on the RAP and grateful that you are accepting public comment and input.

Here are some of the things we applaud about the plan: it is relatively short (20 pages) and reasonably easy to understand (with some exceptions). We hope that public comment and endless negotiations will not result in it becoming a long, dense, and incomprehensible government document, the sight of which causes small farmer's eyes to glaze over and their blood pressure to rise.

We also appreciate the even more accessible brochures (e.g. "Vermont's Clean Water Act and Farming") that lay out very clearly the requirements of key provisions.

Here are some of our concerns after attending the Randolph meeting at the Sheep and Goat association last week:

We believe that if testing is required (and even if it isn't) that there should be easily accessible and affordable (e.g. not-for-profit) testing sites for compost, soil, etc. Farmers are much more likely to invest in understanding their soils and nutrients if sampling/testing resources are easily accessible and linked with information/extension services that can help interpret the results.

We are concerned about the requirement to do formal NRCS Nutrient Management Plans. While we believe in understanding nutrient management and try to do it conscientiously in practice, we understand that the NRCS Plan is extremely difficult to complete and probably exceeds the competence level of most farmers. (This was stated by someone at NRCS, who also said they don't have the capacity to help a lot of small farmers who are suddenly required to do Plans and focus their technical resources for NMP on large farms.) We don't mind complying with reasonable environmental standards but we would like planning/reporting to be accessible to small farmers and not require us to contract costly or scarce technical assistance to comply.

I would suggest that once small farms demonstrate compliance and the State confirms that reasonable procedures are in place they should be able to report less frequently than annually (4.10.a)...perhaps every 5 years...unless complaints are lodged against them. In

general, reports should only be required if there is a reasonable likelihood that they will be read/treated. Paperwork should not be required for the sake of collecting piles of paper that are never used.

I would suggest that either the regulations on field stacking of manure(5.2.e) be loosened OR that there be reasonable provisions for exceptions. In our case it would be both unwieldy and impractical to adhere to the currently proposed regulations that would require our compost site to move every year and not return to the same site for four years. This would have other negative consequences on the local environment and force us to invest in larger mechanized equipment (that we can ill afford) rather than using environmentally friendly human power (with pitchfork and wheelbarrow). In addition, the rule saying that the stacks cannot remain in one location for more than 180 days will make it practically impossible for us to make compost as we are doing now. We do not have the heavy equipment needed to continuously move our compost piles to different sites and it takes longer than 6 months for a batch to “ripen.” We do already rent equipment once a year to move ripe compost to our garden sites.

I do not understand why there is a requirement to sample manure/compost annually (5.3.c). If a farm uses virtually identical strategies and processes from year to year, annual testing becomes another unnecessary (and potentially costly) burden, especially since there are already other annual tests (e.g. water) required for farms/processing plants.

Thank you for considering these comments as you move forward.

With all best wishes,

Karen Freudenberger

Karen Freudenberger, Project Manager

Pine Island Community Farm

1029 Pine Island Road

Colchester VT 05446

freudenberger@burlingtontelecom.net OR pineislandfarmvt@gmail.com

Follow our goat raisers on Facebook: The Vermont Goat Collaborative

www.pineislandfarmvt.com

From: [Bruce Chapell](#)
To: [AGR - RAP](#)
Subject: Comments on the proposed RAP's
Date: Friday, December 18, 2015 1:17:27 AM

Comments on Proposed Required Agricultural Practice's Regulations for Small Farms December 17, 2015

- I want to begin by saying I have attended 2 meetings on this subject. Our family has operated a successful grass fed beef operation in East Montpelier for 6 years with presently 50-60 head of Angus and Hereford beef cattle. I have been a sugarmaker for 29 years. I worked for NRCS for 35 years in 6 different Vermont counties. I am very familiar with all the practices listed and have planned and implemented many of these RAP practices with cooperating farmers throughout Vermont.
- I am totally behind the efforts to clean up Vermont's surface waters
- I think your idea of one size fits all farmers is bound for failure and will not accomplish yours or the state's desire to clean up the state's waters. I say this because to require and follow-up on just the small farm sector RAP's would require a beauracracy far exceeding the VAAFMM funding levels now or in the future. VAAFMM needs to prioritize where their staff resources are going to be utilized. If you really think you are going to solve a lot of the water quality problems dealing with 20-50 cow farms you are incorrect. I am suggesting your staff needs to prioritize which farms are potentially causing water quality problems. NRCS did this 20-30 years ago with our PL-566 programs. We inventoried the farms in many watersheds throughout the state, top priority farms received our funding and technical assistance. Low priority farms were most likely not funded. Today they are doing something similar with EQIP funding. Once you identify these farms direct your resources to them.
- Keep in mind also the smaller SFO farms are often times working with a limited number of employees and capital. Requiring a CNMP and follow-up record keeping on these small farms is going to cause you and the farmer a lot of frustration. Word has it up in Franklin County that some of these guys are simply going to call the auctioneer and get out of farming because of the RAP proposed regulations. These farms may or may not even have much of an impact on water quality. It is certainly one way to get rid of a potential problem? Just keep in mind that some of these smaller SFO farms do not have the cash flow or personnel of MFO or LFO sized farms.
- Livestock Exclusion: I think the idea of keeping cattle fenced out of streams is a great practice. If you have a farm with a tremendous amount of pasture along a stream it can be quite expensive to afford that much fencing by 7/1/16. If you are going to start "requiring" farms to implement a practice such as this and possibly be found in non-compliance if they do implement because of financial restraint I feel this is totally unfair. Noncompliance could lead to penalties or removal from the current use program. I thought we lived in a democracy. I think there should be some type of funding mechanism to help these smaller farms. Due to their smaller farm size they may not rank out well with EQIP and financial help may be 2-3 years away. I chuckle about the 3" vegetative growth requirement in a pasture system, all good grazing farmers know you don't get much dry matter out of short grass such as this but if you get below 3" you are in violation. Your staff have higher priority water quality issues to go after than measuring the grass in my pastures. I feel the staff at VAAFMM may forget we deal with Mother Nature every day and sometimes we are unable to do things exactly the way we would like and now we may be in violation of water quality laws because of a variety of weather or financial conditions.
- Cover Cropping is one of the best practices out there. I feel "requiring" annual croplands subject to flooding to all be cover cropped would include basically all floodplain soils in the state. Once again "requiring" it to all be cover cropped every year is not meteorology or economically fair to the farmers who crop this productive land. I have been involved with all types of cover cropping programs in various counties in Vermont. Cover cropping can work just perfect when all components come together. The biggest hurdle is when will the corn crop be harvested? This year was a perfect example, the corn harvest was delayed due to an abnormally wet June. The winter rye could not be applied until after the Oct. 1st deadline. I will strongly disagree with the NRCS agronomists on this date, you can realistically get a good take even by the 10th – 12th. So once again a requirement puts your farm into a

potential violation. I suggested this at the Statehouse meeting, zero in on the “ fields which actually do flood every year”, not all floodplain land. NRCS has soils maps for every county which indicate where these frequently flooded, low bottom soils are located. Create a map where these lands are located. You may even be able to get NRCS soil scientists to create such maps for you.

- Nutrient Management Plans

I have had plenty of experience with the 590 NMP standard on our NRCS EQIP contracts. The thoughts of a 40 or 50 cow dairy farm now being “required” to have and implement such a plan without some kind of funding for a plan development is difficult to comprehend. The NMP is a good guide but for a farmer (one man operation) who has the time and expertise to meet and implement the 590 standard would be beyond most farmers’ time and ability. I will be honest, if I had to create the NMP that meets the NRCS 590 standard complete the soil and manure tests, record keeping and run our beef and maple sugaring operation, I really do not think I could do it all. Now, you are “requiring” such a plan for Vt. dairymen who work no less than 12-15 hours a day and likely had little or no experience creating and implementing a plan such as this. Before you start “requiring” come up with a plan to help these guys with their NMP don’t just start throwing regulations at them and expect them to magically complete a NMP.

- Final Thoughts

I really enjoyed Chuck Ross’s introduction and comments. Laura DiPietro certainly knows the ins and outs of the RAP’s. I came away from the meeting feeling like for our farm personally I think we can meet the requirements without too much trouble. I will honestly tell you after working with large and small farms of all types and shapes in half the counties in this state I am really fearful for these smaller farmers being able to meet all the requirements of the RAP’s. Not that they don’t want to but time and capital on these small operations is sometimes very limited. Please keep in mind, for you this is a new program/ requirement. For these small farmers it is their livelihood, lifestyle and who they are. Some of these guys are really worried about meeting the “requirements” and whether this will put them out of business.

Bruce Chapell Templeton Farm Beef and Maple
3410 Center Road
East Montpelier, Vt. 05651

From: [Diane McGarry](#)
To: [AGR - RAP](#)
Subject: Comments on the proposed RAP's
Date: Wednesday, December 2, 2015 3:26:00 PM

Hello,

I attended the meeting on RAP's at Enosburg. I felt my comments were not valued. I was most disappointed to have my comments hardly heard by the the Department of Agriculture; they were immediately brushed aside as inconsequential. I will briefly relate my concerns in writing in hopes that they will not fall on deaf ears,.

We have poured millions of dollars into the clean-up of Lake Champlain--RCWP, Missisquoi project, and the Lake Champlain project. Farmers were given federal dollars to construct many water quality projects. The majority of the projects were manure pits.

I like to think that these projects were money well spent, but now I hear about all the mistakes made back then. I hope that this time we get it right; base projects on sound research,. It seems as if projects are put on the ground because things look bad rather than based on scientific evidence,. For example, the research on tile drainage, manure pit liners, and silage leachate retention ponds are constructed, but the evidence is inconclusive. Tax payers work so hard for their money; we owe it to them to be responsible with their money by constructing only those projects with backed research.

The public needs to be aware that the lake is not going to get cleaned up overnight. Warming lake temperatures, the Missisquoi causeway, and the many feet of sediment at the bottom of the bay will all contribute .to a slow solution.

We need to partner up with researchers from UVM and Miner Institute to construct projects where we get the most bang for our buck. And, we should continue to monitor progress to see what works and what doesn't. And please, when you hold a public forum, be prepared to listen to the concerns of those in the audience. They deserve your attention.

Thank you for your attention to my letter.

Diane McGarry
mcgarry_6@yahoo.com

From: [John Klar](#)
To: [AGR - RAP](#)
Subject: comments on water quality rules
Date: Friday, December 18, 2015 1:36:41 PM

To: Vermont Agency of Agriculture Secretary Chuck Ross

Small farms are the foundation of Vermont's landscape, culture, and food supply. Recently proposed water quality regulations for very small herds and acreages punish small farms for the pollution generated by industrial farms. Fencing, lost acreage, lost watering resources, and other costs will prove prohibitive for many of these vibrant small producers. Please craft water quality rules that preserve and exempt as many small farming operations as possible, and which ensure that those farms which are adversely affected are fully compensated for the property rights taken by the State of Vermont.

Name Town Phone/email

The above language has been signed by a number of area residents -- I will submit their signatures by mail today.

I am hopeful that your department will endeavor to draft regulations that are sensitive to the economic impact they will have on small farmers. The vast majority of water pollution from agricultural operations is generated by very large dairies, not small farmers. Increasing the size of the net will not be effective when the big fish are already escaping the holes.

Thank you

John Klar

Orleans, VT

From: [Proprietor at MVM](#)
To: [AGR - RAP](#)
Subject: Comments regarding Draft RAPs, RE: Application of Manure or Compost
Date: Thursday, December 10, 2015 10:56:33 AM

I am commenting on the draft Required Agricultural Practices, the interpretation I understood presented by VAAFM staff at the December 3rd, 2015 hearing in White River Junction VT and the factsheet at http://agriculture.vermont.gov/sites/ag/files/pdf/water_quality/RAP/RAP-Farm-Size-Definitions-draftsheet.pdf as of this date.

Section 5.3 of the Draft RAPs requiring a nutrient management plan from all 'Certified Small Farm Operations' with the interpretation that any individual spreading manure or compost qualifies as a small farm will force many operations to make an investment that is not in concert with their scale or force them to give up benefits of composting. These benefits include the responsible treatment of manure, animal bedding, crop residuals, livestock mortalities and slaughter wastes before returning those materials and nutrients to the land.

Some alternatives that would make it easier for small farms to continue to compost without requiring a nutrient management plan:

Treating Compost and manure separately in the interpretation

Adding a threshold of compost volume that triggers Certified Small Farm category

An Exemption for compost spreading that recognizes the scale that is likely to cause water quality issues

With the current Draft RAPs and expressed interpretation of the VAAFM staff, the application of the composted manure of one chicken on a garden raising vegetables for a road side farm stand would require a nutrient management plan. This level of requirement does not seem reasonable nor does it seem likely to improve water quality. And it would have the unintended consequence of forcing small operators to stop the responsible beneficial practice of composting or give up agriculture altogether.

Simply put, composting is not just a beneficial and economically valid practice of a small farm, it is a necessary part of a responsibly run small farm. And without the outlet of returning compost to the soil, composting just does not work.

Manure, animal bedding, livestock mortalities and slaughter wastes are a normal occurrence for any operation that involves livestock. Composting those materials is the most responsible and cost effective way to safely return those nutrients to productive soil. Composting these materials well requires maintaining an active compost pile of adequate size and an outlet for the finished compost. Making a nutrient management plan required for small operations whose scale does not make the investment appropriate will have the unintended consequence of making the beneficial practice of composting less likely on small farms. The costs of a developing an unnecessary nutrient management plan or commercial disposal of animal wastes will force small operations out of agriculture. Without the opportunity

of agricultural pursuits, the land owned by small operations will face increased development pressure leading to further non ag development. After non ag development, it will be impossible in practical terms for that land to return to agriculture in the future. Making so many small operations to choose between the responsible beneficial practice of composting and not farming will have an unintended consequence of forcing small farms out of the working landscape of Vermont.

From: [Family Cow Farmstand](#)
To: [AGR - RAP](#)
Subject: Comments to Draft RAPs
Date: Tuesday, December 1, 2015 1:43:34 PM

Hi,

I want to start by introducing myself. My name is Kalyn Campbell and I run a small farm in Hinesburg, VT. I milk 8 cows and sell raw milk with a Tier 2 Raw Milk License. Here are my comments to the draft RAPs:

I have concerns about the definition of small farms in the Draft RAPs. I seem to fall under the certified small farm because I have over 10 acres of land. I have so much acreage for such a small farm because I am a grass-based farm. My cows eat only pasture in the summertime and therefore I need a lot of it. If I choose to have an 8 cow's feedlot on less than 10 acres it seems like I would not fall under the certified small farm and thus would have less regulation. Since grass-based farming is probably better for water quality for the most part, I would suggest changing this definition. In the definition maybe the amount of acreage for small farm certification should be increased to encourage grass farming.

Section 4.12 refers to required water quality training for all categories of farms, but does not state if there will be fees involved. It would be great if there was clarity on this. Farms are already subject to a wide variety of fees and if required training involves further outlays, this will be a barrier to farming in this state, especially for small farms.

In each section it seems that there is a sentence like this: ". . . certify compliance with these Rules and shall do so in a manner prescribed by the Secretary." This seems to give the Agency overarching control and negates any of the definitions and requirements, since they can be changed at will. I understand that there will be many exceptions to the rules and this is why it is written in, but this could be used wrongly in a different administration.

Section 5.2, paragraph (d), regarding waste storage, would require waste storage facilities to be in compliance with USDA regulations and, if not, to be certified by a licensed professional engineer. For small farms, including mine, this would be a further unwarranted expense and would be a barrier to farming.

Paragraph (e), referring to field stacks, would require moving the stack either: every four years (subsection iii) or every 180 days (subsection iv). This is a little unclear, what is field stacking, can it be stacked in a sacrifice area without falling under these requirements? Either of these would make it very difficult for my farm and for many small farms. I only have one place on the property that is 200ft from all the necessary requirements. I understand the reasoning behind this regulation, but it does seem like many farms will not be able to comply. Maybe it could be written to allow manure to be stacked for more than 4 years on a concrete pad or a lined area, so there is no leeching. Since I am usually working with bedded pack material it often will not go through a spreader in 180 days and therefore needs more time to decompose before spreading. This section should be changed to allow more days between stacking and spreading, especially since all these farm organizations, including the agency, are encouraging bedded pack set-ups which will require more time to decompose.

Section 5.3 Paragraph (c) would require soil and manure testing either every three years, or annually. . This would be even more fees for small farms that are usually strapped financially. This should not be required for small or "very small" farms.

I hope you will take my comments into consideration when you make changes.

--

Thanks,
Kalyn

Family Cow Farmstand
2386 Shelburne Falls Road
Hinesburg Vermont, 05461
802.482.4440
www.familycowfarmstand.com

From: dclarkbmiller@comcast.net
To: [AGR - RAP](#)
Subject: comments
Date: Friday, December 18, 2015 6:42:02 PM

Sec 3.1 c - Definitions for what constitutes a "farming operation"

Why 4 equines? Horse manure is drier, less likely to leach and stacks better than cow manure. So, why fewer equines. Also animals size and weight should be considered. 4 mini equines could easily weigh less (and produce less manure) than 1 bovine.

Sec 5.2 e = setback for manure stacking. Really? We have 35 acres and could not have a manure stack that meets these requirements unless we put it on our hill in the woods, where it would certainly have runoff.

Shouldn't soil testing data be considered? Perhaps the stack spot is deficient in Phosphorus or other mineral. The only way soil testing is rational is if the data from it benefits the land owner (i.e. taxpayer).

From: [Bryan & Susan](#)
To: [AGR - RAP](#)
Cc: ["Bryan & Susan"](#)
Subject: comments
Date: Monday, December 14, 2015 1:43:03 PM

12/14/2015

Good afternoon,

I am writing in regards to the RAP's.

First I would like to thank Laura for doing such a good job explaining the proposals at the Eastside in Newport last week. She also did a great job earlier this fall at the St. Albans Co-op meeting at the Abbey.

Comments...

I'm not sure if I understand how you can have the same regs for the Northeast Kingdom and Addison County when it comes to when the cover crop needs to be planted, October 1st, I believe. The amount of growing degree days here in the northeast and far less than they are in the southern part of the state.

As for the 10% slope for manure and fertilizer, I do not think I have a field with a slope less than 10%. When I spread fertilizer and manure the last place I want to see it go is down the hill into a ditch or stream. We always watch the weather and use common sense when we spread.

I'm concerned what the fee is going to be for the small farm permit.

I liked the idea proposed by a farmer in Newport to delay the implementation of these new regs for a few years while you get some of the worst offenders up and running before you come after us who already have a NRCS approved manure pit and who already have nutrient management plans.

Thank you,

Bryan Davis,

Derby,

802-673-9398

From: [Sam Burr](#)
To: [AGR - RAP](#)
Subject: comments
Date: Friday, December 18, 2015 11:32:22 PM
Attachments: [COMMENTS TO DRAFT REQUIRED AGRICULTURAL PRACTICE REGULATIONS.docx](#)

Please accept these comments on the draft rules. Thank you.
Sam

From: [Bill & Mary](#)
To: [AGR - RAP](#)
Subject: Cow manure!
Date: Wednesday, December 2, 2015 7:05:28 PM

You have got to be kidding about towns controlling phosphorous into our watershed! Take the town of Stowe:

I have been driving past a farm on RT 100 towards Morrisville just before Randolph Road for 46 years.

The farm, which I suspect, Stowe covets, has about 80-100 cows in their Summer pasture across the road through

which a river flows from Moss Glen Falls directly into the Little River and then into the Winooski river.

No attempt has ever been made to keep the cows out of the river. They drink from it and pour their excrement into the watershed. Where have our Lake Champlain caretakers been all these years?

That's my story. Check it out sometime when pasturing the cows is in season.

Respectfully,

William Ward

PS: My name should remain anonymous for obvious reasons

From: [mike bald](#)
To: [AGR - RAP](#)
Subject: deadline for comments
Date: Wednesday, November 4, 2015 9:14:40 PM

Hi,

Curious to know what the deadline is for public comment on the Draft RAPs.
Thank you.

--

Mike Bald
Got Weeds?
<http://choosewiselyvt.wordpress.com>
Royalton, VT

From: [FWA](#)
To: [AGR - RAP: Heather Darby; Darlene Reynolds](#)
Subject: Draft RAP comments from FWA
Date: Friday, December 18, 2015 2:38:57 PM
Attachments: [FarmersWatershedAllianceResponseRAPs.docx](#)

Attached are comments for the RAPs from the Farmers Watershed Alliance.
Thank you very much,
Susan
for the FWA Committee

From: [Graham Unangst-Rufenacht](#)
To: [AGR - RAP](#)
Subject: Draft RAP feedback
Date: Sunday, December 20, 2015 3:31:30 PM
Attachments: [Draft RAP's feedback.pdf](#)

To whom it may concern,

This is being submitted on the 20th of December, 2015 – 2 days after the official end of the public comment period on the Draft RAPs. At the meeting I attended at the Statehouse, it was said that comments sent after this period would be considered equally. I apologize for not getting them in by the 18th, but expect that the promise that they will be considered will be honored.

Thank you.

Graham Unangst-Rufenacht

From: info@thistlehillfarm.com
To: [AGR - RAP](#)
Subject: Draft RAP
Date: Friday, December 18, 2015 12:05:50 PM

I submit the following comments relating to the draft RAP.

1) Manure: The purpose of the RAP is to ensure water quality; that goal can be met without the requirements imposed by strict adherence to Code 590 as adopted by Vt. The requirements of 5.3 (a) could be met by simply using the standards organic farmers now use, which is a common sense correlation between animal numbers, amount of manure spread, where spread, and land base. These records are easy to keep, easy to monitor and avoid the unnecessary expense to small farms of hiring outside consultants to prepare a "plan" per Code 590.

No small farmer has the time or expertise to comply with the requirements of the code's "Plans and Specifications" at 590-7. If these provisions are kept in place, compliance will be discouraged, and in many cases, will not happen. Good luck inspecting every small farm in VT! That won't happen either. Likewise, testing of manure is silly. Using "book values" (see 590-3) would suffice. There is a lot of info about manure out there. For example, a plan could simply state that a farm is certified organic, i.e. no pesticides or hormones, is grass based and feeds only grass forages and supplemental grain. That's all that is needed. One size does not fit all, a recognition of every farm's attributes is best done on farm, by the farmer. A plan written by the farmer and available for review will work, and mostly likely would actually be done. A record, as is now required by NOFA, stating what was spread, in what quantity and where, is not hard to do, and creates a sufficient record to monitor potential adverse effects to water.

I was told at a public hearing that simply attending classes at UVM would provide all the necessities to create a 590 plan. I disagree. First, there isn't the capacity to accommodate every farmer, nor will the classes suffice. Everyone will have to hire some hack to get the job done. I would have to do a minimum of 4 sites. The UVM standards and recommendations referred to throughout the RAP (as researched on line) are either non-existent, or so vague as to be virtually meaningless.

The way around all of this is to expand the meaning of "consistent" in 5.3 (a) to allow a small farm to follow the intent of both the RAP and 509 without strict compliance with 509's "must" language found at 509-7. Such an approach would achieve both the results sought by the RAP, allow the State to acquire the money it seeks from the Federal government to clean up the mess in Lake Champlain (which we small farmers did not create) and put small farmers in "compliance" mode instead of the F you mode which they are presently feeling. Another way would be to make small farms fall under 5.3 (b). That is probably your easiest way out of this mess. Compliance with 5.5 will suffice for small farms. (With the understanding that 5.2 (e) iii makes no sense whatsoever and needs to be deleted)

2) Farmer training: For small farms, no way. If the owner is the person making the certification, then he or she knows what is being certified. He, or she, should be required to explain to family or staff what is required for such certification. That is more effective education than can be provided by yet another state employee. Cancel the training part; no one will show up anyway.

3) Zoning: Delete all. Much of the language is lifted from pattern municipal zoning regs or state law i.e. variances, which we already have. Go back to the intent of Title 24 and avoid all of this stuff. Simply say that notification will be given to the Ag. Dept. which may make an inspection within 30 days if deemed necessary, and prompt approval will be given if no adverse water quality issues are present. Otherwise, just forget it and we will go thru our town's process (if it has zoning at all).

4) Last, at the meetings, the speech on how important we are to Vt's economy, followed

immediately on how we are a bunch of idiots relating to water quality, does not serve your efforts well. Next time, leave the Secretary home and bring some people who actually know the regs. We need less "face" and more expertise.

Thanks for your consideration. John Putnam

From: [Villars, Thomas - NRCS, White River Jctn, VT](#)
To: [AGR - RAP](#)
Subject: Draft RAP: comment on manure stacking
Date: Wednesday, December 2, 2015 11:28:24 AM

I have a concern with the new proposed VT Required Agricultural Practices (RAP) regarding the requirement of having 4 approved field manure stacking sites per farm. I think this could be a very tough requirement to meet.

Using the NRCS Field Waste Stacking Location Criteria as a guide (from the Ag Waste Mgt Field Handbook), there are 5 main soil criteria to be met – slopes less than 8%, minimum of 12-18 inches to seasonal high water table, minimum of 30-40 inches to bedrock, a permeability standard, and less than once in 25 year flooding frequency. Then there are setback requirements from various resource concerns that need to be met.

I've done a quick review of all 1600 or so soil map units in Vermont, including their acreage. A quick look shows the following:

67% of the land in Vermont is too steep for stacking sites (with slopes > 8%). This includes soils over 8% slope with bedrock limitations and some with wetness limitations, too.

12% of the land in Vermont is too wet for stacking sites (based on soil drainage class, which is being generous). This also includes some wet floodplain soils.

2% of the land in Vermont is too shallow to bedrock for stacking sites. This is only counting the land not already excluded by steep slopes.

1% of the land in Vermont is not suitable for stacking sites because of flooding frequency. Does not include floodplain soils that are already excluded because of wetness.

And 4% of the land in the state is not suitable because it is mapped as miscellaneous soil types like quarries, landfills, urban land, and water bodies counted in the soil survey mapping.

That leaves about **14% of the land in the state with any potential for use as field manure stacking sites.** I do foresee that some of these areas will be too steep or too wet, too, based on the range of characteristics of the soils and map units. And then we get into the limitations based on the required setback distances from resource concerns – that will further limit the land available for this use. This also assumes that all of this land is in farmland, but a lot of it is in other land uses, such as rural housing and small scale development.

In short, I just don't see having a requirement for having 4 stacking sites per farm as being practical or feasible in consideration of the soil limitations, setback requirements, and the current land use on potentially suitable land. For many producers, even finding one suitable site is a challenge. Hope this info is helpful and that you will reconsider the requirement for 4 sites. I think having 1 approved site at this time would be a good RAP.

Thom Villars

Thomas Villars, CPSS

Soil Resource Specialist, NRCS

28 Farmvu Drive

White River Junction, VT 05001

802-295-7942, x.124

Thomas.villars@vt.usda.gov

From: [patsagui](#)
To: [AGR - RAP](#)
Cc: [Robert Foster](#); [Brian Jerose](#); [bob spencer](#)
Subject: draft RAPs - comments
Date: Friday, December 18, 2015 2:57:31 PM
Attachments: [121815 Comments on draft Required Agricultural Practices.pdf](#)

Comments on draft RAPs from Composting Association of Vermont

Thank you,

Pat Sagui

Director
Composting Association of Vermont
802-744-2345

From: [Peter Benevento](#)
To: [AGR - RAP](#)
Subject: Draft RAPs
Date: Thursday, December 17, 2015 10:47:58 AM

I am the President of the Lake Carmi Campers Assoc., Inc. I represent more than 250 members of the Lake Carmi Community. Lake Carmi has been designated an impaired lake for more than a decade and has had an approved TMDL since 4-8-09. Ideally, nothing short of **Best Agricultural Practices** should be mandatory in the watershed of an impaired lake.

In reference to the subject at hand we certainly endorse the **Required Agricultural Practices (RAPs)** but recommend the following changes.

- Farm inspections should be conducted annually not once every ten years. Annual farm inspections should be mandatory in the watershed of an impaired lake.
- Training should be conducted annually not 4 hours in 5 years or 8 hours in 10 years as written. Certified training should also be mandatory for new operators applying manure.
- **All** manure application operators, not just Custom Applicators, should be certified and demonstrate a knowledge of the RAPs.
- Soil samples should be collected annually, especially in the watershed of an impaired lake. One sample within 10 years is not sufficient.
- The soil test phosphorous limit that prohibits the spread of manure should be lower than > 20 parts per million, especially in the watershed of an impaired lake.
- The proposed perennial vegetated buffers of 25 feet for surface water and 10 feet for water conveyances should be doubled, especially for the watershed of an impaired lake.
- The consideration of using an **injection manure process** should be included in the RAPs. It should be mandatory in the watershed of an impaired lake.
- **Cover Cropping** should be mandatory for all croplands in the watershed of an impaired lake, not just those subject to flooding from adjacent surface waters.
- Increase in the tillable land and the number of livestock in the watershed of an impaired lake should be subject to the approval of the Secretary.

Thank you for the opportunity to provide comments on the RAPs. If there are any questions please feel free to contact me at peterben@gmail.com.

Peter Benevento, President
Lake Carmi Campers Assoc., Inc.

From: [front_porch](#)
To: [AGR - RAP](#)
Cc: [Smith, Stephanie](#); "[Sarah Hadd](#)"
Subject: Draft RAPs: VT Planners Association comments
Date: Friday, December 18, 2015 10:39:07 PM
Attachments: [Draft RAPs VAP Comments 12-18-15.pdf](#)

My apologies for the late evening filing on behalf of the Vermont Planners Association – it's been a very long day. I hope that you will still consider our attached comments on the draft RAPs – we very much appreciate the opportunity to provide some feedback in advance of the rulemaking process. If you have any questions or would like to discuss the particulars included in the attached, please don't hesitate to contact me!

Best,

Sharon Murray

Sharon Murray ACIP

Legislative Liaison

Vermont Planners Association

802.434.4118 | frontporch@gmavt.net

From: [Dan Breslaw](#)
To: [AGR - RAP](#)
Subject: draft rules
Date: Tuesday, December 15, 2015 5:44:39 AM

We are hoping to start a small livestock-raising operation on our land. We want to do it in a way that is responsible and reflects good land stewardship. We hope the new rules and their application will help rather than hinder us in doing that. It's very important that this be a working partnership.

Thank you for understanding, and for being open to our input.

Dan Breslaw (for the Lost Meadow Land Coop, West Corinth)

From: [Riverside Emus](#)
To: [AGR - RAP](#)
Subject: Ekolott Farm comments on draft RAP
Date: Tuesday, December 15, 2015 5:53:23 PM
Attachments: [Comments on new RAP regulations.doc](#)

Ekolott Farm
179 Scott Road
Newbury, VT 05051
802-866-5650
riverside_emus@hotmail.com

Comments re: proposed RAP regulations:

We are a former dairy farm with 290 acres, 171 of which are tillable. Of the tillable acres, 84.2% (144 acres) are in the flood plain of the Connecticut River. We have a cow-calf beef operation and a commercial flock of emus. Corn silage is a significant cash crop for us. We also grow oilseed crops and small grains.

Here are some of our concerns:

- Unlike the topography along Lake Champlain, our riverfront acreage is highest in elevation along the riverbank, so normal run-off flows away from the river. The majority of our soils are well-drained Hadley silt loam.
- Unfortunately, we have been having increasingly abnormal flooding issues since Trans-Canada assumed ownership of the dams above and below our farm. We now often have rain events that shouldn't ordinarily cause flooding, yet flooding occurs, and the water remains on the land for longer periods than normal.
- The ceiling of 20 parts/million for phosphorus will be a huge game-changer for us. All our upland fields are above this threshold, which means that we can spread manure only on the fields in floodplain.
- If we can only spread manure on the fields in floodplain, then Trans-Canada needs to be part of the equation, since they own flowage rights and can flood the fields at any time. They have been exercising that right more often than the previous dam owners.
- It seems pretty well established that phosphorus does not move in the soil. Thanks to the Hadley silt loam, our upland fields don't have run-off into the river. Because of flooding, we cannot always get on the floodplain land, nor would we want to spread manure there if flooding was likely. So we need to be able to spread manure on the upland fields.
- The requirements for stacking manure will also be problematic. A setback of 200 feet from domiciles is reasonable, but requiring 200 feet from all boundary lines lacks some common sense. It is not always feasible to get that far from the road.
- We note that the new regulations give the Secretary the ability to cut off manure spreading earlier than December 15 if weather conditions warrant. Do they also allow for an extension beyond December 15 if the weather remains warm? (This year is a perfect example....)

Thank you for the opportunity to voice our questions and concerns. We attended the hearing

in White River Jct. and found it very helpful. The presentation was clear and well-organized.
We do understand the need to protect water quality.

Larry Scott and Peggy Hewes

From: [Amy Norris](#)
To: [AGR - RAP](#)
Subject: Feedback from Draft Required Agricultural Practice Rules
Date: Thursday, December 17, 2015 2:25:25 PM

Good Afternoon,

This is some feedback that I have gotten specific to the RAP proposed rules:

- areas prone to annual flooding should not be planted to corn
- cornfields that have manure spread on them should have 48 hours to turn manure under unless injected (currently can spread in fall and leave on top of bare cornfield)
- need to define weather conditions conducive to run-off, great improvement but need define (showers, rain, ½ inch, one day out.
- under livestock exclusion I am surprised no buffer requirements for pasture, would have expected 10-20 buffers from streams/ditches (cows do defecate when in pasture!)
- Also, under the small farm designation what is the approved "business management plan" --- requirement? Not sure what they are asking?

Thank you for this opportunity! The lake is a precious resource!

Amy Norris

Board Member

Friends of Northern Lake Champlain

From: [DiPietro, Laura](#)
To: [AGR - RAP](#)
Subject: FW: Comments for RAP
Date: Monday, December 14, 2015 5:35:53 PM
Attachments: [Comments for RAP.docx](#)

From: Amanda St Pierre [mailto:dfwt06@yahoo.com]

Sent: Monday, December 14, 2015 5:12 PM

To: DiPietro, Laura

Subject: Fw: Comments for RAP

Please find our personal comments for the RAP draft

Amanda St Pierre

Pleasant Valley Farms

Vermont Pleasant Valley Maples

www.vermontpleasantvalleymaples.com

Cell 802-777-4794

From: [Patch, Ryan](#)
To: [AGR - RAP](#)
Subject: FW: Comments on RAPs
Date: Friday, December 18, 2015 4:12:09 PM
Attachments: [LCI.CLF.CRWC Pre Rulemaking RAP Comments Final.pdf](#)

From: Anthony Iarrapino [mailto:anthony@mivt.net]
Sent: Friday, December 18, 2015 4:09 PM
To: Patch, Ryan ; AGR - WaterQuality ; AGR.RAP@vermont.gov
Subject: Comments on RAPs

Please see attached.



Anthony Iarrapino

16 State St., Suite 2
Montpelier, VT 05602
802-522-2802

From: [Patch, Ryan](#)
To: [AGR - RAP](#)
Subject: FW: horse RAP"s
Date: Tuesday, November 3, 2015 10:41:29 AM

-----Original Message-----

From: Sue Greenall [<mailto:onrcd1@gmail.com>]
Sent: Tuesday, November 3, 2015 7:10 AM
To: Patch, Ryan <Ryan.Patch@vermont.gov>
Subject: Re: horse RAP's

MFO stands for? Just seems unrealistic to be able to have 30 brood cows with calves but only 15 horses. I would certainly suggest increasing that number because every horse boarding business is going to be affected otherwise and if they all have to go through the same hoops as a small dairy farmer you won't be able to process them all...not to mention the outcry! The farm I am looking at has a 15-20 horse boarding situation and is very well run. They grow their own hay, soil test and fertilize. They do not, however, spread their manure due to the 90% content of bedding. Have to give them credit for understanding that the stuff takes forever to compost and would not be good on their fields if spread. They understand the dilemma of what to do with it but have yet to come up with an answer. Nor can I. How to fix this has been a long time problem. Most compost farms do not want the manure for the same reason.

I am not saying that there are no horse facilities that need to clean up their act and I think this will give them a kick in the butt or put them out of business. I will try to call later today.

On 11/2/2015 5:34 PM, Patch, Ryan wrote:

- > Hi Sue,
- >
- > Will do my best to answer your question, please feel free to call to discuss further. Just as a reminder, these rules are in draft form--and your feedback in this process is critical. Looking forward to discussing further.
- >
- > Attached is a graphic which explains the 3 different categories created under these draft RAPs for small farms.
- >
- > As is currently true with the AAPs, with the draft RAPs a farm which has between 4 - 14 horses on 4-10 acres will be required to conduct basic nutrient management which includes: soil sampling once every 3 years, annual manure sampling, applying nutrients based on university recommendations. Above and beyond the AAPs, the draft RAPs would require a farm to keep record of wastes applied on the farm for the previous 5 years.
- >
- > To answer your question: A farm which has more than 10 acres used for farming and 15-149 horses will be required to develop a Nutrient Management Plan to the NRCS 590 standard.
- >
- > This 15 horses as the minimum threshold for a SFO certification came from the current MFO definition (150 - 499 horses) and taking 10% of those numbers.
- >
- > MFO thresholds are below:
- > i) 200 to 699 mature dairy cows, whether milked or dry;
- > (ii) 300 to 999 youngstock or heifers;
- > (iii) 300 to 999 veal calves;
- > (iv) 300 to 999 cattle or cow/calf pairs;
- > (v) 750 to 2,499 swine weighing over 55 pounds;
- > (vi) 3000 to 9,999 swine weighing less than 55 pounds;
- > (vii) 150 to 499 horses;
- > (viii) 3,000 to 9,999 sheep or lambs;
- > (ix) 16,500 to 54,999 turkeys;
- > (x) 9,000 to 29,999 laying hens or broilers with a liquid manure

> system;
> (xi) 25,000 to 81,999 laying hens without a liquid manure handling
> system;
> (xii) 1,500 to 4,999 ducks with a liquid manure handling system;
> (xiii) 10,000 to 29,999 ducks without a liquid manure handling system;
> or,
> (xiv) any other animal type and number that the Secretary may deem
>
>
>
> -----Original Message-----
> From: Sue Greenall [<mailto:onrcd1@gmail.com>]
> Sent: Monday, November 2, 2015 4:43 PM
> To: Patch, Ryan <Ryan.Patch@vermont.gov>
> Subject: horse RAP's
>
> Mary and I talked about the RAP's on Friday and she said that since 15 horses would put someone into the small
> farm category that they would need a NMP? Need to confirm this with you. Also, where did the number come
> from? Cows and pigs are higher so why 15?
>
> --
> Ottauquechee Natural Resources Conservation District Sue Greenall -
> District Manager
> 28 Farmvu Drive
> White River Junction, VT 05001
> ONRCD1@gmail.com
> www.ONRCD.org
>

--
Ottauquechee Natural Resources Conservation District Sue Greenall - District Manager
28 Farmvu Drive
White River Junction, VT 05001
ONRCD1@gmail.com
www.ONRCD.org

From: [DiPietro, Laura](#)
To: [AGR - RAP](#)
Subject: FW: letter and recommendations
Date: Tuesday, December 15, 2015 8:16:13 AM
Attachments: [RAP Comments_Nov2015.docx](#)
[ATT00001.htm](#)

From: Jane [mailto:ejclifford@comcast.net]
Sent: Monday, December 07, 2015 4:47 PM
To: Bothfeld, Diane ; Rupe, Marli ; DiPietro, Laura ; Patch, Ryan ; Tom Eaton
Subject: letter and recommendations

From: [Champlain Valley Farmer Coalition](#)
To: [AGR - RAP: DiPietro, Laura; Ross, Chuck](#)
Subject: Fwd: Comment Concerning Draft RAPs
Date: Tuesday, December 8, 2015 9:13:14 AM
Attachments: [RAP Comments_Nov2015.pdf](#)

Sending this again, as there was some mention that perhaps the Agency hadn't received it.

Thanks,
Kirsten Workman, Secretary
CVFC

----- Forwarded Message -----

Subject: Comment Concerning Draft RAPs
Date: Wed, 25 Nov 2015 05:44:25 -0500
From: Champlain Valley Farmer Coalition
Reply-To: info@champlainvalleyfarmercoalition.com
To: AGR.RAP@Vermont.gov
CC: Nathaniel Severy , briankemp@shoreham.net , jeff.carter@uvm.edu

The Champlain Valley Farmer Coalition appreciates the opportunity to comment on the first draft of the Required Agricultural Practices. Please find our comments attached.

--



<!--[if !vml]--><!--[endif]-->

Champlain Valley Farmer Coalition Inc.

Farmers Working Together for a Clean Lake Champlain & Thriving Agriculture in Vermont

23 Pond Lane, Suite 300 | Middlebury, VT 05753

(802) 388-4969 x347

info@champlainvalleyfarmercoalition.com

www.champlainvalleyfarmercoalition.com

From: [DiPietro, Laura](mailto:DiPietro.Laura)
To: [AGR - RAP](#)
Subject: Fwd: FW: Re:
Date: Tuesday, November 24, 2015 11:12:01 AM

Sent from my iPhone

Begin forwarded message:

From: AGR - Helpdesk <AGR.Helpdesk@vermont.gov>
Date: November 23, 2015 at 11:49:11 AM EST
To: "DiPietro, Laura" <Laura.DiPietro@vermont.gov>, "Leland, Jim" <Jim.Leland@vermont.gov>, "Ross, Chuck" <Chuck.Ross@vermont.gov>, "LaClair, Jolinda" <Jolinda.LaClair@vermont.gov>, "Bothfeld, Diane" <Diane.Bothfeld@vermont.gov>
Subject: FW: Re:

Email RAP from Help desk.

From: Carolyn Branagan [<mailto:CBranchan@leg.state.vt.us>]
Sent: Monday, November 23, 2015 10:55 AM
To: Chris Brigham
Cc: AGR - Helpdesk
Subject: Re: Re:

There will be plenty of information available when the time comes, but now is really the opportunity to express your opinions. It is all still in draft form right now. Let the Secretary know what you think is unreasonable. After these rules are implemented the change process will be much more difficult. And stay in touch, I may be able to help you.

Carolyn

From: Chris Brigham <cbrigham@enosburgk12.net>
Sent: Monday, November 23, 2015 10:30 AM
To: Carolyn Branagan
Cc: AGR.Helpdesk@vermont.gov
Subject: Re: Re:
Carolyn Branagan <CBranchan@leg.state.vt.us> writes:

Hi Chris,

Thanks very much for contacting me. This entire issue is of great concern to me, and the reason I wrote the letter was in hopes to generate more comment to the Secretary.

When the standards for certification of medium and large farms were passed into law several years ago, it was the understanding of the legislature that the standards for small farms would soon follow. There was quite a bit of press on this and there is no surprise that the Agency of Agriculture has prepared these standards, especially now that clean water is receiving so much public attention. In order to be sure our lakes, rivers, streams are free from pollutants induced by all kinds of industry, there is near unanimous agreement among Vermonters than

we are 'all in'. Everyone has to do what they can to improve water quality, not just farms.

The certified small farm operations that fall under these new regulations will be able to certify compliance with all the Required Agricultural Practices. These are farms that have over 10 acres used for farming, or meet the numbers of animals (more than 4 cows, more than 4 horses, more than 100 hens etc.) or apply manure, compost or other waste to farming acres.

Other details are available from the Agency of Agriculture. There is still time to comment on these proposals, although the best time would have been at the hearing. Please take time to contact the Secretary of Agriculture. This is extremely important.

Rep. Carolyn Branagan

Franklin-1, Georgia

Sent from my iPad

On Nov 21, 2015, at 7:51 AM, Chris Brigham <cbrigham@enosburgk12.net> wrote:

Good Morning Ms. Branagan,

After reading the article in The Courier regarding certification for small farms I felt compelled to write you to voice my concern. But first to give you a short family history. My parents purchased our small farm in 1951 at the intersection of Route 108' The Boston Post Road and The King Road where I was born and raised. In a family of five children I was the only one who fell in love with farming and over the years have dabbled in sugaring, raising livestock and gardening. In 1985 just after the death of my father, knowing that my mother was going breakup and sell the farm I was able to purchase fifteen acres that adjoined my property giving me a total of twenty five acres. My thought was rather than have houses on the property I hoped to someday utilize the land as it had been intended. At the age of 60 I am eyeing retirement in the next 6-7 years. My dream has been to have a third career during my retirement years as a farmer. Not for profit but specifically for the enjoyment and fulfillment of a lifetime dream. I have already started planning and implementing my homestead. I will build a sugar house on the backside of my small 250 tap sugarbush and produce approximately 30 gallons of syrup. I have planted 100 balsam firs and will do so every year hoping to sell 30-40 trees each year. I will also be building a small barn and keep 5-10 sheep for meat and to help keep the pastures from growing up. This is my dream for retirement. My concern is that requiring certification will bring expenses that would drive individuals like me out of the business much like bulk tanks did back in the early sixties. Again I don't intend to make a dime in profits, this is purely for enjoyment and to fill a void that I have had for much of my adult life. I hope that the intended legislation doesn't prohibit other individuals like myself from doing so. I'd much rather keep the land open than develop it for housing but if it were to become too prohibitive due to government intervention I am afraid that in retirement with a fixed income I might have no other choice. Please do not consider certification for small farms. We are not the ones responsible for the run off of phosphorus into the streams and waterways, please don't hold us responsible.

Chris Brigham
Director of Student Activities
Enosburg Falls Middle & High School
Hi Carolyn,

So it sounds like this legislation is going to happen. Will there be information regarding requirements when implemented? How will someone not actively engaged in agriculture know how to become certified? What will be the financial impact? Before I spent a lot of time and resources planning and implementing my homestead I want to know if it is going to be cost prohibitive. If so I'll just plan on sub-dividing my land in retirement and find other means of entertainment.

Chris Brigham
Director of Student Activities
Enosburg Falls Middle & High School

From: [Deb Conant](#)
To: [AGR - RAP](#)
Subject: Fwd: Vermont Agency of Agriculture, Food and Markets
Date: Tuesday, December 15, 2015 9:12:30 AM

Begin forwarded message:

From: Deb Conant <riverside@gmavt.net>
Date: December 15, 2015 9:08:32 AM EST
To: Deb Conant <riverside@gmavt.net>
Subject: Vermont Agency of Agriculture, Food and Markets

Vermont Agency of Agriculture, Food and Markets
116 State Street
Montpelier, Vermont
December 12, 2015
RE: RAP Regulations Draft Review
Secretary Ross,

Thank you for allowing us the opportunity to submit comments for potential revisions to the RAP Draft. We want you to know that Conants Riverside Farms supports all efforts to improve water quality in Lake Champlain. We intend to be involved in any way to do our part through the Champlain Valley Farmer Coalition and other activities with direct ties to promoting the goal of clean waters in Vermont.

As a result of CVFC meetings, comments were sent to your office with suggestions and details for changes that may be considered and I am fully supportive of them, and as well, my comments go beyond those suggested. We feel fortunate to be able to work with ACS specialist Tom Eaton and have ongoing conversations about changes that would have a positive impact on water quality and still be practical to implement. We agree that farmers need more access to Certified Planners such as Tom or others like him and we all should encourage farms to use a certified crop adviser to aid them with implementing AAP's and BMP's. These people are some of our best resources available and need to be held to a higher level of significance as well as accountability for their work. Tom has been working with his N.Y. State peers to put in place a Planner Certification Program and I believe also doing work with phosphorous index/ RUSTL 2 revisions. We support these approaches.

I feel there is a need to promote better working relationships between the farmer, their CCA, the NRCS offices, and your staff. I know some farmers should take the lead in all of this but often either don't make the time or don't even know the resources available to them. There needs to be focus placed on creating a more effective working relationship between all parties.

We have some concerns with the drafted RAP's.

I am sure you have had many comments on the 20 ppm. levels for phosphorous stated in section 5.5 of the draft. This seems to override our CNMP. This does not allow for the use of a "scientific" approach based upon a farms suite of

options available to them through their nutrient management plan. I'm sure there are farms in that category. If farms are not allowed any manure at all on these acres, it affects every other acre on the farm. More additional N and K would need to be purchased to maximize yield. This strategy of limiting phosphorous affects land base acres, throws an NMP out of balance, and quite frankly, may lead to initial abuse. Every farm is different; every soil type, crop yields, cropping strategies, soil sample timing, historic nutrient levels, manure management, as well as location. It is vitally important that the nutrient management plan that has been crafted for each farm work to its intended potential.

Suggestions with regard to manure stacking:

Our stacking site was approved by NRCS and a soils expert inspected the site. We are required to stack within the bounds defined by our CNMP. It is on annual cropland and therefore spread each year in the spring. It would be very difficult to certify and maintain four different sites on any farm. Perhaps a better approach should be that manure cannot remain on the stacking site for more than 11 months without it being cleaned totally. That site though, or another approved site could be used for future stacking. This would prevent an overgrown stack from occurring and potential problems because of it. Review of a potential site would be by the landowner, CCA, NRCS, and Dept. of Ag. Coordinator. This type of process works for manure pits with a lower risk potential for runoff! The location may be as important as a storage vessel for liquid manure.

Within the same scope, should a compost site be any different?

If I could put just three practices at the top of my list that are most effective in improving water quality, they would be cover crops, no till planting, and enforcement of regulations.

We as an industry are better at caring for our environment than we were even five years ago. The practices that we have implemented and the potential for significant progress with regard to water quality, and soil health and stability is almost limitless. We need everyone on the same page and with the same attitude of responsibility.

We are making progress and we can see it happening. We all need to remember that.

Thank you,
David Conant

From: [Sue Greenall](#)
To: [AGR - RAP](#)
Subject: horse RAP
Date: Friday, December 18, 2015 9:26:10 AM

The board of supervisors for ONRCD would like to comment on potential revisions to the RAP's. This is a collective comment.

Through programs like AOI and RCPP we have been in contact with many small farmers in our district. Most are willing to learn and willing to comply. However, we have struggled with some farmers who, despite NRCS and Ag involvement, continue to allow their animals to wallow in mud up to their bellies and walk through streams. These situations do not set a good example and are brought to our attention by other landowners who have become frustrated in our failed attempts to correct the situations. Then along come the RAP's and they say "really, you can't do anything about them but insist we comply?" We understand that putting teeth in a law is costly and difficult but unless some steps are made to do so, those laws are just paper.

While we realize that RAP's will affect all livestock owners, our district, Windsor County, has the third largest population of horses in the state and is probably the most densely populated. With two horse owners on our board, we have a pretty good picture of what is going on on those horse farms. Our concern with the RAP's is that the only nutrient addressed is manure. Understandably, coming from a dairy viewpoint, that manure is viewed as a nutrient and handled as such. Not the case with horse owners. Often the manure is removed from the stalls, with bedding, and spread directly on pastures. More commonly it is stacked somewhere where it sits for years. Very few horse farms have the equipment to turn the manure or spread it. Composting is a rarity and the reason for that is because there is so much sawdust bedding content that without intense management it just sits there. The nutrient value for spreading that on pastures is in the negative. RAP's are telling them to spread it, and yes, they are supposed to test it. However, if the test comes back saying it is not worth spreading, what do they do then? Unfortunately, there is little information on how to deal with high bedding manure unless one is fortunate enough to have a dairy close enough to haul it off for bedding down cows. Those dairy farmers must shake their heads in wonder at the money horse owners throw away! That brings us to the second point. Horse owners are not making money (exception of boarding facilities which very often have a benefactor with funds). Horse owners are famous for applying lime and commercial fertilizer to pastures "just because". We see it all over our district and when the horse owner is asked if they soil tested before applying lime or fertilizer they admit that they do not. We have to ask the Agency of Ag why lime and commercial fertilizer applications should be exempt from soil testing under the proposed RAP's.

The ONRCD board is happy and willing to discuss any of the above should you wish

Respectfully submitted for the ONRCD board - Larry Kasden, Bill Manner, Judy Howland, Cynthia Rankin, Lynn Bohi, Roy Burton
Sue Greenall

--

Ottauquechee Natural Resources Conservation District
Sue Greenall - District Manager
28 Farmvu Drive
White River Junction, VT 05001
ONRCD1@gmail.com
www.ONRCD.org

From: [Judy Miller](#)
To: [AGR - RAP](#)
Subject: Input
Date: Wednesday, December 9, 2015 1:44:34 PM

To whom it may concern:

Last week I went to a listening session in Brattleboro on the proposed new regulations. I left discouraged because everything proposed made my job as a dairy farmer more difficult. The buffers are doubled in cases, there will be greater record keeping/reporting and greater policing. None of those help me be a better farmer or more profitable. I am farming because I don't like office work or supervision. We run a good operation. We don't pump manure down river if we can help it because we need it. It costs us. If there are some farms out of compliance, work with them, but don't punish me for their negligence. In short, since this is a listening session, anything that makes my life harder or my business less profitable I am against. Perhaps you could treat farms and farmers as individuals instead of disposable.

Art Miller
Cell. 802-490-0751
Sent from my iPad

From: [John Hutchins](#)
To: [AGR - RAP](#)
Subject: Lake Phosphorous
Date: Thursday, December 3, 2015 11:00:31 AM

If 40% comes from farms, where does the other 60% come from? Does it come from Rutland continuously dumping sewage into the Lake?

Please take a stand against towns/municipalities DUMPING SEWAGE into the Lake.

The practice is unacceptable and shameful. To put the blame purely on farmers is a cowardly act and something only corrupt politicians would do.

If state "legislators" cannot commit to keeping a clean lake, they deserve to lose their spot in Montpelier. In fact, every single politician should remove themselves as they are absolutely horrific in regards to Lake stewardship.

Extremely concerned citizen.

From: [Bob Helm](#)
To: [AGR - RAP](#)
Subject: Lk Champlain water quality issues
Date: Wednesday, November 4, 2015 7:36:05 AM

Please spend less time on farms and more time on water treatment plants, removing the Missisquoi causeway and more immediate identifiable solutions. Rep Bob Helm

Sent from my iPad

From: [Pete Johnson](#)
To: [AGR - RAP](#)
Date: Friday, December 18, 2015 2:06:45 PM

Hi Folks, I want to reiterate Vern Grubinger's comments on the RAPs and how they will affect vegetable farms. The need to seed with cover crop flood prone land by Oct 1 is especially concerning and would take a healthy percentage of the vegetable acreage in the State out of normal production. I question how well the proposed RAPs are based on sound science. We're all for improving water quality. But when I see the farming going on in the Craftsbury area, it sure seems like heavy coating of cow manure applied on steep corn land (little vegetation to hold the manure) up until Dec. 15 is a significant issue. This is happening on thousands of acres in my area, often on frozen and snow covered land. Is it possible you are legislating everyone to a silly level while not addressing the big problem-or problems? Shouldn't manure injection be a part of the solution? Pete Johnson

Sent from my iPhone

From: [Watrous, Cynthia - NRCS-CD, Middlebury, VT](#)
To: [AGR - RAP](#)
Subject: Manure Stacking
Date: Monday, December 14, 2015 10:51:50 AM

Land Treatment Planner going out with the NRCS Soil Scientist over the years there a lot of farms that we have been out at there is only one spot to stack that we can find that passes all NRCS requirements. So one spot that passes is better than 1 spot that passes and 3 that do not.

Cindy Watrous

Land Treatment Planner and Cartigraphic Aide
802-388-6748 ext 129 or 802-775-8034 ext 113

From: [Timothy McKay](#)
To: [AGR - RAP](#)
Subject: McKay RAP comments
Date: Saturday, December 19, 2015 9:10:26 AM

Hi Laura et al,

I am retired from NRCS and have 40 years experience working with farmers and landowners in eastern Vermont, mostly the NEK. Making AAPs RAPs is a good move. I have the following comments.

1. In general, requirements are good, but ineffective without enforcement. We've spent millions of dollars for 25 years trying to get the carrot approach to work. Now it is long past time for rigorous enforcement. It is NOT happening. Overall, we have given farmers ample opportunity to take advantage of tax dollars to clean up their act. Dollars are now being used primarily to expand storage for expanded cow numbers. That expense should be built into the cost of expansion. Permits should be required for significant expansions of cow numbers, and the necessary practices should be in place before the cows are, without public funding. Under the current systems, farms add cows and assume that NRCS will pay for that expense. That needs to change.
2. SFOs are being brought into the process, which is good, but they are not the problem. Inspection and enforcement need to be concentrated on MFOs and LFOs.
3. Proposal that manure shall not be applied on slopes of >10% without a minimum 100 foot buffer: In eastern Vermont, the majority of fields are >10% slope and a high percentage have well drained soils. All fields have variable slopes, so 5 acres might be 10%, 5 acres 5%, etc.. Buffers are part of the required NMP 590 standard. If this is to be a stand-alone rule, it should apply to >14%, rather than 10%, and/or the buffer should be 50 feet on well drained, unfrozen soil. Champlain Valley clay is a different story and should have tighter requirements.
4. Custom manure applicator training is vital, and enforcement will be the key. Big fines are needed.
5. Secretary discretion on winter spreading ban is a good idea. There will need to be heavy publicity for a few years, starting in August or September each year, that the ban could be earlier than December 15 and to act accordingly. The 590 standard does not allow spreading on snow or frozen ground, no matter the date, and that should be the crux of the publicity. If the 590 standard is to be applied to all farms, WITH ENFORCEMENT, then the date in the rule is unimportant. Currently the 590 standards are not enforced, and only a small percentage of farmers admits to knowing that they are already bound not to spread on snow or frozen ground.
6. Soil loss being held to T is essential, and is not happening. I observe many, many fields with soil loss far above T, and many with ephemeral gullies. ENFORCEMENT is needed.
7. Cover cropping is a great idea. The problem in the NEK is the necessity of seeding before the corn is harvested. The VAAFV should put some money into getting Hi-Boy seeders out and available, perhaps through the Conservation Districts. This could be accomplished through custom croppers and fertilizer dealers, but a District system would be more reliable. Incentives for aerial seeding is also a possibility.

Tim McKay

2113 Thaddeus Stevens Rd., Barnet, VT 05821

From: [DII - O365 Project](#)
To: [DII - O365 Project](#)
Cc: [DII - Service Desk Information](#)
Subject: Microsoft Office 365 Migration Project
Date: Thursday, October 29, 2015 2:25:09 PM
Attachments: [image002.png](#)
[image004.png](#)

State of Vermont *Agency of Administration*
Department of Information & Innovation
133 State Street, 5th Floor [phone] 802-828-4141
Montpelier, VT 05633-0210

TO: State of Vermont, State Staff
FROM: Office 365 Project Team
DATE: October 29, 2015
SUBJECT: Microsoft Office 365 Migration Project

We are pleased to announce that you will soon have access to Microsoft® Office 365. Office 365 is referred to as a cloud-based service, and provides access to many tools such as Email, Office and SharePoint over the internet. The move to Office 365 is part of the State of Vermont's strategy to reduce the cost of administering and hosting Microsoft systems, such as Email and SharePoint by moving them to the Cloud. Office 365 will also provide enhanced features that are not currently available to us, and free up needed technical staff to focus on other initiatives. Some of the immediate benefits to be realized from Office 365, including being able to login from anywhere, are:

1. Larger mailboxes with increased storage capacity
2. Ability to identify, monitor and protect sensitive emails.
3. Tools to facilitate compliance with legal, business, and records management requirements.
4. Capacity to plan and manage eDiscovery cases and execute legal and retention holds.

Over the next few weeks, you will be learning more about the many capabilities Office 365 has to offer. In addition, you will receive details about our launch timeline and the many resources available to you so you can begin using Office 365 right away.

If you have questions concerning this service or preparation for the launch, please visit our Office 365 website at: http://dii.vermont.gov/news_issues/projects/office365. The website includes many details about Office 365, and is one of the resources we are utilizing to inform all users as the project progresses.

Is there anything you should do in preparation for our migration? Yes. You can clean your mailbox and delete items that are no longer needed. **Please ensure you are following your agency or department policy regarding public records retention.** For mailbox cleanup instructions, please visit our website at:

<http://dii.vermont.gov/sites/dii/files/PDF/Support/Mailbox-Cleanup.pdf>

We will continue to keep you updated as we progress and new information becomes available. Please expect to receive multiple communications from DII and the Office 365 Project Team designed to help you adapt to this change. Some of these emails will include instructions and require action on your part. Please remember to follow the instructions and take the actions requested.

Thank you in advance for your support throughout this endeavor.

DII Office 365 Project Team

From: [Karen Huard](#)
To: [AGR - RAP](#)
Subject: new water quality rules
Date: Thursday, December 17, 2015 7:54:27 PM

To whom it may concern,

Please address issues of water contamination as they arise on a case by case basis instead of taking the approach of one size fits all. Please find a way to exempt more small farms due to their individual circumstances.

From: [Maddie Monty](#)
To: [AGR - RAP](#)
Subject: NOFA-VT's draft RAPs comments
Date: Friday, December 18, 2015 5:20:31 PM
Attachments: [NOFA-VT Draft RAPs Comments.pdf](#)

Dear VAAFM staff,

Please find NOFA-VT's comments on the draft RAPs attached, and don't hesitate to contact us with any questions.

Best,

Maddie Monty

--

Maddie Monty
Office Manager & Policy Advisor
NOFA-VT
(802) 434-4122
www.nofavt.org

From: [Nathaniel Neider](#)
To: [AGR - RAP](#)
Subject: Non Certified Small Farms St. Albans Planning Commission Public Comment
Date: Wednesday, December 2, 2015 8:28:50 AM

Hello,

At the St. Albans Town Planning Commission meeting on 12/1/2015, the board resolved to not regulate non-certified small farms.

Nathaniel Neider

Planner | Town of St. Albans

P.O. Box 37 | St. Albans Bay, VT 05481

Tel: 802-524-7589 ext. 108

www.stalbanstown.com

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From: [Taylor Newton](#)
To: [AGR - RAP](#)
Subject: Northwest Regional Planning Commission Comments
Date: Wednesday, December 16, 2015 12:03:53 PM

Please see the below comments from Northwest Regional Planning Commission regarding the proposed RAPs:

- The section headings/numbering is inconsistent throughout the document.
- The addition of a revised introduction and an applicability sections is great and helps to make the document more user friendly. I'd just have each of these sections be numbered as its own "section" like the rest of the document.
- I really like the last sentence of the introduction. Pretty strong. Or at least a lot stronger.
- The farm structure definition has been simplified in a positive way.
- I have some specific concerns about the definition of floodplain and floodway that are technical in nature, but many have an impact on interpretation.
- I'm unsure why we're still defining FEH in addition to River Corridor. We should just be going with River Corridor at this point.
- The definition of small farm seems to exclude many small vegetable farms. Was this intended? Is this right? What are these "farms" classified as if they are not "small farms," yet still are still defined as a "farm?" Follow me?
- For the definition of a "waste management system," how many of the practices must be used? Just one? Two? Or all three?
- I'm really confused by Section 3.1. I don't really understand the colon used at the end of the first paragraph and the subsequent list. I also have issue with the last sentence of the first paragraph because ZA technically have the final decision on if farm structures are exempt....it just happens that they agree with the Secretary of Ag almost every time.
- Section 4.10(d) seems to allow "small" vegetable farms to be exempt from certification. Is that the intent?
- Section 5.2(c)(ii) – I'd define or explain what "freeboard" is because I'm not sure it's generally understood.
- Section 5.4(c) – What are "annual cropland subject to flooding?" This should be better defined.
- Section 5.7(b) is repetitive. But generally think the rest of the section is well explained.
- Section 5.8 is clear.
- Is Section 9.0(c) talking about River Corridor? If yes, it should be explained clearer.
- Should Section 9.0(d) require the applicant to provide a letter of determination from the Secretary of Agriculture? I think it should.
- In Section 9.0(e)(i), is the River Corridor mentioned adopted by the state? Or does ANR technically have jurisdiction over River Corridor when dealing with farm structures? I think it's the latter and therefore there should be some rewording here.
- I'm curious about Appendix A when it discusses construction of new farm structures. Why are only farm structures over 1 acre in size considered? Should the "must" in the first sentence be a "shall?"

Thanks,

Taylor Newton, CFM

Regional Planner

Northwest Regional Planning Commission

75 Fairfield Street

St. Albans, VT 05478
tnewton@nrpcvt.com

From: [Daniel J. Hudson](#)
To: [AGR - RAP](#)
Subject: one other thought about one of the proposed RAP rules
Date: Friday, December 11, 2015 9:57:11 PM

I mentioned this to Ryan yesterday, and it represents my own opinion, not necessarily that of the rest of the UVM Extension contingent:

Regarding the proposed requirement that certain farmers receive four hours of pertinent education every five years:

While our organization would obviously be involved in providing such education, the rule itself is not that great an idea.

Here is why I think so:

- Taking human nature into account, it seems likely that some/many farmers will attend fewer meetings if this requirement is put into law. 'I've got my four hours, and I'm done!' I would rather farmers develop a pattern of self-education because they see value in it.
- Farmers can and do educate themselves in many different ways. This four hours in five years would be a drop in the bucket compared to what most of them already do.
- It does not seem reasonable that the state saddle them with one more reporting requirement, especially since they are going to be required to comply with the field and farmstead parts of the law anyway.

From: [Ted Siegler](#)
To: [AGR - RAP](#)
Cc: greenall@vermontel.net
Subject: Proposed Rules: Required Agricultural Practices Regulations For Agricultural Non-point source pollution control program
Date: Friday, December 18, 2015 11:39:50 AM

To Whom It May Concern:

I am a small farmer with a herd of angus beef averaging 12 head, farming 10 acres of my own land and roughly 30 acres of adjacent land.

I also own an environmental consulting company.

I have read through the above referenced proposed rules and offer the following comments:

1. It is virtually impossible to understand from these rules, as written, what category of farm I fall into. For example, the use of "or" under 2.25 (c) appears to indicate that any farm with 10 or more acres is not exempt yet Section 3 would appear to imply that I am a small farm with separate requirements.
2. The requirement for annual certification of all small farms is completely ridiculous. I know from experience that these certifications will either (a) end up in a file cabinet somewhere; or, (b) add a whole series of new positions dedicated to reading each one of these certifications year after year. These new positions will not be out in the field but sitting behind a desk.
3. The idea that we have to test our manure annually is completely ridiculous. There are countless analyses of manure from beef cows readily available which can be used to determine what the average nutrient value is. To think that I need to take one (?) ten (?) grab samples of my manure and test each year makes absolutely no sense.
4. You could achieve the exact same results with a simple farm management plan for small farms required ONCE, and updated only if there were significant changes to the farm operation. It could be as simple as stating that I will only apply "X" tons, or cubic yards of manure per acre, with 3 year soil samples required.

The result of these proposed rules is very obvious. I will simply ignore them because they make absolutely no sense for a small farmer. They will drive honest small farmers out of business trying to comply, and will make many of us outlaws in a State that purports to want to grow small agriculture – and it will do very little to foster improved water quality.

It is simply amazing to me that the Secretary of Agriculture would have allowed these to be published as written. They are clearly designed for very large dairy farms, and are incredibly harmful to small farms.

I pride myself in running an environmentally sound farm. I have participated in a Fish and Wildlife program to plant trees in a 25 foot buffer along my stream. I faithfully follow the prohibition on spreading manure in the winter. I rotationally graze my cattle. I only allow them access to the stream on my property at one location which is the only way they can get to fields on the other side of the stream. My cattle are completely grass fed. I annually control for invasive in my hay fields and take soil samples every other year before deciding if I need to spread any fertilizer or lime my fields.

You need to:

1. Re-read your proposed rules and make them crystal clear as to whom is required to do what, and what type of farm is required to do what – that is not the case now under these proposed rules.
2. Eliminate annual reporting requirements – there is absolutely NO need for this level of

reporting for small farms.

3. Revise the rules to require a simple farm management plan for small farms that incorporates best management practices for that farm – this is going to require that you send state employees out in the field to actually work with small farmers rather than have them sitting behind their desks reading annual reports!

Failure to make substantive changes to these proposed rules will simply result in small farmers completely ignoring them, or stopping agriculture. Neither of these outcomes should be acceptable to you.

Quite frankly, you should be embarrassed by publication of these rules in their current form.

Ted Siegler

DSM Environmental Services, Inc.

P.O. Box 2, Windsor, VT 05089

(802) 674-2840 x101

(802) 236-2035 (cell)

From: [Unknown Unknown](#)
To: [AGR - RAP](#)
Subject: Public comment for RAP's
Date: Monday, December 14, 2015 11:16:51 PM
Attachments: [Public Comment Form for.docx](#)

Please find attached file with my farms comments in regards to the draft RAP's

I have 2 additional attachments that I couldn't attach via email so I have mailed a hard copy of this file and the 2 attachments.

Thank you
Justin Poulin
431-3645

From: [Kim Smith](#)
To: [AGR - RAP](#)
Subject: Public Comment on Draft RAP
Date: Friday, December 18, 2015 3:36:26 PM
Attachments: [WRC draft Comments on RAP_1212015_final.pdf](#)

Dear Agency of Agriculture, Food, and Markets,

I appreciate the opportunity to submit comments on the Required Agricultural Practices on behalf of the Windham Regional Commission's Natural Resources Committee. Thank you for engaging the public in this process and for taking our comments into consideration as you revise the draft RAP.

Please don't hesitate to contact me if you have questions.

Sincerely,

Kim

Kim Smith

Windham Regional Commission

139 Main Street, Suite 505

Brattleboro, VT 05301

(802) 257-4547 ext. 108

From: [Lapin, Marc](#)
To: [AGR - RAP](#)
Subject: Public comment on Draft RAPs
Date: Wednesday, November 4, 2015 10:46:22 AM

Thank you for the opportunity to comment on the draft RAP regulations.

My comments are as follows:

General comment: The draft required practices, if actually practiced by all farms, do appear to have the potential to significantly improve water quality and reduce soil erosion. I do not see how they would substantially reduce degrading practices that are currently used on frequently flooded soils under cultivation.

Introduction:

- “Persons engaged in farming who are in compliance with these practices shall be presumed to not have a discharge of agricultural pollutants to waters of the State.”
 - o This is unrealistic and dishonest. The required practices would certainly reduce inputs, but it is false to claim that there would at all times be Zero Discharge.
 - o Reword to be more accurate – “presumed to be within acceptable minimal limits of discharge”

Numbered Sections

- **1.1 Purpose:** The *Required Agricultural Practices Regulations* are farm and land management practices that will control and reduce agricultural non-point source pollution
 - o This is more accurate, realistic and honest than the language in the Intro and repeated in several other subsequent sections.
- **2.15 Intermittent Waters** means waters in conveyances where the presence of water is not continuous and may occur periodically and infrequently such as during and immediately following a rain or snowmelt event. Intermittent waters include, but are not limited to, ditches, swales, channels or other water diversion features.
 - o The relationship between wetlands converted to ag and intermittently with standing lotic or lentic water is not clear.
 - o I would suggest that in such cases that converted wetlands and intermittent waters are not mutually exclusive categories.
- **2.26 Surface water** means all rivers, streams, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border the state or any portion of it.
 - o Inclusion or exclusion of intermittent waterways is ambiguous in this definition.
 - o I would assume that surface waters include both permanent and intermittent waterways, but Section 5.7.a.1 clearly differentiates buffers for these two types of surface water, so the definitions need to be clear differentiated with no room for misinterpretation.
- **3.1 Persons engaged in farming and the agricultural practices** as defined in Section 3.2 of these rules, and who meet the minimum threshold criteria for applicability of these rules as found in Section 3.1(a) – (d), shall be presumed to be meeting *Required Agricultural Practices* and presumed to not have a discharge to waters of the state and groundwater as long as the farm also complies with the conditions and restrictions contained in Sections 4,5,6,7 and 9 of these rules.
 - o This is another case of inaccuracy, dishonesty, and misrepresentation of the expected results of these practices, as I discuss in the comment regarding the Intro.
 - o Zero discharge is an unlikely scenario for all times, storm events, practices, etc.

• 5.4 Soil Health Management Recommendations; Cover Crop Requirements

- o I would like to see a requirement that would reduce bare soil in all areas, not just those subject to flooding. Perhaps 5.4.b would have this effect, but it does not clearly state that soils should not be left bare for long periods of time.
- o What regulation can be worded ore explicitly to include the intent and practice of getting growth on bare soil as soon as possible?
- o I can see how tricky this is for farmers, but we all know that the effects of erosion on these cultivated, unplanted bare soils is extreme.
- o Also, along the banks of Otter Creek, for instance, planting a winter rye or other cover crop in floodplain fields by 9/15 or 10/1 is a laughable attempt to reduce soil erosion and pollutant-laden runoff into the creek. Take a drive down to the Salisbury-Cornwall Swamp Road bridge and look at the cultivated floodplain fields. Can you pass the straight-face test and tell me that if these RAPs were followed there would be zero discharge?
- o We need a regulation for not-tilling frequently flooded soils if we want to make a real difference in these floodplains.

Sincerely,

Marc Lapin

Marc Lapin, PhD

239 Cider Mill Road

Cornwall, VT 05753

From: [Patch, Ryan](#)
To: justin@gmavt.net; [AGR - RAP](#)
Cc: [DiPietro, Laura](#); [Leland, Jim](#)
Subject: Public Comment on RAP Draft Changes
Date: Thursday, December 17, 2015 9:58:38 AM
Attachments: [Justin-Poulin-RAP-Comments.pdf](#)

Hi Justin,

Thank you for submitting additional comments regarding the Draft RAPs, I am writing to confirm receipt of your letter.

Thanks also your attendance and engagement at the RAP meeting last week, as well as your sharing of how the Draft RAPs as written would impact your day-to-day farm operation—appreciate also the alternative language suggestions contained in your letter.

I will reach out when we have redrafted the RAPs so we can discuss the proposed changes and get your feedback. The CT River Farmers Watershed Alliance has asked for a focus group meeting to discuss the second draft in WRJ in January / February, might be a good meeting to attend if you have the availability—will let you know when the meeting date / time is finalized.

Thanks again,

-Ryan

Ryan Patch

Sr. Ag Development Coordinator

Vermont Agency of Agriculture, Food and Markets

116 State St. Montpelier, VT 05620

Cell: (802)-272-0323

Fax: (802) 282-1410

ryan.patch@vermont.gov

<http://agriculture.vermont.gov/>

From: [WagnerRanchLLC AngusBeef](#)
To: [AGR - RAP](#)
Subject: Public Comment on RAP draft
Date: Friday, December 18, 2015 8:17:50 PM

Comments on purposed RAP's

Nutrient Management Plans (NMP) are costly and overly burdensome on small farms. Small farmers are already over worked and struggling to stay in business (financially, physically, and emotionally) without having more work required of them. Small farms are often single family run operations with few if any employees. Unlike large farms who have staff to manage the books, small farmers must do all of the work. Even if one were to spend the thousands of dollars to pay for a NMP, there is still a demand of time needed to input the required data.

Permit/Fees: As stated above Small Farms are small business struggling to stay afloat and to require an additional fee is absurd.

Set back for manure stacking as depicted in Section 5.2(e) indicates no stacking within 200ft from roads. This has no relevance to water quality and should be omitted.

Philip Wagner
Bridport, VT

From: [Mark Cannella](#)
To: [AGR - RAP](#)
Subject: Public Comment on RAPS meeting
Date: Friday, November 20, 2015 10:11:33 AM

VAAFM,

I attended the Middlebury meeting this week. Great presentation, great work on outreach!

Here are several comments/thoughts I wanted to share:

1. the sept 15 and Oct 1 cover crop timelines seems problematic for certain crops... while fall cover is nice I wonder if relaxing those deadlines to later in fall will still get cover crop germination that will be able to establish for spring erosion mitigation, maybe nov 1 deadline?
2. 100' ft stream bank or floodplane manure application on earlier timeline. The policy makes sense, but we might see real logistical problems in custom manure applicators. Might not be economically feasible to deploy labor and equipment for small and targeted early application deadlines.... might need support funds to support transition period for custom operators to sort out how to meet demand and timelines.
3. The definitions of farms seem to all relate to manure application... what about other phosphorus applications/fertilizers... do these applications figure into NRO, UFO, SFO definitions? I'm think about an 11 acre organic veg farm applying rock powders and bone meal/char.
4. I heard that the \$16M may get prioritized to conserved farms. Sounds complex. One consideration: if farms sought conservation easement as mechanism to bandaid and obsolete farm property or struggling business... perhaps they are not the best candidate for more public investment. Farms that have historically taken care of themselves financially should not be penalized for access to \$16M
5. Privacy Issues: This relates to concerns about Freedom of Information and VAAFM obligation to attend to any violations observed. Seems we need a 3rd party and independent entity that can meet farms and conduct assessment visits with no threat of regulatory recourse or information documentation within the agency. Can a certified 3rd party conduct assessments fully independent of VAAFM?

Best,
Mark Cannella

--

Visit Farm Viability Online: blog.uvm.edu/farmvia/

Mark Cannella
UVM Extension: Farm Business Specialist
Toll Free: 866-860-1382
Local #: 802-476-2003
327 US Route 302, Suite 1
Barre, VT 05641

From: [Steve and Tim Kayhart](#)
To: [AGR - RAP](#)
Subject: Public Comment on RAP's
Date: Thursday, December 17, 2015 5:26:53 PM
Attachments: [KayhartBros RAP Public Comment.pdf](#)

Hi,

Please find attached our comments on the proposed RAP's

Sincerely,
Steve Kayhart
Kayhart Brothers, LLC

From: [Michelle Grald](#)
To: [AGR - RAP](#)
Subject: Public Comment on the Draft RAP
Date: Thursday, December 3, 2015 4:28:23 PM

Dear Legislators:

With regard to the number of livestock required to qualify as a small farm. Why is it 15 horses when it is 30 cows? I have owned and managed both horses and cows and can say that the impact on the land is about the same for the same number of animals. It seems like you are penalizing horse owners here. I respectfully request that you amend the draft to specify that the minimum number of horses falls in line with the minimum number of cows, which is 30.

Thank you for being willing to consider public comments.

Best regards,

Michelle Grald

Weathersfield, VT

From: [Dog River Farm](#)
To: [AGR - RAP](#)
Subject: Public comment- water quality
Date: Monday, December 14, 2015 7:47:37 AM

As a vegetable grower who buys phosphorus because it leaves my farm as food, hay and straw I find it unfair that I would be responsible for cleaning up the mess that others create and continue to contribute to. Why not a provision for farms who are determined to be "noncontributory" to have inspections occur on a 5 year interval. Not to throw other farmers under the bus... unsustainable dairy farms relying on government money to grow larger and larger may not be the way to go.

Please dont take from responsible businesses to fund and enforce this measure.

Is there an education component? Similar to a pesticide applicator licence? I get the state is broke but to make everyone pay for this is crazy. How about a lottery ticket that funds this?

George Gross
Berlin

--

Dog River Farm
802-223-1559
dogriverfarm.com
[Find us on facebook](#)

From: [Cheryl Van Epps-Fung](#)
To: [AGR - RBP](#)
Subject: public comment
Date: Thursday, December 17, 2015 9:28:46 PM

Hi there,

I am a strong believer that VT homeowners should be taxed heavily on their use of lawn fertilizer (a nonessential, "luxury" usage) - I am betting that the amount of Phosphorus pouring into Lake Champlain from their liquid and solid yard fertilizers is under-estimated and under-reported.

I live in Pinewood Manor, in Essex VT, where our properties are wooded lots. Our development was originally hilly woodland area and the soil is very sandy with very little top soil. During a dry spells and when the white grub activity is peak, our yards easily convert back to a sand pits. It seems to me folks are using lawn fertilizer as a method of combating their grub infestations. Undoubtedly the majority of our fertilizers is leaching through the soil of our yards and into our watershed.

To illustrate my point, this summer (7/3/15) I took these 2 photos of our development's pond just off of Valleyview Drive. Please note the lovely green algal blooms. There is no nearby farmland; the pond lies at the base of a hill surrounded by properties with lush green yards. No one else in my neighborhood has made note of or posted a message of concern about this annual event. Our neighborhood is only one of many.

For my own lawn, I have been tending it using an all-natural way: experimenting by spreading composted, decaying plant and wood material for the purpose of adding organic material and boosting the top soil layer. This summer I also tried spreading BioChar. If I see good results in a year or two, I'll be sure to pass on these tips to my fertilizing neighbors.

Thank you for taking our public comments!

Cheryl Van Epps
8 Rustic Drive
Essex, VT





From: [Mary Childs](#)
To: [AGR - RAP](#)
Cc: [Paul Doton](#)
Subject: RAP comments from Nov. 20th Focus group
Date: Thursday, December 17, 2015 5:04:01 PM
Attachments: [Nov. 20th RAP Focus Group Comments.pdf](#)

Greetings,

The White River NRCD is submitting comments on behalf of local farmers and landowners in Orange and Windsor county regarding the draft RAPs. These comments were collected on November 20th during two small focus groups, in Randolph and WRJ. I have attached a PDF document summarizing comments.

Thank you for carefully considering the thoughts, concerns, and alternative from the farming community.

Mary

--

Mary Childs, District Manager
White River Natural Resources Conservation District
28 Farmvu Drive
White River Junction VT, 05001
O: 802.295.7942 ext. 112
C: 802.249.9523

From: [Ted](#)
To: [AGR - RAP](#)
Subject: RAP Comments Meeting 12.docx
Date: Friday, December 18, 2015 1:28:06 PM
Attachments: [RAP Comments Meeting 12.docx](#)
[ATT00001.txt](#)

From: [Bruce Howlett](#)
To: [AGR - RAP](#)
Subject: RAP comments
Date: Friday, December 18, 2015 4:27:38 PM

I finally made a few minutes this afternoon to write down my comments on the Draft RAPs.

Comments:

2.05 Without a separate definition of “crop”, this definition appears to say that perennial crops such as hay and pasture, as well as orchards, do not factor into the definitions below – though they are listed under 2.08

2.25 Small Farm definition: The language in the draft is not clear as to whether a, b, and c are “and” or “or” This definition is not consistent with the later “Farm Size Definitions Draft Sheet”, which also mentions “wastes applied” as a factor. 2.25c does not indicate how many acres of crop land would trigger the definition. As written, these regulations would appear to be triggered more by land than by livestock. For example, a diversified farm with 12ac of crop land and 3 pastured beef cattle would be subject to inspection, while a farm with 5 dairy cows in a 2ac lot (bad idea) would not be. A farm with 12 ac of hay and pasture for three horses would be required to certify as a small farm. The Definitions Draft Sheet suggests that a farm that raised 50 ac of hay and also kept 25 pastured sheep would be subject to inspection if they spread any manure on any fields – even though they would have only enough manure for about a half acre. However, the language in 2.25 c, if “crops” is taken to mean annual crops, would suggest that this sheep farm would not qualify as a small farm. [these examples come from actual properties that I have worked with]

3.1.b The language would seem to indicate “and” – that the owner has filed a Schedule F reporting gross sales >\$2000. There are many reasons why a person might not have reportable income exceeding even this small number, and so I would rather see the definition based only on activities not on finances.

4.10.c MFOs, LFOs and other programs including VT’s Use Value Appraisal and USDA Farm Service Agency, only require annual reporting of changes in land base. 30 days is a much stricter standard, and is unlikely to be followed even after a system is in place at VAAF to tract ag land.

4.10.d belongs in 2.25. If a farm is not applying wastes there is no reason to have to report to VAAF.

5.2.e.iii. On some farms, limited options for stacking sites mean that the best solution is stack in the same place every year. I recommend that this line be struck from the draft regulations.

5.3. The NRCS standard is quite involved. NRCS does not have time nor resources to write NMPs for all the small farms in VT. The person at NRCS who certifies NMPs has at least a year’s backlog at present, so who will certify the small farm NMPs? The Go-Crop-based training by UVM-Extension is not useful for many small and diversified farms, but there is already a waiting list for the 2016 classes. This rule may be a good idea but it cannot be achieved without a substantial investment of State funds.

5.4.a. Unspecific agronomic recommendations do not belong in this section of the regulation.

5.4.b. Who will calculate the RUSLE2 estimated soil loss to determine that a farm is in compliance?

5.5.c. For fields along rivers with broad floodplains (e.g., Otter Creek, lower Winooski), 100’ from the top of the bank could be well within the flood zone.

5.5.e. The slope limitations should be set at 15% to coincide with the slope class breaks in the soil map units. Thus, a quick review of compliance could be done in the office w/o having to go out to check every field for its slope. This restriction will hurt grass-based livestock hill farms, many with steep small fields adjacent to streams. Since perennial forages would absorb appropriate nutrient applications in most normal circumstances, it would be just as good to restrict spreading on these slopes to the period May 15 to October 15 – which would also have the effect of banning spreading manure on steep cultivated fields, since those fields will be growing crops during this period.

6.0 I strongly support the idea that livestock will not have access to surface waters in production areas, but can be allowed access in pastures. It would be appropriate to add a rule similar to 6.0.a.iv. stating that pastures shall be managed to maintain adequate vegetative cover.

Thank You.

Bruce Howlett
Bobolink Farm,
East Montpelier

From: [Jen Miller](#)
To: [AGR - RAP](#)
Subject: RAP Comments
Date: Friday, December 18, 2015 3:18:25 PM

Hi,

My name is Jen Miller and I provide business planning services to new farmers in Southwestern Vermont. Prior to that I was a vegetable and small livestock farmer. Here are my comments and suggestions re: the draft RAPs.

- The \$2000 gross sales threshold seems low. On a per acre basis even small market gardens gross more than that. I would like to see this cap raised and would consider \$10,000 gross sales more reasonable.
- There are lots of small farms in our region that raise a diversity mix of livestock. As it stands, for them to figure out what category they would fall into (based on max numbers of certain animals) will be challenging. I think it would be much easier for everyone to interpret if those numbers were changed to animal equivalents (and included a clear definition/method of how to calculate animal equivalent units for each species).
- Europe has had success with incentivizing agricultural practices that deliver public goods. The USDA does a bit of this with the Conservation Stewardship Program (the higher the environmental performance of the farm, the higher the payment). I'm wondering if integrating an incentive model into the RAPs would simultaneously increase the rate of farmer compliance, catalyze innovations that promote water quality, and save the Agency a significant amount of money in the form of reduced enforcement costs. Seems like incentives would be better all around than chasing after farmers, many of whom do not have enough money to fund their practices/structures required of them.
- The definitions of small farm types and whether or not they are covered by the rules are confusing. I support the definitions created and submitted by Vern Grubinger, UVM Extension to bring more clarity to farm size categorized.
- I support the creation of some type of "590-lite" as the standard 590 will be way too cumbersome and costly for the majority of small farmers, especially vegetable growers. The state would save money both in the development and the review of shorter plans where applicable as well.
- The requirement to move a field stack every 180 days and not have it in the same place more than once every 4 years feels like it is a unrealistic requirement for small farms with limited land bases. For example, many vegetable farmers have their fields laid out to maximize tillable acres, accounting for tractor turnaround space, and do not have that number of options for possible locations of their compost piles.
- The Agency has said that initially small farms will not have to pay a permit fee to certify. I would like to see it written into the rule that no fee will ever be required for small farm certification.

Thank you for your time and all your work compiling and considering comments on these

RAPs.

Best,
Jen

--

Jen Miller
New Farmer Program & Farm Fresh Connect Coordinator
RAFFL
jen@rutlandfarmandfood.org
802-417-7096

<http://whatsgrowinon.org/>
www.rutlandfarmandfood.org

From: [Matthew Kittredge](#)
To: [AGR - RAP](#)
Cc: [Sands, Nathaniel](#); [Sands, Nathaniel](#); [David Weber](#)
Subject: RAP comments
Date: Friday, December 18, 2015 9:49:36 AM
Attachments: [Comments for Vermont proposed RAP \(FCS 12.16.15\).docx](#)

To whom it may concern;

Attached, please find comments to the proposed RAPs as compiled by the Farm Compliance Services agronomic team.

If you have any questions regarding these comments, please let me know.

Many thanks,

Matt

--

Matthew Kittredge
Northeast Region Director
Farm Compliance Service
P.O. Box 188
Lafayette, NY 13084
Cell - 802-377-2779
Office - 802-552-3031
matt.kittredge@farmcomplianceservices.com

From: [Jonathan Chamberlin](#)
To: [AGR - RAP](#)
Subject: RAP Comments
Date: Friday, December 11, 2015 10:25:33 AM
Attachments: [RAP Comments.docx](#)

Thank You
Jonathan Chamberlin
Addison, VT

From: [Norma Bromley](#)
To: [AGR - RAP](#)
Subject: RAP comments
Date: Thursday, December 17, 2015 6:27:44 PM

I attended the Dept. of Ag. RAP info meeting in St. Johnsbury on De. 8 2015. As a small/hobby farmer I find many of the proposed regulations will impose huge costs on small farms. The definitions of a small farm: 4 acres, five animals, less than \$2000 annual gross, etc. are very unrealistic. A farm can not put any buildings in Current Use unless more than 25 acres are a farm and, 'more than 50% of earned income is from the farm'. Small farms are being penalized from every direction; an undue burden will be placed on small farms where there aren't any problems !

Please consider my comments as NOT APPROVING the 'small farm' definition !

--

Norma Bromley
Boreas Farm Cashmere
3069 Schoolhouse Road
Newark, VT 05871

From: [Jane](#)
To: [AGR - RAP](#)
Subject: RAP comments
Date: Thursday, December 17, 2015 4:31:58 PM
Attachments: [RAP COMMENT LETTER.docx](#)
[ATT00001.htm](#)

Attached are comments submitted by Green Mountain Dairy Farmers to the RAPs

From: [Bridget Bowen](#)
To: [AGR - RAP](#)
Subject: RAP comments
Date: Saturday, December 5, 2015 6:44:19 PM
Attachments: [RAP Comments 2015.docx](#)

Attached please see comments on the draft RAP regulations.
While agreeing with the Champlain Valley Coalition comments these
also need to be taken into consideration.

From: [Shelly Stiles](#)
To: [AGR - RAP](#)
Cc: sagamrgn@gmail.com
Subject: RAP comments
Date: Thursday, December 3, 2015 10:45:40 AM

Hello folks,

I submit the following comments on the RAPs on behalf of one of my board members.

Re livestock exclusion fencing:

- Our pastures are cut by many rivulets. Fencing them off, and thereby creating a patchwork of obstacles, could mean our animals could not flee coyotes.
- A pasture fragmented by fences can't be worked; the cows will nudge the round bale feeder into the fences; and how is one to drive the tractor in them?
- Our pasture rivulets are a primary source of drinking water for our animals, yet they are unpredictable. A watercourse may carry lots of water one month but dry up the next. We must maintain our flexibility as regards these resources – our ability to put our animals where the water is when they need it.
- Horses, sheep, and goats don't dirty streams. They avoid entering them.
- Wells are not an option when we lack electricity to operate them.
- We use our animals to manage our landscape, for example, to keep our pastures free of weeds. Fenced-off areas will very quickly become a mass of multiflora rose and Canada thistle.
- The RAPs will drive small just-getting-by operations like ours out of business. And who will buy our farm when we can no longer run it? We will have to subdivide it.

Shelly Stiles

District Manager

Bennington County Conservation District

PO Box 505

Bennington, VT 05201

802 442-2275

www.bccdvt.org

From: [Lewis H Stowell](#)
To: [AGR - RAP](#)
Subject: RAP Comments
Date: Friday, December 18, 2015 4:40:35 PM
Attachments: [COMMENT ON REQUIRED AGRICULTURAL PRACTICES \(RAPs\)1.pdf](#)

Please find PDF document attached with my comments.

PLEASE LET ME KNOW IF YOU HAVE TROUBLE OPENING IT.

Thank you.

Lew Stowell
1591 Twin Ponds Road
Brookfield, VT 05036
802-276-3382

From: [Michael Barrett](#)
To: [AGR - RAP: Michael Barrett](#)
Subject: RAP comments
Date: Friday, December 18, 2015 9:37:04 PM

I appreciate the desire to improve our environment but feel it needs to be done in such a way that farms are not restricted to the point they can't operate at an economical level. In a state like Vermont where southern and northern Vermont are very different when it comes to weather and their growing season it is very difficult to have one rule that will fit all when it comes to spreading deadlines and cover crop planting dates. We are in southern Vermont on the Connecticut river and often don't have our corn harvested until late Oct or early Nov due to the longer day hybrids we are able to plant . We can't afford to go to shorter day hybrids due to the lack of available land so we need to get every ton off every acre that we have. I feel there needs to be more flexibility in the end spreading date in a year like this where the weather is good, the ground isn't frozen and they aren't predicting snow why can't the spreading date be extended. Make people have to harrow it in and not allow them to spread in fields that abut a river or stream and it will minimize any chances for run off.

I also have a problem with the field stacking site rule of only being able to stack in a site once every four years. There are a lot of small fields in Vermont and if you make a 200 ft set back that can leave very few spots to stack manure. Currently with our nutrient management plans they have dictated to us or the field itself has where the best place to stack manure is and some times there is only one or possibly two spots. I think it is unrealistic to have four spots in every field possibly forcing you to use a spot that has more potential for runoff. I also feel the 180 day limit is too short. We often stack though the growing season but don't want to have to spread it in the fall where it won't do us much good we want to be able to spread it in the spring.

I also have issues with not being able to spread manure on a field that is greater than 20 ppm of Phos. Most farms in Vermont run very tight on the amount of land they have and the ability to get rid of their manure. I see this rule causing farms to not have the land base to get rid of their manure properly and either ending up with storage problems or over spreading on fields that are below 20 ppm and soon those will be high as well. I think there needs to be a plan where those fields over 20 ppm need to be strictly managed so they are not increased further and hopefully reduced while still being able to spread on them. I especially feel this is true if it can be demonstrated that over time the Phos level has been coming down in a field even though it still is over 20 ppm.

Once again I appreciate the time you are spending to hear our ideas and your efforts to make these rule changes work for everyone.

Thank You
Mike Barrett
Stoneholm Farm

From: [Alex Weinhagen](#)
To: [AGR - RAP](#)
Cc: [Smith, Stephanie](#)
Subject: RAP draft rules comments - Weinhagen
Date: Tuesday, December 15, 2015 4:21:48 PM
Attachments: [floodhaz_rivercorridor_protect_procedure_120514.pdf](#)
[ANR_act250_riparian_buffer_guidance_120905.pdf](#)
[RiparianBuffers_techpapers_2005.pdf](#)

VT Agency of Agriculture, Food and Markets,

Please see below for my comments on the draft Required Agricultural Practices (RAP) rules. As the Hinesburg Town Planner for the last 13 years, I've been part of many discussions on water quality practices – e.g., stream setbacks/buffers, municipal road runoff, development-related stormwater control infrastructure, etc. I'm very encouraged by the proposed RAPs! Especially in the Lake Champlain watershed, it's critical that all sectors step up to improve water quality – municipalities, developers, community members, and farmers.

Section 5.4 (d) – field borne gully erosion – This is an important provision given the rolling topography of many tilled and cropped farm fields; however, the language of this rule is too vague. The rule says that “field borne gully erosion shall be managed...” Managed is the wrong word since it could mean just about any result on the effectiveness spectrum. I recommend replacing the word “managed” with the phrase “minimized or prevented”.

Section 5.5 (c) – manure spreading time restrictions – I understand that the intent of this rule is to effectively extend the winter manure spreading ban in proximity to streams subject to flooding. I recommend extending the protection year round. Flooding along streams in Vermont happens frequently as a result of summer storms – i.e., not solely during the shoulder seasons. Rather than parse the timing, I think it advisable and more straightforward to simply prohibit manure spreading within 100 feet of a stream that is subject to flooding. Regardless of the time of year, flood prone areas immediately adjacent to streams have great potential to deliver untreated pollutants directly into surface waters.

Section 5.7 (a) – surface water vegetative buffer – The proposed 25 foot surface water vegetative buffer for cropland (criteria i), manure application (criteria iii), and tillage (criteria v) is inadequate and inconsistent with riparian buffer recommendations from the VT Agency of Natural Resources. Based on the science and the research literature, VT ANR's river corridor program recommends minimum riparian buffers of 50' and 100' depending on the surface water in question. In fact, the recommended buffer area can be even wider depending on how the river/stream meanders and the associated meander belt width necessary for the river/stream channel to reach equilibrium. The surface water vegetative buffer RAPs should be increased to at least 50' in order to be consistent with the science and VT ANR's policies and best management practices. Refer to the following ANR publications for details:

- Flood Hazard Area And River Corridor Protection Procedure (12/5/2014) – See pages 12, 28-29. Attached and available online at http://www.watershedmanagement.vt.gov/rivers/docs/FHARCP_12.5.14.pdf
- Guidance For Agency Act 250 And Section 248 Comments Regarding Riparian Buffers (12/9/2005) – Attached and available online at http://www.watershedmanagement.vt.gov/rivers/docs/Educational%20Resources/rv_GuidanceforAgencyAct250CommentsReRiparianBuffers.pdf
- Riparian Buffers And Corridors (2005) – Attached and available online at http://www.watershedmanagement.vt.gov/rivers/docs/Educational%20Resources/rv_RiparianBuffers&CorridorsTechnicalPapers.pdf

Section 5.7 (b) – manure spreading surface water setback – For the same reasons outlined above for riparian buffers, the setback for manure spreading from surface waters should be increased to at least 50'.

Section 9.0 (a) – farm structure construction in flood hazard area – Prohibiting the construction of new farm structures in the floodway is sound policy, as is requiring compliance with NFIP standards for construction within the 100-year floodplain area outside of the floodway. From Agency of Agriculture personnel, I understand that VT DEC will be consulted with regard to compliance with some sort of general NFIP standard when construction is proposed in the flood hazard area. The fact is that the NFIP standards are tailored and administered at the municipal level, not the State level. Rather than using some general NFIP review standard, I recommend that the review utilize the actual standards in place within the municipality in question. VT DEC staff provides feedback for all other development in the 100-year floodplain utilizing municipal-specific flood hazard regulations. They certainly could use the same protocol for farm structure construction in the hazard area. This would respect local decisions that have already been made, and keep flood hazard development review consistent for all structures. The ability for the Secretary of the Agency of Agriculture to modify setbacks and other standards can be retained to allow flexibility for unique or difficult circumstances.

Alex Weinhagen
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From: [Sue and John Greenall](#)
To: [AGR - RAP](#)
Subject: RAP draft
Date: Sunday, December 13, 2015 6:53:50 PM

I attended the Dec 3 meeting in White River Junction and want to applaud you all for doing a good job.

I have owned horses all of my life and my husband is a United State Equestrian Federation judge. I feel we have a realistic understanding of the horse industry, not just in Vermont but nation wide. I agree that horse owners should be included in the RAP's and I would say that most are educated people willing to do their part to improve water quality. That said, they are clueless about AAP's, soil testing and nutrient management plans. Manure is NOT treated as a nutrient, rather something one has to pile somewhere and get rid of one of these days. Pastures are NOT considered nutrient sources, rather a nice playground for their horses. Horses are not animals one raises for profit. During the White River meeting I asked if applying lime was OK without soil testing. The answer was, why would anyone apply lime without a soil test as that would be a waste of money. Obviously that person is not familiar with horse owners. Liming fields is just done because they think it is good for the grass. I knew one horse owner who fertilized his pastures twice a year because the grass needed something to grow on. I witness acres and acres of land being treated with lime or fertilizer and I know there has not been a soil test done. I have spoken with state and local officials who agree that the Dept of Ag should be considering more than just manure application to require a soil test. Application of fertilizer or lime without soil testing is more common than you realize and should be incorporated into RAP's/

The second point I would like to make is the number of horses, 15, to be considered a small farm. I did ask Ryan where that number came from and it is arbitrary. I have 10 horses myself. Four are over 25 and living out their retirement, something cow, sheep and pig farmers do not do, but like I said, horse owners are a different lot. I would like to suggest that the number be increased to 30, after all, beef cows are 30 PLUS calves. I think you would be amazed at how many horse owners have 15+ horses and I doubt the Dept of Ag has the resources to reach out to all of them. Start with 30 and if years from now it is obvious that the number needs to be lowered, do it then.

Now to the heart of the matter...manure. The big problem with horse manure is that it is mixed with a LOT of bedding. Beyond what you can imagine -80-90%. People just love fluffing up their horse's beds and there is no turning them from it. That "manure" does not compose well and certainly is not a nutrient source if spread. In fact, it is detrimental to spread uncomposted "manure" with that much bedding in it. Good luck composting it too. An example is Green Mountain Horse Association which has 45 events a year and every stall is stripped clean when a horse vacates a stall. 90% is bedding. Lucky for them a dairy is next door and takes it for their cows. Most horse facilities do not have that option so what the heck do they do with it? Until the Dept of Ag figures that one out that "manure" is of little benefit to pastures and needs to be stored somewhere. I have seen 30 years of "manure" tossed over a bank (no stream nearby) which has produced a peninsula of ground solid enough to drive a truck over because most of it is wood chips. Horse manure is not comparable with cow manure simply because of the bedding issue. I don't think encouraging horse owners to spread it is beneficial to Vermont's water quality.

I am happy to answer any questions you might have.

Sue Greenall
268 Kings Highway
West Windsor, VT 05089

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<http://www.greenallcarriage.com>

From: [Tom Beaudry](#)
To: [AGR - RAP](#)
Subject: rap feedback
Date: Thursday, December 17, 2015 8:42:36 PM

Good Evening,

I have several concerns with the proposed RAP's

1) the proposed 20 ppm P ceiling has the potential to affect a considerable amount of corn acres for both large and small farms. This could lead to some manure disposal issues. I propose that on those fields over 20 ppm to soil test either yearly or every other year and geo-reference the samples so accurate check tests can be performed. If the farm can show that with current manure practices the P level is decreasing then current practices can continue. If current practices do not lead to a decrease in P levels then put the no spread ban in place. The time period should be three to five years to allow some mining of the soil P. These fields should also be required to meet P-Index standards.

2) Flood plain fields with a cover crop requirement should not be the same date for the whole state. It should vary by region from north to south. Method of establishment should also affect requirement date, whereas drilling the cover crop would have a later requirement than broadcasting and harrowing as soil disturbance is reduced and germination enhanced.

Thanks for letting me comment.

Tom Beaudry, CCA
Walpole, NH
tombemf@gmail.com

From: [Kent Henderson](#)
To: [AGR - RAP](#)
Cc: ["Denise Smith"](#); [Elizabeth Brock](#); [Jane Clifford](#)
Subject: RAP first draft written comment
Date: Friday, December 18, 2015 8:51:59 AM
Attachments: [RAP_1st draft.docx](#)

Hello Ryan,

Please accept these personal comments on the first draft on RAP's.

Thanks,

Kent

From: [Barry Lawson](#)
To: [AGR - RAP](#)
Subject: RAP program
Date: Tuesday, December 15, 2015 5:30:22 PM

Secretary Ross,

On Vermont Edition the other day we heard you and your colleague describing the RAP program and recognized after several minutes that this applies to our land here in Peacham. Please send my wife and I the draft regulations so we can inform ourselves of the implications to our land.

We currently have a formal arrangement for a local farmer to hay our 20-acre field and to apply manure after each cutting. We are also in the current use program on land that is conserved through the Vermont Land Trust.

Thank you for your consideration.

Barry Lawson
Barry Lawson Associates
P.O. Box 26
Peacham, VT 05862
lawson384@charter.net

From: [Kristin Williams](#)
To: [AGR - RAP](#)
Subject: RAP public comments
Date: Saturday, November 14, 2015 9:15:21 AM

Dear VAAFAM,

Below I have written my own example of what should I believe should be defined as a SFO, and underneath that some general comments about the RAP draft. I know I am one little pea in a big sea of pods, but I sincerely hope you take the time to read my suggestions. As written, your draft RAPs are not practical. While we still have a problem regulating medium and large farms, we are now going to require so many small farms to certify. MFO and LFO farmers who ARE following the current rules are upset because they see their neighbors who aren't following them be ignored and now you are going to spend your time and money focused on other farms entirely, but it remains an open question whether this will be a fair process.

There should also be language written in this bill that says the State, with the help of the Secretary, shall ensure proper staffing of VT Conservation District employees is maintained so that Land Treatment Plans can be created in a timely manner, or that another avenue is created where Land Treatment Plans can be created in a timely manner. If it is not possible in the next 3 years to obtain funding or maintain employees, than the State and the Secretary shall be obliged to evaluate this management structure and re-write the RAPs so that farms that are required to obtain NMPs have a reasonable and timely way of doing so.

Finally, I beg you to consider the unintended consequences your legislation as written would create. It appears to me to be demonizing manure and excluding synthetic fertilizer applications. Consider also how the state composting laws will interact with these laws. Re-using organic amendments can be considered 'waste application' but it can also be considered one of the most sustainable things that humans figured out how to do to maintain soil fertility and feed people, and that we have a serious crisis because in many parts of the US animal production and crop production are separate entities and our food waste is not being recycled to the land. Additionally, the acreage requirement doesn't make sense, because the issue is an animal density one fundamentally. VT has a long tradition of farming, and we must take a balanced approach to continue to support good farming practices where farmers act as stewards of the land, while addressing this pressing issue of water quality in Lake Champlain.

~~~~~

Small Farm Operator –

Operates a farm with at least 50 cows (or equivalent animals)

\*Equivalent animal numbers should be determined by phosphorus production equivalent as chickens and swine manure is not equal to dairy cow manure

OR

Operates a farm with annual net profits of \$20,000 to be adjusted annually with inflation

Under the below conditions the Secretary may determine that an Uncertified Farm Operator certify as a Small Farm Operator:

Operates a farm with at least 20 acres, and applies phosphorus and nitrogen in repeated years that lead to University of Vermont (or equivalent lab protocol) soil

tests in the excessive range

OR

Operates a farm with at least 5 acres of land in floodplain (defined by FEMA 25 yr event), and applies phosphorus and nitrogen in repeated years that lead to University of Vermont (or equivalent lab protocol) soil tests in the excessive range

<!--[if !supportLineBreakNewLine]-->

<!--[endif]-->

OR

Animal density is determined to be unsustainable under current conditions because it is over **x** animal units/acre

Application of phosphorus and nitrogen:

Animals grazing and depositing waste, or manual application of waste, compost, manures and fertilizers either synthetic or of organic origin, applied for at least 2 consecutive years.

Uncertified Small Farms

Shall register as an operating farm business with the state if they make more than \$8,000 net profit adjusted yearly for inflation, take soil test results every 3 years and keep soil test results on file for 9 years. The Secretary may ask to see soil test results if there is conclusion that the farm is also violating the RAPs, and require as per above to be a SFO.

Remove language that implies any farm has to certify if they spread any amount of manure on 10 acres, this is not practical and not worth time or money. A person could literally own one pet donkey and spread that manure out around their 10 acre fields and fall under regulation with the way the RAPS are now written.

Remove language that excludes synthetic application of phosphorus or nitrogen and only applies to manure

Remove language about 20 ppm P and 10% slope – Certification applies above and they shall use the P-Index to determine P application as per 590 standard

Add language that allows for manure and compost fertilization to establish a buffer if the farmer is certified organic

Add language in soil health section that recognizes the value of manures and composts as a way to recycle nutrients instead of importing nutrients, while also adding organic matter, reducing carbon emissions, and reducing reliance on fossil fuels. Manure and compost are not inherently bad, and in fact can be beneficial to soil health, but like any tool application needs to be managed properly.

Thank you for considering my comments,  
Concerned VT resident

**From:** [elizabeth.howrigan](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAP Public Comments  
**Date:** Friday, December 18, 2015 6:45:41 PM  
**Attachments:** [RAP"s.docx](#)

---

**From:** [Rich Larson](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAP suggestions from a farmer  
**Date:** Wednesday, December 2, 2015 8:27:41 AM  
**Attachments:** [Water Quality letter to AAgency of Ag, Dec 2, 2015.docx](#)

---

Please consider the attached letter.

Thank you

Richard Larson

Larson Farm

69 South Street

Wells, Vermont 05774

802-645-0865

**From:** [Dan Lerner](#)  
**To:** [AGR - RAP](#)  
**Cc:** ["Doug Lantagne"](#); ["Vern Grubinger"](#); [Debra Heleba](#); [Cindy](#); [Diane Trono](#); [Daniel J. Lerner](#)  
**Subject:** RAPs Comments from UVM Extension  
**Date:** Wednesday, December 16, 2015 11:22:00 AM  
**Attachments:** [RAPs letter UVMExtension.pdf](#)  
[RAPs comments UVMExtension.pdf](#)

---

Dear Secretary Ross,

On behalf of UVM Extension, I am pleased to submit comments on the draft Rule that will guide implementation of the Required Agricultural Practices. We thank you for the opportunity to provide this feedback, and look forward to a productive dialogue with the Agency.

There are two attachments to this email.

- A letter from Doug Lantagne, Dean and Director of UVM Extension
- Comments from UVM Extension faculty and staff

At your convenience, please confirm receipt of this message and its attached documents.

Sincerely,

Dan Lerner

--

**Dan Lerner**

Associate Dean  
UVM Extension  
23 Mansfield Ave.  
Burlington, VT 05401  
802.656.4625 (office)  
802.656.8642 (fax)  
[www.uvm.edu/extension](http://www.uvm.edu/extension)

UVM Extension: "Cultivating Healthy Communities" since 1913

**From:** [Rebecca Maden](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPs comments  
**Date:** Friday, December 18, 2015 1:01:54 PM

---

Dear Secretary Ross and the VAAF Water Quality Team,

I am appreciative of your efforts to create regulations to improve water quality in the state. The degradation of our water quality has long been a concern of mine, and I am pleased to see the state addressing it through Act 64 and the draft RAPs.

I am a longtime organic vegetable farmer as well as a life long environmentalist. My farm includes lake front shoreline and I treasure the time I spend swimming or boating on Lake Champlain. It is hugely distressful to me when there are times when I cannot enjoy the pleasure of swimming because the water quality is at a dangerous level.

However, despite my appreciation of your efforts to enforce new water quality standards, I feel that there are a number of points in the draft RAPs that should be amended to make the rules effective, clear, and reasonable for all farms to follow. The end goal of the RAPs should be rapidly improved water quality, not merely an increase in regulations that simply mean more burdens and costs for farmers.

As an overall comment, I think that the state already has information on what watersheds are most vulnerable and where some of the heaviest Phosphorus contributors are located. I think the state should begin by targeting these regions of the state without wasting time and money enforcing regulations on farms that are not located in vulnerable watersheds or do not have farming practices that are potentially harmful.

**Some specific comments I have:**

- The definitions of compost or fertilizer vs. manure are blurry. Also, what quantity of material qualifies as an ‘application’ of waste/manure? These definitions need much clarification. (Section 2)
- Will small applications of ‘manure’ (as with compost in potting mix or as a fertilizer ingredient) qualify as an ‘application’ of manure that requires farms over 10 acres to become certified? Most organic farms (like my own) rely on compost based potting mixes for our transplants. It is also very hard to meet the nitrogen needs of a crop without adding some P since organic fertilizers are derived from animal or food wastes. There are very few (if any) affordable organic fertilizers that contain absolutely no P. Feather meal and Chilean Nitrate are two of the no P Nitrogen fertilizers available to us, but it is expected that the National Organic Program (NOP) will disallow the use of Chilean Nitrate in the next few years (currently you are only allowed to meet 20% of your crops N needs with Chilean Nitrate according to the NOP). We have few other choices to meet the N needs of our plants. (Section 4.10 d)

- Requiring that manure stacks not be in the same place more than once every 4 years is prohibitive for farms of my scale (assuming this applies to compost piles as well as manure? This should be clarified). Many farms, especially farms in flood plains or farms like my own that are on heavy, easily compacted soils, have few choices for where to locate our manure or compost piles. Requiring farms to move them regularly could cause more danger to the water quality rather than improving it. (Section 5.2 e.)
- Will an NRCS '590' nutrient management plan be required for all farms over 10 acres that apply any amount of 'manure' products? Writing a plan like this for a diverse farm like my own would be burdensome, tedious, and ultimately not a useful management tool. Can a simpler and more useful form of a nutrient management plan be allowed instead, maybe one developed by UVM Extension and approved by the Secretary? (Section 5.3)
- It will be a challenge for farmers to calculate erosion loss using the universal soil loss equation, and typical soil management practices on vegetable farms would in all likelihood demonstrate the soil losses above the allowable limit of 1 T/ acre . Is it necessary to ask them to do this, or instead could it be required to adopt practices that reduce erosion, such as using cover crop strips? Is the expectation that farmers will stop growing vegetables on sloping land? (Section 5.4 b)
- The requirement to plant to a cover crop by October 1 in flood plains will make it impossible to grow late season, high-value root crops and leafy greens on many of our state's vegetable production land. Will exemptions be allowed for some acreage, or can alternative methods of erosion control be allowed instead? (Section 5.4 c)
- Would it be reasonable to use the NRCS P- Index as a metric for P risk rather than the 20 ppm soil test limit? And if 'manure application' (note--does this also mean compost? Clarify this!) is prohibited on soils with P level over 20 ppm, can vegetable farmers with P above that level still use transplants grown in potting soil containing manure-based compost? Can they use fertilizer containing small amounts of processed manures or animal by-products? See comment above about organic fertilizers. (Section 5.5 e)
- If intermittent waters means water that "may occur periodically and infrequently such as during and immediately following a rain" and a 10-foot perennial buffer is required around these areas, this could mean taking many of our vegetable fields out of production if strictly interpreted. (Section 5.7)
- A large percentage of our farm's income comes from high tunnel production. We manage our soils in the tunnel very differently than in the field because of the intensity



of production necessary. Typically, these soils are very high in P because of additions of compost and fertilizers (on our farm in particular, because we are on Vergennes clay, we have had to add major amounts of compost and other organic materials in order to improve the soil tilth). There is no discussion of nutrient management in high tunnels or greenhouses; will they be exempt from this rule? If not, how will the nutrient management planning requirements apply, since tunnel soils are typically higher in P than field soils but also are covered which protects against erosion?

- Are high tunnels and greenhouses considered to be ‘farm structures’ and if so do they have to comply with the 50-foot setback from top of stream banks, regardless of their size? (Section 9.0 c)

In summary, the RAPs don't seem to take into account the diversity of farms in the state of Vermont, particularly vegetable farms. In the past, the produce farm community has been very appreciative of your efforts to recognize our industry and to help navigate difficult regulations such as FSMA. We look to your understanding once again as a new set of regulations impresses itself upon farms.

Thank you for your efforts to improve the water quality in our state, and we look forward to an amended set of draft RAPs that account for the comments you have received.

Sincerely,  
Becky Maden  
Orwell  
578-1466

**From:** [abha.uvm@gmail.com](mailto:abha.uvm@gmail.com) on behalf of [Abha Gupta](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPs public comment  
**Date:** Monday, November 30, 2015 4:24:46 PM

---

Hello,

Issues arise with having set dates by when farmers are allowed to spread manure. For example, farmers sometimes spread when weather conditions are inappropriate to do so, just because they need to empty their pits before December 15.

Although there is language saying that these dates can be changed, it does not seem like dates are changed based off of seasonal events.

I think a promising course of action would be to use required NMPs as a platform for creating personalized spreading times for a farm. Based on soil type, location, and other factors, a spreading timeline could be created. For farmers who have not created a NMP, the set calendar dates would still apply. In this way, public concerns about removing the set dates would be avoided.

Thank you,  
Abha Gupta

Abha Gupta  
Crops and Soils Coordinator  
UVM Extension Northwest Crops and Soils Program  
278 South Main Street, Suite 2  
St. Albans, VT 05478-1866  
802.524.6501

**From:** [George Plumb](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPS  
**Date:** Tuesday, December 1, 2015 10:08:13 AM

---

Dear Secretary Ross,

As one who lives about as far as one can get from Lake Champlain and still live in the watershed (town of Washington) I am still concerned about farm water runoff from our few farms that are left. I do notice that some of the field run right up to the ditch next to the town road and as a result some of the pollution ends up in these ditches. Shouldn't there be a little buffer along roads as well as water ways?

In addition I support the following:

- All farms should be required to follow RAPs. VAAFMM can create RAPs that fit different farm sizes.
- I support outreach and incentive systems to help farms to be good stewards.
- I support strong prohibitions and mandating proper training to apply manure.
- I believe small farms should be inspected more than once.
- I support stronger buffer requirements to address pollution runoff.
- I encourage VAAFMM to incorporate organic, biodynamic, regenerative, and/or restorative practices, as long as the farms can demonstrate that their practices are achieving the same level of water quality protection.

Thanks for providing opportunity for input.

**George Plumb**

***It is not how many people Vermont and the U.S. can contain it is how many they can sustain.***

***[http://www.vspop.org/htm/opt\\_sustainable\\_report\\_vt\\_2013\\_ver4.pdf](http://www.vspop.org/htm/opt_sustainable_report_vt_2013_ver4.pdf)***

**From:** [Suzanne Kidd](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPs  
**Date:** Wednesday, December 16, 2015 6:20:34 PM

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This is a letter, which I fully support, written by Walter Jeffries. Please consider these issues and reject the proposed RAPs.

Sincerely,

Suzanne Kidd

To the Agency of Agriculture:

*The proposed Required Agricultural Practices (RAPs) rules in Vermont are going about it all wrong and will have many unintended consequences that are destructive to small farms and local agriculture without solving the water quality issues.*

*It is fundamentally wrong to be changing the definition of a small farm. The small farms under the old definition are not the cause of the water quality problems. The threshold between medium and small farms should not be lowered.*

*Farms that are not spreading manure, fertilizer, pesticides nor herbicides should be completely exempt from these rules. They are not contributing to the problem. In fact, farms like ours are the solution. Our land filters the air and water, cleaning it and making up for others. The added paperwork the RAPs will create are an unnecessary and undue burden for us.*

*RAP should not be telling farmers how to graze their livestock. That is the farmer's business and will vary with many conditions that are outside the scope of rules handed down by bureaucrats and legislation. Sometimes a farm needs to do mob grazing, sometimes light grazing, depending on the goals for the paddock.*

*Inspectors and any other government officials going farm to farm are a prime vector of disease. The RAPs are going to create problems by transmitting disease from farm to farm. Inspectors should be required to take maximum biosecurity*

*precautions at their cost which means completely new clothing, boots and equipment at each farm, disposable coveralls changed between each farm, vehicles parked off farm, vehicles washed between each farm including tires sanitized. Biosecurity is very serious and an event can wipe out a farm.*

*The RAP rules are a serious overextension of government that will be an onerous burden on small farms driving many out of business, making it less profitable for those who remain, destroying the farming future for the next generation and driving further development of farm land as farms close. The RAP rules are destructive to Vermont's food sovereignty by destroying local farm production.*

**From:** [Doug Zehner](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPs  
**Date:** Sunday, December 6, 2015 12:34:03 PM

---

December 7, 2015

TO: Chuck Ross

Secretary of the Vermont Agency of Agriculture, Food, and Markets

It has been over forty years since the passage of the Clean Water Act in the United States and yet water pollution in many of our waterways and lakes still remains disgraceful. In Vermont, many millions of federal dollars have been dumped into the effort to make Lake Champlain and its tributaries, swimmable, drinkable and fishable again - yet we have severe impacts occurring constantly.

In the mid 1970's many studies were done by many federal and state partnerships to discover where these impacts were coming from. Phosphorus was identified as one of the major non-point pollution problems. Phosphorus is a "limiting factor" in the balance of aquatic ecosystems in the United States—Great Lakes, Ohio River Basin, Mississippi River Delta, Chesapeake Basin, on and on and of course, Lake Champlain suffering major impacts from these additional inputs of phosphorus. Without question from all the research, two basic sources of non-point pollution were identified: (1) urban sewage treatment and stormwater runoff and (2) agricultural runoff from fertilizers, pesticides from cropland and animal waste. Even in the Great Lakes Studies with huge metropolitan areas, 50% of the problem was clearly coming from agricultural runoff and poor manure handling practices.

After all this time and effort, there is damn little to show for improvements in the Lake. While the regulatory hammer has fallen on many small towns and communities across the country, we treat the mega-dairy industry in Vermont with kid gloves and try to paint a picture of "Ma and Pa" in the barnyard with a pitchfork one step ahead of the bank foreclosure. So . . . we give them tax shelters on land taxes for "ag purposes", we subsidize most of their crops guaranteeing them a price including milk, and give them government grants for making "Improvements" on their lands. Yet - they still spread manure on roads, dumping manure in fields without required soil testing, without incorporation of these wastes to protect from runoff - and in many cases have raised soil test levels of phosphorus to such high levels that instead of being tied to soil particles, it becomes soluble to the point of moving with ground water. These producers are still polluting our water resources not to mention creating questionable air quality emissions.

There are a few model farms that have made significant strides to being good neighbors and are managing these products responsibly without polluting our streams and lakes. But the majority of others have a long, long way to go to reach this level of management. Without significant penalties to these "bad actors" these clean water objectives will never be reached. Forty years of minor progress in Lake Champlain using only the "carrot" approach has been miserably unsuccessful. Other industries in the US are regulated for water pollution, why then is the agricultural industry exempt?

Healthy farms are important to clean waters for Vermont and farmers benefit from clear and consistent regulations that address water pollution. Just as other businesses and individuals are accountable for any pollution they create, farms should be held to similar standards. The Draft RAPs is a baby step in the right direction but they must be improved.

- All farms should be required to follow RAPs. VAAFAM can create RAPs that fit different farm sizes.

- I support outreach and incentive systems to help farms to be good stewards.
- I support strong prohibitions and mandating proper training to apply manure.
- I believe small farms should be inspected more than once.
- I support stronger buffer requirements to address pollution runoff.
- I support violators to be significantly fined and prosecuted.

I encourage VAAF to incorporate organic, biodynamic, regenerative, and/or restorative practices, as long as the farms can demonstrate that their practices are achieving the same level of water quality protection. Accountability of both the farmer and agencies that make regulations, and distribute funding must be part of this system, otherwise, we will continue to pour money down a rat hole with no improvements in our precious water resources.

The time has come to build an agricultural system that is effective in both controlling pollution while providing a healthy and nutritious food source - an agricultural industry that respects all segments of the Vermont eco-economy.

Sincerely,

Douglas Zehner

A Vermonter who cares about our Natural Resources

Cc: Senator Bernie Sanders

Senator Patrick Leahy

Congressman Peter Welch

Robert Kidd, Vermont Chapter of the Sierra Club

Louis Porter, Vermont Fish and Wildlife Commissioner

**From:** [Cranmer, Paul](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPs  
**Date:** Tuesday, December 1, 2015 11:39:11 AM

---

Dear Sirs,

I support strong a RAPs bill. Healthy farms are important to clean waters for Vermont and farmers benefit from clear and consistent regulations that address water pollution. Just as other businesses and individuals are accountable for any pollution they create, farms should be held to similar standards.

- All farms should be required to follow RAPs. VAAFM can create RAPs that fit different farm sizes.
- We support outreach and incentive systems to help farms to be good stewards.
- We support strong prohibitions and mandating proper training to apply manure.
- We believe small farms should be inspected more than once.
- We support stronger buffer requirements to address pollution runoff.
- We encourage VAAFM to incorporate organic, biodynamic, regenerative, and/or restorative practices, as long as the farms can demonstrate that their practices are achieving the same level of water quality protection.

Sincerely,

Paul K. Cranmer

120 East Street

Lyndonville, VT 05851



**From:** [Alan-Betsy Curler](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPs  
**Date:** Sunday, December 20, 2015 7:46:46 AM

---

To Whom It May Concern:

1. In regards to a producers being removed from the current use program for a violation. The producer should be required to pay a fine equal to the benefit they receive from current use, instead of removing the producer from the program. The reason I state this is when a land owner is removed from current use, they have to pay a portion of the benefits they received during the time they were in current use.

2. There should be some flexibility in the requirements, instead one fits all. If the ground is not frozen, a producer should be able to spread manure and can incorporate the manure in the soil after December 15th.

3. Is there a waiver for land owners who grow crops in the flood plain in regards to planting a cover crop after the proposed dates especially along the Otter Creek areas. If the land is flooded in the fall it typically may require a longer period of time to drain before the land owner would be able to plant a cover crop.

4. There appears to be an error in the brochure and the proposed rules regarding stacked manure. The brochure indicates 100 ft. from property lines and in the draft rules it states 200 ft.

**From:** [Lesley Pollitt](#)  
**To:** [AGR - RAP](#)  
**Subject:** RAPS  
**Date:** Thursday, December 3, 2015 7:05:49 AM

---

Please support RAPS. It is so important we have clean water in this state.  
Thank you.

Lesley Pollitt  
Halifax, VT

**From:** [Ross, Chuck](#)  
**To:** [<info@champlainvalleyfarmercoalition.com>](mailto:info@champlainvalleyfarmercoalition.com)  
**Cc:** [AGR - RAP; DiPietro, Laura](#)  
**Subject:** Re: Comment Concerning Draft RAPs  
**Date:** Tuesday, December 8, 2015 9:31:18 AM

---

Thank you !

Sent from my iPhone

On Dec 8, 2015, at 9:13 AM, Champlain Valley Farmer Coalition  
<[info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)> wrote:

Sending this again, as there was some mention that perhaps the Agency hadn't received it.

Thanks,  
Kirsten Workman, Secretary  
CVFC

----- Forwarded Message -----

**Subject:** Comment Concerning Draft RAPs  
**Date:** Wed, 25 Nov 2015 05:44:25 -0500  
**From:** Champlain Valley Farmer Coalition  
**Reply-To:** [info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)  
**To:** [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
**CC:** Nathaniel Severy , [briankemp@shoreham.net](mailto:briankemp@shoreham.net) , [jeff.carter@uvm.edu](mailto:jeff.carter@uvm.edu)

The Champlain Valley Farmer Coalition appreciates the opportunity to comment on the first draft of the Required Agricultural Practices. Please find our comments attached.

--



***Champlain Valley Farmer Coalition Inc.***

*Farmers Working Together for a Clean Lake Champlain & Thriving Agriculture in Vermont*

23 Pond Lane, Suite 300 | Middlebury, VT 05753

(802) 388-4969 x347

[info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)  
[www.champlainvalleyfarmercoalition.com](http://www.champlainvalleyfarmercoalition.com)

**From:** [DiPietro, Laura](#)  
**To:** [info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)  
**Cc:** [AGR - RAP: Ross, Chuck](#)  
**Subject:** Re: Comment Concerning Draft RAPs  
**Date:** Tuesday, December 8, 2015 1:15:37 PM

---

Got'em!  
Thanks,  
Laura

Sent from my iPhone

On Dec 8, 2015, at 9:13 AM, Champlain Valley Farmer Coalition  
<[info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)> wrote:

Sending this again, as there was some mention that perhaps the Agency hadn't received it.

Thanks,  
Kirsten Workman, Secretary  
CVFC

----- Forwarded Message -----

**Subject:** Comment Concerning Draft RAPs  
**Date:** Wed, 25 Nov 2015 05:44:25 -0500  
**From:** Champlain Valley Farmer Coalition  
**Reply-To:** [info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)  
**To:** [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
**CC:** Nathaniel Severy , [briankemp@shoreham.net](mailto:briankemp@shoreham.net) , [jeff.carter@uvm.edu](mailto:jeff.carter@uvm.edu)

The Champlain Valley Farmer Coalition appreciates the opportunity to comment on the first draft of the Required Agricultural Practices. Please find our comments attached.

--



<!--[if !vml]--><!--[endif]-->

***Champlain Valley Farmer Coalition Inc.***

*Farmers Working Together for a Clean Lake Champlain & Thriving Agriculture in Vermont*

23 Pond Lane, Suite 300 | Middlebury, VT 05753

(802) 388-4969 x347

[info@champlainvalleyfarmercoalition.com](mailto:info@champlainvalleyfarmercoalition.com)

[www.champlainvalleyfarmercoalition.com](http://www.champlainvalleyfarmercoalition.com)

**From:** [AGR - RAP](#)  
**To:** [mike bald](#); [AGR - RAP](#)  
**Cc:** [DiPietro, Laura](#); [Leland, Jim](#)  
**Subject:** RE: comments on Draft RAP  
**Date:** Tuesday, December 15, 2015 9:21:47 AM

---

Hi Mike,

We have received your comment and were able to download your attachment.

Thank you,

-Ryan

Ryan Patch

Sr. Ag Development Coordinator

Vermont Agency of Agriculture, Food and Markets

116 State St. Montpelier, VT 05620

Cell: (802)-272-0323

Fax: (802) 282-1410

[ryan.patch@vermont.gov](mailto:ryan.patch@vermont.gov)

<http://agriculture.vermont.gov/>

**From:** mike bald [mailto:choosewiselyvt@gmail.com]

**Sent:** Monday, December 14, 2015 1:17 PM

**To:** AGR - RAP

**Subject:** comments on Draft RAP

Comment document attached.

Thank you, please acknowledge.

Mike

--

Mike Bald

*Got Weeds?*

<http://choosewiselyvt.wordpress.com>

Royalton, VT

**From:** [Patch, Ryan](#)  
**To:** [Anthony Iarrapino](#); [AGR - WaterQuality](#); [AGR - RAP](#)  
**Cc:** [Patch, Ryan](#); [DiPietro, Laura](#); [Leland, Jim](#)  
**Subject:** RE: Comments on RAPs  
**Date:** Friday, December 18, 2015 4:14:31 PM

---

Mr. Iarrapino,

Just wanted to confirm that we have received our comments in the [AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov) inbox.

Thank you,

-Ryan Patch

Ryan Patch

Sr. Ag Development Coordinator

Vermont Agency of Agriculture, Food and Markets

116 State St. Montpelier, VT 05620

Cell: (802)-272-0323

Fax: (802) 282-1410

[ryan.patch@vermont.gov](mailto:ryan.patch@vermont.gov)

<http://agriculture.vermont.gov/>

---

**From:** Anthony Iarrapino [mailto:[anthony@mivt.net](mailto:anthony@mivt.net)]

**Sent:** Friday, December 18, 2015 4:09 PM

**To:** Patch, Ryan ; [AGR - WaterQuality](#) ; [AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov)

**Subject:** Comments on RAPs

Please see attached.



*Anthony Iarrapino*

16 State St., Suite 2

Montpelier, VT 05602

802-522-2802



**From:** [Brian Jerose](#)  
**To:** "patsagui"; [AGR - RAP](#)  
**Cc:** "Robert Foster"; "bob spencer"  
**Subject:** RE: draft RAPs - comments  
**Date:** Friday, December 18, 2015 3:54:02 PM

---

Hi Pat-

Thanks for getting these in and incorporating input from different folks.

Take care  
Brian

-----Original Message-----

From: patsagui [<mailto:sagui@pat@gmail.com>]  
Sent: Friday, December 18, 2015 3:12 PM  
To: [AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov)  
Cc: Robert Foster <[rfoster@gmt.net](mailto:rfoster@gmt.net)>; Brian Jerose <[jerose@together.net](mailto:jerose@together.net)>;  
bob spencer <[spencebbc@aol.com](mailto:spencebbc@aol.com)>  
Subject: draft RAPs - comments

Comments on draft RAPs from Composting Association of Vermont

Thank you,

Pat Sagui

Director  
Composting Association of Vermont  
802-744-2345

**From:** [Bob Spencer](#)  
**To:** [saguipat@gmail.com](mailto:saguipat@gmail.com); [AGR - RAP](#)  
**Cc:** [rfoster@gmavt.net](mailto:rfoster@gmavt.net); [jerosse@together.net](mailto:jerosse@together.net)  
**Subject:** Re: draft RAPs - comments  
**Date:** Monday, December 21, 2015 1:56:37 PM

---

Looks good to me Pat.

**Bob Spencer**  
**Environmental Planning Consultant**  
**15 Christine Court**  
**Vernon, Vermont 05354**  
**978-479-1450**

-----Original Message-----

From: patsagui  
To: AGR.RAP  
Cc: Robert Foster ; Brian Jerosse ; bob spencer  
Sent: Fri, Dec 18, 2015 2:57 pm  
Subject: draft RAPs - comments

Comments on draft RAPs from Composting Association of Vermont

Thank you,

Pat Sagui

Director  
Composting Association of Vermont  
802-744-2345

**From:** [chris.robbins](mailto:chris.robbins)  
**To:** [AGR - RAP](mailto:AGR-RAP)  
**Subject:** RE: Small farms not subject to RAPs  
**Date:** Friday, November 20, 2015 12:58:34 PM

---

Thank you, Laura. Is there anything the town is now allowed or required to do about these farms' water quality issues that we did not do before?

Chris

On Nov 20, 2015 11:22 AM, "AGR - RAP" <[AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov)> wrote:

Hi Chris,

Thanks for attending yesterday. What the Agency has proposed that would fall under local zoning is the following:

4 acres or less and the number of animals specified by the secretary (for example: 1-4 cows, 1-3 horses, 1-99 laying chickens)

OR

Makes less than \$2,000 annually from the farm operation AND does not file a farm tax form.

Above these thresholds the operation would fall under the Agency of Ag and the RAP requirements.

Please let me know if this makes sense. I've attached a factsheet that may help as well.

Thanks,  
Laura

---

**From:** [a.c.robbins73@gmail.com](mailto:a.c.robbins73@gmail.com) [mailto:[a.c.robbins73@gmail.com](mailto:a.c.robbins73@gmail.com)]  
**Sent:** Friday, November 20, 2015 8:49 AM  
**To:** AGR - RAP <[AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov)>  
**Subject:** Small farms not subject to RAPs

Hello.

At your meeting in Middlebury yesterday, you mentioned that municipalities will now be responsible for regulating agricultural activities on very small farms (Less than 10 acres). Can you give me a reference for that? I am on the town planning commission and we need to know about it. Thanks.

Your presentation was very good.

Chris Robbins

**From:** [Gwynn Zakov](#)  
**To:** [AGR - RAP](#)  
**Cc:** [Karen Horn](#)  
**Subject:** Required Agricultural Practices Comment Letter  
**Date:** Friday, December 18, 2015 3:33:51 PM  
**Attachments:** [RAP Comment Letter to Secretary.docx](#)

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Dear Secretary Ross:

Please accept the attached comment letter on behalf of the Vermont League of Cities and Towns membership, in response to the draft Required Agricultural Practices Regulations.

Thank you very much for your time and consideration.

Gwynn Zakov, Esq.

Municipal Policy Advocate

Vermont League of Cities and Towns

(802) 229-9111 x 1945

**From:** [Mary Madden](#)  
**To:** [AGR - RAP](#)  
**Cc:** [robb.kidd@sierraclub.org](mailto:robb.kidd@sierraclub.org)  
**Subject:** Required Agricultural Practices  
**Date:** Tuesday, December 1, 2015 6:57:39 AM

---

Dear Secretary Ross,

I support the VT Sierra Club's recommendations for farm regulations to help clean and protect our water systems:

- All farms should be required to follow RAPs. VAAFMs can create RAPs that fit different farm sizes.
- We support outreach and incentive systems to help farms to be good stewards.
- We support strong prohibitions and mandating proper training to apply manure.
- We believe small farms should be inspected more than once.
- We support stronger buffer requirements to address pollution runoff.
- We encourage VAAFMs to incorporate organic, biodynamic, regenerative, and/or restorative practices, as long as the farms can demonstrate that their practices are achieving the same level of water quality protection.

As a resident of South Hero whose drinking water comes from the lake, I'm especially concerned about the state of Lake Champlain. Please do all you can to ensure a future of clean water.

Thank you.

Respectfully,

-Mary Madden

350 South St.

South Hero, VT 05486

**From:** [paul knox](#)  
**To:** [AGR - RAP](#)  
**Subject:** rules  
**Date:** Monday, December 14, 2015 9:38:19 AM

---

Ryan, I thought you did a great job at Randolph. Biggest concern I have is deadlines for cover crops, especially in Conn Valley. I realize rye can be applied before harvest by helicopter but that is expensive and I think will not always do real well. At the least there should be some variation in deadlines. Vernon, VT is different than Guildhall. We have put rye on for 40 years, one time 37 years ago by helicopter. I don't know that there is a right way to do rye but what we have done works reasonably well. I agree that the sooner we get it on the better and we won't always have late falls but the Oct 1 deadline for Bradford VT is a little early. A concern I have is that some might like to double crop winter rye to remove extra P and if double cropping I think a high rye population is needed. How expensive by helicopter? We have gone to 175-200#/acre on some acres and it seems to make a difference. For us a deadline of Oct 10 -15 would allow us to maximize corn yield on some acres and use rye as a cover crop. An earlier corn harvest would allow us to get better root growth and if a dense stand to perhaps harvest the rye or winter wheat in May. This will delay planting some so an Oct 1 deadline for the late planted crop is problematic to me. I think we should be goal oriented rather than deadline oriented. Same with manure piles, my second concern. We pile in floodplains now but only those areas with very low risk. We have had manure get flooded and I have inspected the piles later. The manure is sand laden manure that stacks up like virgin sand. It appears to me that there is an extreme low level of transfer of nutrients to the water from the sand laden manure. We could spread the sand laden manure in the fall but I think if we split a field in half and you fall apply the product to half of the field and I spring apply the product to the other half I will grow more corn with spring applied product, especially if applied to a rye cover crop. That to me proves nutrients are better conserved with piling over the winter. The regulations remind me of my brother receiving a stop sign violation ticket and a \$75 fine a few years ago. He is 71 and has never had an accident so is probably a safe trailer truck driver. On day he came to a stop sign on a long straight stretch of road, good visibility both ways for 500' or more. He slowed almost to a stop and drove through. It was dry and sunny. Cop stopped him and told him: "The sign says stop, it doesn't say slow down and look both ways." Well, the cop was right that day. However sixty days later the sign was changed to a YIELD sign. Now my brother was all kinds of frustrated, he had a ticket and although he had broken the law he obviously hadn't broken the spirit of the law. They changed the sign to fit the reality of the situation. I hope you can at the least give our farm a little leeway, I think we are like my brother in that we are experienced and have a good track record in our winter rye and manure handling. I realize we can probably get better but I am confident that the rules as proposed will result in more loss of nutrients and more expense than our present system. Please confirm receipt of my comments so I know you received them. Thank you for all you work. You have a tough job. Sincerely, Paul Knox

**From:** [Rebekah Weber](#)  
**To:** [AGR - RAP](#)  
**Cc:** ["Robb Kidd"](#); [ddeen@ctriver.org](mailto:ddeen@ctriver.org); ["Brian Shupe"](#); ["Lauren Hierl"](#); ["Marty Illick"](#); ["Lori Fisher"](#)  
**Subject:** Sierra Club, CLF et al Comments on Draft RAPs  
**Date:** Friday, December 18, 2015 1:59:43 PM  
**Attachments:** [SC.CLF et al Comments on Draft RAPs.pdf](#)

---

Please find our comments attached. Thank you.

Rebekah S. Weber

Lake Champlain Lakekeeper

Conservation Law Foundation

15 East State St., Suite 4

Montpelier, VT 05602

802-223-5992



**From:** [Anne Peyton](#)  
**To:** [AGR - RAP](#)  
**Subject:** Size of small horse farms  
**Date:** Thursday, December 3, 2015 4:32:43 PM

---

I strongly urge you to align the number of animals – horses – to be the same as cows. There's no reason why horses should be considered "DOUBLE" the impact of cows.

Anne Peyton  
South Strafford, VT

**From:** [Doug Smith](#)  
**To:** [AGR - RAP](#)  
**Subject:** Small Farm Horse Numbers  
**Date:** Wednesday, December 9, 2015 10:59:07 AM

---

Hello,

I'd like to voice my opinion and say I think, to be considered a small farm, horse numbers should be in line with cattle. If cattle numbers need to be 20 (or 30) to be considered a small farm, I think horse numbers should be the same. It seems unfair to have horse numbers be less (4, 10, 15, etc.).

Thanks,

Doug Smith

**From:** [a.c.robbins73@gmail.com](mailto:a.c.robbins73@gmail.com)  
**To:** [AGR - RAP](#)  
**Subject:** Small farms not subject to RAPs  
**Date:** Friday, November 20, 2015 8:50:56 AM

---

Hello.

At your meeting in Middlebury yesterday, you mentioned that municipalities will now be responsible for regulating agricultural activities on very small farms (Less than 10 acres). Can you give me a reference for that? I am on the town planning commission and we need to know about it. Thanks.

Your presentation was very good.

Chris Robbins

**From:** [Dave Martin](#)  
**To:** [AGR - RAP](#)  
**Subject:** small producers  
**Date:** Friday, December 11, 2015 5:30:57 PM

---

This issue may affect all producers; but my assumption is that smaller producers are especially vulnerable.

I am personally aware of two producers this year who had problems dealing with manure because of equipment breakdown. Repairs of spreaders and tractors can be expensive and a real challenge for the smaller producer.

My own experience over the past two summers is an example. During the summer of 2014 my manure spreader broke down at least three times. One repair was relatively inexpensive and simple ( except for having to unload the spreader by hand). The other two repairs were more expensive and time consuming. These issues really put me behind schedule. A newer and more reliable spreader would cost several thousand dollars.

This year I had to spend three thousand dollars to repair my skid steer and then almost \$1000 to repair my tractor. In each case I was unable to spread manure. I completed spreading my stack today.

I do not know what the solution would be or even if there is a solution. Maybe small scale custom spreaders.

Thanks for the opportunity to provide feedback. I fully support efforts to clean up the lake.

Dave

**From:** [todell6@juno.com](mailto:todell6@juno.com)  
**To:** [AGR - RAP](#)  
**Subject:** SRAP's  
**Date:** Monday, November 30, 2015 9:12:53 PM

---

Like most government agents, you'll be late to the party: who needs you, waste of life?

**From:** [Patch, Ryan](#)  
**To:** [AGR - RAP](#)  
**Subject:** test  
**Date:** Friday, December 18, 2015 4:11:29 PM

---

Test

**From:** [Vermont Intelligence Center](#)  
**To:** [SOV - All Exchange Users](#)  
**Subject:** This is a Test - Testing the State of Vermont Email System - This is a test  
**Date:** Thursday, December 17, 2015 12:57:11 PM

---

Private Group-Based Notification

.....This is an ACTUAL NOTIFICATION.....

Issued By: VT - Vermont Intelligence Center  
Issued To: Vermont - All State Employees

Headline: This is a Test - Testing the State of Vermont Email System - This is a test

This is a test of the State Email System - This is only a test.

This is a test - No response or reply is needed - This is a test.

Audio Recording URL: <http://files.vtalert.gov/Public/DownloadAudio.aspx?parentid=3552321&type=3>

-----

Vermont Department of Public Safety Notification Message

VT-Alert Message Number --- 26076159 \_\_\_\_

**From:** [Jared Carpenter](#)  
**To:** [AGR - RAP](#)  
**Subject:** Vermont Council of Trout Unlimited Comments on Pre-Draft RAPS  
**Date:** Friday, December 18, 2015 1:47:54 PM  
**Attachments:** [Vermont Trout Unlimited Comments on Pre-Draft RAPS 111815.pdf](#)

---

Good Afternoon,

Attached, please find the comments of the Vermont Council of Trout Unlimited on the Pre-Draft Required Agricultural Practices. Thank you for this opportunity and we look forward to working with AAFM in the future on the issue.

Sincerely,

Jared Carpenter

Vermont Council of Trout Unlimited



**From:** [Charles Simpson](#)  
**To:** [AGR - RAP](#)  
**Subject:** water pollution and the draft RAP  
**Date:** Monday, November 16, 2015 12:37:54 PM

---

Hello, VTAA,

I garden in Burlington's Intervale where I've worked with the Intervale Center on indigenous agriculture. Agriculture there, as across the state in the many smaller operations ranging from CSAs to value-added operations selling to farmer's markets, includes small and diverse production, often integrating livestock with crops. Your RAP proposes to treat all small farms--the most numerous category--uniformly. That's simplistic and irrational. Nor should the RAP add the burden of a fee to small and innovative farms which are the cutting edge of a new farm economy in the state. The key to many of these innovative operations is returning nutrients to the soil via composting and rotations. The RAP should not inhibit such innovations.

Waterway pollution is, as you know, a wider issue than farm nutrient runoff. Here in Burlington, a developer has proposed siting a building on the edge Barge Canal Superfund site which is still within the area where monitoring of industrial toxins continues. VTAA should work closely with the state's environmental agencies to address the broader issues of lake water pollution rather than focusing on small, organic and biodynamic farmers.

Finally, VTAA should prioritize enhancing the farm and food economy in the state through such measures as assisting in the funding and location of food preparation hubs for the processing of meats and vegetables by smaller producers, including canning, freezing, drying, and smoking. Without a doubt, one such hub needs to be in Burlington's South End, close to both highways and a large consumer and retail base. Ideally, it could be located on the roughly 2 acres that will remain unused when City Market builds its South End store. City Market tells me they can't take this on at this time. But VTAA could be the catalyst! Let's do something that stimulates the Vermont food economy.

Thanks,

Charles Simpson

[charles.simpson@plattsburgh.edu](mailto:charles.simpson@plattsburgh.edu)

**From:** [Liza Cabot-Case](#)  
**To:** [AGR - RAP](#)  
**Subject:** Water quality protocol  
**Date:** Thursday, December 17, 2015 12:27:17 AM

---

Seriously in favor of regulating use of herbicides to prep soil for use of GMO corn crops.  
Also want much more stringent regulation against spreading of raw sewage/sand from milking parlors.

Please hear from a resident of Peacham, VT:

I have ten acres on a slope with a year-round water sources running through it. On the hill above and across Green Bay Loop, we see trucks spreading raw dung. I am concerned that this is a hazard to my well and the spring due to the feed the cattle are being fed...gmo corn silage grown nearby by dairy operations where heifers are concentrated in sand lined milking parlors. My fear is chemical contamination from herbicides, pharmaceuticals given to cows. Cows' patties are yellow a liquid.

Anecdotal evidence of airborne contaminants-

Every time this intense spreading goes on in fall I contract a sinus infection that causes the tissue of nasal passages to slough-off (gross), many people have reported coincidence of spreading with sudden on-set fever and bloody nose then sinus infections

In November, this fall I have been hospitalized for kidney infection.

Thank you,  
LizaCabot-Case  
Green Bay Loop  
Peacham, VT

# Optional Public Comment Form

In re: Reconsideration CLF Petition to Require Mandatory Pollution Control Best Management Practices for Agricultural Non-Point Sources Identified in The Missisquoi Basin Plan  
AAFM #2014-06-04 ARM



NOV 20 AM 10:07

As it relates to Lake Champlain - Missisquoi Bay:  
The amount of Phosphorous escaping from farm fields is inconsequential from a crop production standpoint. A 1/2 to a pound of P runoff per acre isn't much but this same amount appears to be what's driving the blooms in Lake Erie according to agronomists working there.

<https://www.agonomy.org/science-news/getting-bottom-lake-eries-water-quality-we>

"So from an agronomic standpoint, the farmer is doing great," King says. "But from an environmental standpoint [the loss] is very significant."

The effects of the thousands of millions of gallons of liquid manure spread on farm fields ~~that~~ <sup>that</sup> slope down to our waterways seem impossible to mitigate. Nutrient management plans will not solve the problem of manure + sediment runoff and accompanying nutrient enrichment.

Continue on Reverse

### Submit Form to:

Vermont Agency of Agriculture,  
Food and Markets  
116 State Street  
Montpelier, VT 05620

|         |                  |
|---------|------------------|
| Name    | Crea Lintilhac   |
| Address | 886 Northgate Rd |
| City    | Shelburne        |
| State   | Vt               |
| Zip     | 05482            |

11/11/11

## RAP Comments

2.10

Floodplain means the land in the community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the National Flood Insurance Program maps. (Please clarify, and define flooding)

2.11

Floodway means the channel of a watercourse and adjacent land areas which are required to carry and discharge a one-hundred year flood within a regulated flood hazard area without substantially increasing flood heights. Floodways are depicted on the National Flood Insurance Maps on file with the Town Clerk. (Please clarify)

2.15

~~Intermittent Waters and/or Ditch means waters in conveyances where the presence of water is not continuous for 3 months or more and drains greater than 160 acres. may occur periodically and infrequently such as during and immediately following a rain or snowmelt event. Intermittent waters include, but are not limited to, ditches, swales, channels or other water diversion features. A swale or surface feature that contains water only during and immediately after a rainstorm or a snow melt shall not be considered to be an intermittent water and/or Ditch.~~ Reason: (this definition is too broad, it covers concentrated flows that have no significant contribution to phosphorus loading in to surface water.

5.2

(e) Field stacking of manure on unimproved and non NRCS approved sites:

- i) Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding.
- ii) Manure stacking sites shall meet the following minimum setback distances:
  - a) 200 feet from property lines or domiciles;
  - b) 200 feet from surface waters;
  - c) 200 feet from private water supplies;
  - d) 200 feet from any public water supply well;
  - e) 100 feet from ditches, swales, diversions or other conveyances to surface waters;
- iii) Field stacks shall not be placed in the same location more than once every 4 years;
- iv) Field stacks cannot remain in one location for more than 180 days;
- v) Field stacks shall not be located in areas of concentrated runoff such as water diversions or swales;

vi) Other site specific standards may be approved upon petition to the Secretary but in no case shall unimproved manure stacking sites be located less than 100 feet from a private water supplies or surface water:

5.4

(c) Annual croplands subject to flooding from adjacent surface waters are required to maintain a 30% cover over the soil going into the winter. ~~be planted to cover crops. Broadcast seeding must be completed by September 15th of each year. Seed established with drill seeders or otherwise incorporated shall be completed by October 1<sup>st</sup> of each year.~~ Reason: that still give the cover need to protect the soil.

5.5

(b) ~~Manure and other wastes shall not be spread between December 15 and April 1. The Secretary may prohibit the application of manure to land in the State between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary determines that due to weather conditions, soil conditions, or other limitations, application of manure to land would pose a significant potential of runoff to State waters. Reason: (RAP's already say "Manure shall not be applied to fields that are: iii) Are saturated with water; or iv) Frozen and/or snow covered' no reason to have a state wide limitation. Newport conditions is very different then Addison)~~

(d) ~~Manure and other wastes shall not be applied when actual or expected weather a 25 year / 24 hours storm is expected and field conditions are conducive to flooding, runoff, ponding or other off site movement or can be reasonably anticipated to result in flooding, runoff, ponding or other off site movement. Reason: RAP's already have (e) to stop applications during high risk conditions.~~

(e) Manure shall not be applied to fields that are:

i) ~~Excessive in soil test phosphorus (> 20 parts per million) as determined by soil analysis; or Reason: ( 20 ppm is a agronomic value that was never intended to determine whether manure should be applied. UVM's Modified Morgan Available P2O5 doesn't tell you total P2O5 in the soil just the portion available to the crop.)~~

ii) ~~Exceed 10% slope without permanently vegetated buffers to surface waters of at least 100 feet. Manure shall not be applied within the buffer, unless farm is following a NRCS 590 NMP or an improved application method i.e. Injection; or~~

iii) ~~Are saturated with water; or~~

iv) ~~Frozen and/or snow covered~~

(f) ~~Application of manure shall not occur within 400 50 feet unless on EWD soils then 100 feet of a private water supply or 200 feet of a public water supply. The prohibition shall not apply to private water supplies that have been established inconsistent with the~~

Department of Environmental Conservation Water Supply Rules. Reason: that is constant with past AAP, current MFO and LFO rules.

#### 5.7 Buffer Zones and Setbacks:

(a) A vegetative buffer zone of perennial vegetation shall be maintained between annual croplands and the top of the bank of adjoining surface waters consistent with all criteria in (i) through (vii) below.

i) adjacent surface waters shall be buffered from annual crop lands by at least 25 feet of perennial vegetation.

ii) ~~Intermittent waters, ditches, swales, diversions and other water conveyances~~ shall be buffered from annual crop land by at least 10 feet of perennial vegetation.

iii) application of manure or wastes is prohibited within required vegetative buffers.

iv) use of fertilizer to establish and maintain a required vegetative buffer is allowed consistent with nutrient management plan requirements and agronomic recommendations.

v) tillage shall not occur in a vegetative buffer except for the establishment or maintenance of the vegetative buffer.

(vi) harvesting of the required vegetative buffer as a perennial crop is allowed.

(vii) Variances to required buffers may be considered by the Secretary on a site specific basis according to standards approved by the Secretary. Site specific buffers may be approved based on field characteristics such as field contours, soil types, slopes, proximity to water, nutrient management plan requirements and other relevant characteristics when the Secretary determines that the site specific buffers are adequately protective of surface waters.

(b) Manure and other wastes shall not be applied within 25 feet of surface water or within 10 feet of intermittent waters or applied in such a manner as to enter surface water or intermittent waters.

*You should only take away property rights when there is hard evidence that the right you are eliminating is actually causing pollution.*

*Peter Briggs  
218 Bruggs Rd.  
Addison, VT 05491*

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## Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program

First I Like To see our Streams kept clean. Having said that and reading this draft there is some good ideas.

My concern is that it does not address the fact that farms are not all the same. Farms in some areas of the state have longer growing seasons, thus time limits are easier to meet. Some farms are not near streams so spreading manure is no problem. The farms along streams are a different situation.

Less manure, less feed. If land can not be used who pays for that land? If manure is hauled, say! five - ten - or more miles away, plus renting land to get rid of surplus of now too much manure, where does the money come from?

Will this cause a land war, so to speak? Will this put some farms out of business like it did when the →

Continue on Reverse

## Submit Form to:

Vermont Agency of Agriculture,  
Food and Markets  
116 State Street  
Montpelier, VT 05620

|               |               |       |  |
|---------------|---------------|-------|--|
| Name          | BRUCE SARGENT |       |  |
| Address       | 5409 RT 105   |       |  |
| City          | State         | Zip   |  |
| NEWPORT, DTR. | VT.           | 05857 |  |

interstates highways were built?

This will affect some farms income.

I see nothing in this draft that address's that.

Thank-you

Bruce Sargent

# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



I attended the public meeting in Montpelier Dec 10 re: RAPs. I'm a small farmer and will likely have to be certified as SFO. Our operation involves the use of hayland, permanent pasture, and woodlot. We're a valley operation and a brook runs through the middle of us, so some changes in our day to day activities are surely forthcoming. I'm optimistic about with a few fencing changes and a designated outside feeding location in the early spring and fall (when they aren't stacked), will be able to comply. The hardship will be the logistics of soil & manure sampling and a records book for all the small parcels that constitute the hayland we use. Will you be issuing a common booklet for everyone to use? How are the labs going to handle the huge load of samples coming their way?

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
 Or mail to:  
 Vermont Agency of Agriculture, Food and Markets  
 116 State Street  
 Montpelier, VT 05620

|         |       |     |
|---------|-------|-----|
| Name    |       |     |
| Address |       |     |
| City    | State | Zip |

**Optional:** VAAFAM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No

Then almost seems to be too much of an honor system required and the task force required <sup>for compliance</sup> will be large and expensive.

This viewpoint is probably too late, but I consider a "point" system as viable to attain the same outcome.

All farms that are UFO could be given a score on their operation. One needs for example a 90 out of 100 to be in compliance. Different criteria to be considered:

Number of head on X amount of pasture (acres)

Cropland all grass?

Use of moldboard plow

Comm. Fertilizer use

herbicide use

Type of manure storage & location

If annually plowed ground

sloped

covercrop use

grass strips

manure topdressed or incorporated

Need for brook crossing and animal

use of this water source at same

location.

Creativity in fencing / use of rotational grazing  
more I haven't thought of

All small farms could have to attain a certain score or better at any review. Works

for me!

Sincerely, at 65 yrs old

RANDOLPH

### Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



This will be like the change  
that cows had to be on cement  
this will drive small farms  
out of business

*Continue on Reverse*

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
 Or mail to:  
 Vermont Agency of Agriculture, Food and Markets  
 116 State Street  
 Montpelier, VT 05620

|         |       |     |  |
|---------|-------|-----|--|
| Name    |       |     |  |
| Address |       |     |  |
| City    | State | Zip |  |

1

**Optional:** VAAFm is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?

Yes       No



Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Small <sup>or</sup> farm No Charge for Spreading Manure but large farm  
will be charged large sums of Money unfair to the large  
farms

I heard one farmer say he did everything you told him  
to do to eliminate the problem & he spent lots of money  
and it did nothing.

Think you should learn to calculate  
your figures on 20% of spreading manure or less  
your ag group could not understand it  
but you are pushing things on farmers!!!

Why look at other STs for direction to create a  
plan for VT. Why can't we make our own thing?

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

|                |
|----------------|
| Name           |
| Address        |
| City State Zip |

**Optional:** VAAFPM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes  No





# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Consider aeration <sup>& injection</sup> on 10% slopes. i.e. use of aeration equipment to allow infiltration and negate the need for a ban.

I only import manure/compost to my otherwise non-certified farm once every 5 +/- years. I feel certification and a NMP would be a burden. Please provide an avenue for reduced reporting or an exemption

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

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| Name    |       |     |
| Address |       |     |
| City    | State | Zip |

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 Yes       No



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Required Agricultural Practices (RAP) Regulations For  
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When does the 540 NMP need to be completed?  
- Who is going to write these? (Not enough TSPs or space in the classes)  
~~Should be completed~~  
> 20% soil test P no manure should actually be based on P Index  
10% or greater fields manure spreading should be limited to  
vegetated fields.

Continue on Reverse

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| Address |       |     |
| City    | State | Zip |

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**Optional:** VAAFM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No



Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Uncertified Farm Operations

Animal numbers

\* ~~Animal numbers~~ should be represented in Animal Units (1,000#) and I feel that 1 Animal unit should have at least 2 acres of land (pasture/hayland) to support those animal units.

\* Having more than ~~the~~ <sup>9.99 acres</sup> ~~average~~ ~~should~~ ~~not~~ bump the producer up to the next level (Certified Small Farm), provided they are not importing nutrients beyond a certain measurable amount and are under 19 ~~Animal Units~~.

\* We have 3 Horses, 5 cows, 200 Birds, 6-8 pigs on our small farm using about 25 acres for our vegetables (1A), pasture & hayland and another 130 acres in Forest land. Our Farm fits in the should

uncertified Farm Operation

\* Please allow for more acreage for VFO's

Continue on Reverse

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Or mail to:  
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116 State Street  
Montpelier, VT 05620

Name Lisa McCroby  
Address 341 Macintosh Hill Rd  
City Randolph State VT Zip 05060

Optional: VAAFM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?

Yes  No



that is on our farm

Optional Public Comment Form  
Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



1. Definition sections should be consistent when listing the types of animals.
2. Can the budget pay for the "Digging In" UVM program for farmers and the phosphorus <sup>inlets</sup> tool & checking to ensure the small farmer has a computer, and could it include room & board for the farmer & material if they need it to get each VT farmer a Nutrient Waste Management Plan.
3. If injection method is the best way to spread manure on fields can every farmer get that machinery immediately under cost/share.
4. Your presentation is excellent, thorough, thoughtful & intelligent. It is so hard to get a one size fits all. You've done a great job.
5. Horse Farms are going to be surprised that these Regs apply to them. They usually have manure piles in the same place year in and out.

Continue on Reverse

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Or mail to:  
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116 State Street  
Montpelier, VT 05620

|         |                  |       |  |
|---------|------------------|-------|--|
| Name    | Lyn DesMarais    |       |  |
| Address | 215 Ella Dean Rd |       |  |
| City    | State            | Zip   |  |
| Brandon | VT               | 05733 |  |

I'm interested in historical levels of the health of the forest & issues with needing help re our town, run off, to road issues thru floodplain Meadow Farm.

1. **Optional:** VAAFPM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No  
 → but I'm low priority. I have no animals, produce hay only

and lease the land to Mountain Meadow Farm.

6. most of us don't know how to soil test, or have soil tests, <sup>in hand re phosphorus</sup> or how to calculate 10% slope or greater

7. Very Reasonable cost / benefit analysis on livestock exclusion stds.

8. It would really help to know <sup>concretely</sup> how to access <sup>remediation</sup> the money so we all can ensure it stays in Vermont, is used by the farmers, to improve our VT water quality.

I hope you can read my scratchings.

9. I'm personally worried that our town will ditch its roads, which go through our farm, to turn it from Otter Creek, which also goes through our farm, and divert road run off into my fields - which as an organic farmer I don't want. I've had to speak to Brandon when they cleared snow, <sup>this past winter</sup> pulled up asphalt with the snow & dumped it into a vernal spring on our property. Their hired help didn't know what they were doing. Who helps us with this type of water pollution and soil pollution problem? LDM



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
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CERTIFICATION  
NOT REQUIRED

I Have an Apple Orchard of 4 acres  
and exceeds the 1040F requirements.

I use granulated fertilizer and solar  
fertilizer based upon yearly leaf analysis.  
no manure used.

On my land I let a farmer graze  
20+ cattle during the growing season  
on meadow around the orchard.

Do I certify or does the certification  
fall under the farmers plan?

I have no livestock income or ownership.

Continue on Reverse

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Or mail to:  
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Montpelier, VT 05620

|            |                |       |  |
|------------|----------------|-------|--|
| Name       | Dwayne Brass   |       |  |
| Address    | 2622 VT Rt. 65 |       |  |
| City       | State          | Zip   |  |
| BROOKFIELD | VT             | 05036 |  |

1

**Optional:** VAAFM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?

Yes       No



Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
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"Small Farm Designation" No

"Small Farm Designations" maybe

Designations neither "Large" or "Medium" best choice

"cows" means? calves, heifers, bulls, yearlings, ~~weaned~~  
cow calf "units", ~~the~~ feeder calves (year),  
feeder cattle, cows.

Should commercial compost be considered  
"waste"? (you buy or "accept" manure, you process) treat  
manure you sell treated manure as "compost."  
Are you a farmer?

"manure" means?

We should have answered many of these (above)  
questions before passing the law.

Continue on Reverse

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Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

Name: MARK A. MACDONALD  
Address: 404 MACDONALD RD  
City: Williams town State: VT Zip: 05679

**Optional:** VAAPM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?

Yes  No

## Vocabulary Matters\*

Farmers used to spread "manure," ~~factor~~  
It was measured in ~~postels~~ bushels. It was a solid.

To day many farms spray "manure" It is more  
like a liquid. ~~The larger the~~

The larger the farm the more likely to "spray."

Drilling (liquid) is more rare and more expensive.

Work books, rules, practices should  
recognize the difference when the practices  
impact the soils differently.

→ "Manure application" is ~~neutral~~ <sup>neutral</sup> to  
spraying or spreading.

### manure vs. compost

Mandating, forcing, disruptive changes and its  
consequences - Hwy in 1968 it mandated that  
operators of motor vehicles must pass up coming  
vehicles on the right. Freedom attacked!

Many

Forests are no longer "logged." They are "chipped"  
Both are forms of "harvesting."

# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



→ I WY WANT TO CLARIFY OR EMPHASIZE THAT COVER CROPS ARE ONLY REQUIRED FOR AREAS THAT ARE SUBJECT TO FLOODING - NOT ALL CROPLANDS.

→ IS THERE A LIST OF PLANTINGS THAT WILL <sup>BE</sup> INCLUDED THAT ARE BETTER FOR BUFFERING? MORE GUIDANCE SHOULD BE PROVIDED TO ENSURE THE "RIGHT" VEGETATION IS INCLUDED IN BUFFER AREAS.

Continue on Reverse

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 Yes       No



Comments on Draft RAPs

Peter Burmeister

Burelli Farm

December 10, 2015

AG work group ✓

This entire process, including the meeting being held today, as well as similar meetings that have been held during the past several weeks, is seriously flawed. Instead of promulgating draft regulations, drawn up by Agency staff, and then submitting them for public comment, it would have been far better to have convened a task force of farmers and given them that duty. This current mode is backwards and the resultant opposition that it has drawn was inevitable.

These proposed regulations are unworkable and they cannot stand. If there is an effort to put them into effect, the result will be anger, resentment and widespread indifference. Enforcing them will prove to be nearly impossible and there will be negligible impact on water quality.

The proposed RAPs are poorly written, are in some areas contradictory, and as a whole represent a burden for farmers in the state of Vermont, while failing to outline an effective method for reducing water pollution from agricultural runoff.

The proposed regulations provide no incentives for farmers to comply. Instead, they represent an attempt by the turn the Agency into a police force, and it makes me wonder what will be the consequences if there is no compliance. Fines? And if the fines are not paid, what then? Jail? How far do we want to see this process play out?

According to USDA census statistics, there are 7,338 farms in Vermont, comprising 1,251,713 acres, more than a fifth of the land area of the state. In order to enforce the proposed regulations, the Agency would have to field a small army of inspectors, and even then there would be no way to be sure that on any given day, or on any given acre, the regulations were being followed.

The first part of the report discusses the importance of maintaining accurate records of all transactions. It highlights that proper record-keeping is essential for the success of any business. The second part of the report focuses on the various methods used to collect and analyze data. It describes how data is gathered from different sources and how it is processed to extract meaningful insights. The third part of the report discusses the challenges faced in data analysis and how they can be overcome. It also provides some recommendations for improving the data analysis process.

The following table shows the results of the data analysis. It provides a clear and concise summary of the findings. The table is organized into columns and rows, making it easy to read and understand. The data is presented in a way that allows for quick comparison and contrast between different categories. The table is a key component of the report and provides a visual representation of the data.

The data analysis shows that there is a significant correlation between the variables studied. This finding is important as it provides valuable insights into the relationship between the variables. The results of the analysis are discussed in detail in the following sections of the report. The data is presented in a way that allows for a clear understanding of the findings and their implications.

The data analysis also shows that there are several factors that influence the results. These factors are discussed in detail in the following sections of the report. The data is presented in a way that allows for a clear understanding of the factors and their impact on the results. The findings are discussed in detail in the following sections of the report.

The data analysis shows that there is a significant difference between the groups studied. This finding is important as it provides valuable insights into the differences between the groups. The results of the analysis are discussed in detail in the following sections of the report. The data is presented in a way that allows for a clear understanding of the findings and their implications.



Because of the large number of farms in the state, these proposed regulations are unworkable and unenforceable. They represent a "carpet bombing" approach rather than one that would pinpoint the relatively small number of large polluters. Because of the VAAFMs focus on large dairy, it can be assumed that there is a reluctance to target the major offenders, most of whom are in the "large farm" category of the dairy sector. Instead, there is a new focus on the "small" farmers, who are a rapidly growing economic force in the state, making Vermont a leader in the localvore and slow food movements.

The Agency has historically taken a neglectful, and in some cases, hostile approach to the small farm sector, choosing instead to favor large dairy. The proposed RAP's represent a further example of this bias at the Agency.

In fact, the problem of pollution can be primarily traced to the practices of a relatively few large dairy farms, which abut either Lake Champlain, or one of its tributaries, or the Connecticut River. These farms can be readily identified, simply by consulting a map. The spreading of liquid manure and chemical fertilizers within a few feet of these waterways is the primary culprit. Enforcement of regulations designed to mitigate these practices would require a small complement of personnel and a fraction of the expense, as opposed to putting the proposed RAP's into effect.

Fees for small farms are not specified, but will be decided by the VAAFMs through the mandated public rule-making process.

The issue of small farms fees needs to be addressed immediately within the Draft RAPs, not waiting for the "rule-making process." Unless guidelines are given there will be no basis for discussion.

Furthermore, the arbitrary definitions of "large, medium and small" make little sense. For example, if a farm has one more animal than stipulated in the definition, it could trip its designation from one category to the next larger one, with the attendant increase in fees.



Despite the detailed definitions of the various categories of farms, based on size, the Secretary is given vast and arbitrary powers to determine where a farm fits in terms of fee schedules.

I am a member of the Board of Directors, and the Policy Committee of Rural Vermont, a farmer advocacy group with more than 1000 members. I would like to suggest to the Agency that you convene an advisory committee of representatives from our organization, as well as other farming groups throughout Vermont, to re-write and revise the proposed RAP's, after which they should again be submitted to the public for comment and review. I would be pleased to serve on such a committee and I am quite sure that you would find others that have attended these hearings, able and willing to join in.

See below:

Paragraph 2.25:

Definition of "small farm" includes various provisions regarding amount of land, and quantity of animals raised. However, the following sections give complete discretion to the Secretary of VAAFV to make his/her own designation without regard to the detailed listings given in the sections above.

"Any other animal type or number as designated by the secretary or,

(c) that are used for the preparation, tilling, fertilization, planting, protection, irrigation, and harvesting of crops for sale; or

(d) that the Secretary has designated, on a case by case basis after an opportunity for a hearing, as a small farm required to comply with certification requirements pursuant to section 4871 of Title 6 regardless of livestock type or number based on the farms' management, agricultural inputs used by the farm, tillage practices used by the farm and the associated actual or potential water quality impacts."

The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in the context of public administration or corporate governance. The text highlights how detailed records can help identify trends, prevent fraud, and ensure that all actions are documented and traceable.

In addition, the document outlines the various methods and tools used for data collection and analysis. It mentions the use of spreadsheets, databases, and specialized software to manage large volumes of information. The importance of data integrity and security is also stressed, as well as the need for regular audits to verify the accuracy of the recorded data.

The second part of the document focuses on the practical implementation of these record-keeping practices. It provides a step-by-step guide for setting up a robust system, from defining the scope of records to establishing clear protocols for data entry and review. It also discusses the role of training and ongoing support in ensuring that all staff members are proficient in using the system.

Finally, the document concludes by emphasizing the long-term benefits of a well-maintained record-keeping system. It notes that such a system not only improves operational efficiency but also provides a valuable historical record that can be used for strategic planning, legal compliance, and performance evaluation. The overall goal is to create a culture of transparency and precision in all organizational activities.

The following section details the specific requirements for data storage and backup procedures. It specifies that all data must be stored in a secure, encrypted format and that regular backups should be performed to prevent data loss. The document also addresses the issue of data retention, outlining the policies for how long records should be kept and the procedures for securely deleting obsolete information.

Furthermore, the document discusses the integration of record-keeping systems with other organizational tools and processes. It highlights the need for seamless data flow between different departments and systems to ensure that information is up-to-date and accessible to all relevant parties. This includes discussing the use of APIs and data synchronization techniques.

In conclusion, the document serves as a comprehensive guide for anyone responsible for managing organizational data. It provides a clear framework for developing and maintaining a reliable record-keeping system, ensuring that all activities are properly documented and that the organization can benefit from the insights and security provided by a well-organized data environment. The document is intended to be a practical resource that can be adapted to various organizational contexts and needs.

These sections give far too much power to the Secretary and staff to make arbitrary decisions as to the definition of "small farm," and need to be eliminated or completely modified.

Similarly, paragraph 2.27, addressing the definition of "wastes" gives similar discretion to the Secretary, notwithstanding the detailed definitions immediately preceding the following: ". . . and any other waste compound or material which is determined by the Secretary or the Secretary of ANR to be harmful to the waters of the State, or other wastes as defined in 10 V.S.A. Section 1251 (12)."

In Section 3, "Required Agricultural Practices Activities," it defines farms required to adhere to the proposed regulations as:

"Farms that have produced an annual gross income from the sale of agricultural products of \$2,000 or more in an average year and are managed, owned or leased by a person who has filed a Form 1040 Schedule F income tax statement in at least one of the past two years; or

(c) any farming operation, whether the \$2000 annual gross income or 1040 F filing threshold is met, that is used for the raising, feeding, and management of at least the following number of adult animals on a farm that is no less than 4.0 contiguous acres in size:

four equines;

five cattle, cows or American bison;

fifteen swine;

fifteen goats;

fifteen sheep;

fifteen cervids;

fifty turkeys;

fifty geese;

one-hundred laying hens;

two-hundred and fifty broilers, pheasant, Chukar partridge, or Coturnix quail;

three camelids;

four ratites (ostriches, rheas, and emus);

thirty rabbits;

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one hundred ducks;  
one-thousand pounds of cultured trout;  
or other livestock types, ages, and numbers as may be designated by the Secretary based on the farm's potential to generate nutrients or other associated livestock wastes; or

(d) any farm with a prospective business or farm management plan, approved by the Secretary, describing how the farm will meet the threshold requirements of this section.

These definitions do not match those listed in Section 2. It makes the matter of which farms are required to register and to then adhere to the proposed regulations very unclear. The definitions need to be clearly stated in one coherent section to avoid ambiguity.

Furthermore, this section once again gives arbitrary discretionary power to the Secretary, which would appear to negate the definitions.

Paragraph 3.2, (c), which relates to maple syrup production, seems to have no relevance to water quality or phosphate/nitrogen pollution. Why is it included in the document?

Section 4.10, referring to "small farms," states that they shall ". . . certify compliance with these Rules and shall do so in a manner prescribed by the Secretary."

This sentence and paragraph (a) below once again gives sweeping arbitrary powers to the secretary and staff. The matters of compliance and certification need to be spelled out in detail in the final document, not left to the ambiguity of "rule-making" or "policy" as we have witnessed in the past with VAAFV.

Paragraph (f), referring to a 10-year time span for certification of small farms is absurd and unworkable. During the 10-year period, farms will change hands, owners will stop farming, and many new farms will be established. It will prove to be impossible to certify all 7338 farms in Vermont and many farms will elude the certification process either by design or due to the impossibility of keeping up with the various processes of change.





This section again gives arbitrary power to the Secretary to decide how often the certification process must take place.

Section 4.12 refers to required water quality training for all categories of farms, but does not state if there will be fees involved. This needs to be clarified. Farms are already subject to a wide variety of fees and if required training involves further outlays, this will be a barrier to farming in the states, especially for small farms.

Section 5.2, paragraph (d), regarding waste storage, would require waste storage facilities to be in compliance with USDA regulations and, if not, to be certified by a licensed professional engineer. For small farms this would be a further unwarranted expense and would be a barrier to farming.

Paragraph (e), referring to field stacks, would require moving the stack either: every four years (subsection iii) or every 180 days (subsection iv). It is very unclear as to which subsection actually applies. In either case, moving the stack is unworkable, especially for small farms with limited acreage. What is the purpose of moving the stack?

Paragraph (g) mentions pesticides, but nowhere do the proposed regulations actually address the issue of pesticide/herbicide pollution of waterways.

Section 5.3 addresses nutrient management plans and would require all farms to prepare such a document. For small farms this is an onerous regulation that would entail additional expense and would be a barrier to farming, especially small, startup operations.

Paragraph (c) would require soil and manure testing either every three years, or annually. This needs to be clarified. Such testing represents an additional expense for farmers and should not be required of small or "very small" farms.

Section 5.5, paragraph (g) would require record-keeping every time a farmer spreads manure. The records would have to be maintained for 5 years and made available to the Secretary. This is an absurd requirement and would induce an undue burden, while in no way helping to reduce nutrient pollution.

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Section 5.8 purports to refer to animal mortality composting, but the final paragraph, (c) instead addresses non-mortality composting regulations. This paragraph deserves its own separate section so as not to be overlooked by farmers that routinely compost manure, vegetation and food waste.

YES IT IS.  
—  
ACTUALLY PRESERVES AN EXISTING EXEMPTION.

Section 9.0, addressing farm structures, would require notification to town officials prior to construction a practice which is not now required in Vermont. The section refers to setbacks from adjoining property lines and roads, which is completely irrelevant to issues of water quality. This section could be construed as a first step toward increased regulation of farm buildings, which are currently mostly exempt from zoning requirements and building codes. Preparing sketches and submitting them to town officials represents a further burden to farmers, especially small farmers. This section should be removed from the proposed regulations.

BEEN REQUIRED SINCE 1995

Furthermore, the Appendices, under the section headed "Construction of new Farm Structures," mentions involvement of ANR in the construction of new farm structures when such activity requires the excavation of an acre or more of property. Virtually any farm building would involve movement or disturbance of earth on an acre or more. The impact of such activity on water quality is minimal and this section has no relevance to the proposed regulations, and is an undue burden for farmers.

Respectfully Submitted:

Peter Burmeister  
Burelli Farm  
Certified Organic beef, pork and poultry  
269 Burelli Farm Drive  
Berlin, Vermont 05602  
[www.burellifarm.com](http://www.burellifarm.com)  
(802) 595-2572

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The document also outlines the various methods and procedures that should be followed to ensure the accuracy and reliability of the records.

The second part of the document provides a detailed description of the various types of records that should be maintained. This includes records of sales, purchases, inventory, and other financial transactions. It also discusses the importance of maintaining records of contracts, agreements, and other legal documents. The document provides a clear and concise explanation of the various types of records and the information that should be included in each.

The third part of the document discusses the various methods and procedures that should be followed to ensure the accuracy and reliability of the records. This includes the use of double-entry bookkeeping, the use of standardized forms and procedures, and the use of modern accounting systems. The document also discusses the importance of regular audits and the use of independent auditors to verify the accuracy of the records.

Very truly yours,

J. H. [Name]

Director of [Department/Office]  
[Address]  
[City, State, Zip]

# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program

NEWPORT/ST. J.



ADD FURTHER CLARIFICATION ABOUT PERMANENT BUFFER  
MANAGEMENT:  
CANS HARVEST  
CAN APPLY FERTILIZER

*Continue on Reverse*

Submit Form to:  
Vermont Agency of Agriculture,  
Food and Markets  
116 State Street  
Montpelier, VT 05620

|         |       |     |
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| City    | State | Zip |



# Optional Public Comment Form

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Please decide on Permit Amounts for Small Farms based on sliding scale income. <or none!>

Small Farms need a bigger window of time for action based on labor availability.

Send farmer's a copy of their watershed (water) sampling, so they can place their activity on the landscape for themselves.

Any action made could be followed up by self-certification.

If MFO + LFO are all ready following the guidelines, why are they still such a big source?

USE the Cow per Acre Formula for phosphorus reduction.

→ stored phosphorus

Any erosion causing activity should be regulated ie large scale crops, manure not the only problem.

Continue on Reverse

Submit Form to:  
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# Optional Public Comment Form

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① "Grandfather Rules" to protect farms from new housing / development next to farm boundaries (small house lots, wells too close to boundary, lawn fertilizers, etc.)

② Small farm animals qty thresholds not realistic !!

③ RE: "Training" - Farmers are the smartest people in the world + have common sense + don't want to pollute "Training" is a bureaucratic "ticket punch"

④ 40% of Water ~~Q~~ Quality problems are homeowners Should every landowner be required to attend training? (probably have more spare time than farmers)

⑤ \$2000 Gross Income is ridiculous!! Current Use Farm must be more than 50% of income. ~~Both~~ Both hurt <sup>small</sup> farmers.

⑥ Too many Requirements!

Continue on Reverse

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| Name    |       |     |
| Address |       |     |
| City    | State | Zip |

**Optional:** VAAFM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



|                                                          |
|----------------------------------------------------------|
| Cover Crop Floodplain                                    |
| Cutting Corn not done cutting until 10/20-28             |
| Should not fine farmer for not getting done by date      |
| Should be recommendation not requirement                 |
| Farmers not ready financially or time.                   |
| Commercial Fertilizer annual in buffer to maintain grass |
| Conservation Program to help plant buffers               |
| "Mobilize everything" to help farmer                     |
| NMP for 15 beef cows?                                    |
|                                                          |
|                                                          |
|                                                          |
|                                                          |
|                                                          |
|                                                          |
|                                                          |
|                                                          |
|                                                          |

*Continue on Reverse*

Submit Form to:  
Vermont Agency of Agriculture,  
Food and Markets  
116 State Street  
Montpelier, VT 05620

|         |       |     |
|---------|-------|-----|
| Name    |       |     |
| Address |       |     |
| City    | State | Zip |



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Change wording on field stacks! Field Stacks need  
to be in place for more than 100 days.  
"CAN use a soil specialist to determine site  
for a stack - NRCS should do this."  
Thus, this could cover compost site;  
possibly "Routine mortality" compost site,  
and a routine manure stack.  
Some farms need a temp stack  
site permanently to use most years.

Cover crop flood plains: Cover crops  
should be use on crop land when streams  
are subject to ice jams and <sup>more</sup> flood history  
along crop lands. Highly recommend this.

"P" Test > 7 ppm - Not spelled out enough  
Need to follow "crop removal" guide.  
NRCS Phosphorus INDEX will guide this better!

Continue on Reverse

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Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

Name: Lacey Hamel  
Address: 73 Clover Hollow  
City: Lyndonville State: VT Zip: 05851

1  
**Optional:** VAAFAM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
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In the presentation, new farms were not discussed. As I read the draft, it seemed that new farms had to apply before starting. I think this may make it very hard for farms to start.

I don't understand the section on structures. As I read it, any structure on a farm has to be submitted to the zoning board and or town clerk. I don't understand the purpose of this.

I think there should be some attention on reducing phosphorus before it comes on the farm.

Continue on Reverse

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116 State Street  
Montpelier, VT 05620

|         |                |       |    |
|---------|----------------|-------|----|
| Name    | Dan Demaree    |       |    |
| Address | 1985 County Rd |       |    |
| City    | W. Glover      | State | VT |
| Zip     | 05875          |       |    |





Who is regulating the spreading of whey?  
Grafton cheese is spreading whey all winter long  
on Corn fields and we watch it run off in  
the spring before the ice is out of the  
ground.

are they certified?

# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Make notification of land transfers reportable on annual basis  
(Same time as annual report)

Trainings need to be locally available - southern vt is  
NOT Springfield.

Continue on Reverse

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Montpelier, VT 05620

|            |                          |       |  |
|------------|--------------------------|-------|--|
| Name       | The Corse Farm Dairy LLC |       |  |
| Address    | 1085 Corse Road          |       |  |
| City       | State                    | Zip   |  |
| Whitingham | VT                       | 05361 |  |



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Excellent - just be careful you don't fund more chiefs than Indians ie farmers should get a lot of help \$ here to implement.

*Continue on Reverse*

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116 State Street  
Montpelier, VT 05620

|         |       |     |
|---------|-------|-----|
| Name    |       |     |
| Address |       |     |
| City    | State | Zip |



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Q about flooding: 5.2 e "otherwise subject to flooding." 5.4 c "subject to flooding"  
5.8 b "annual overflow" What frequency of flooding are you referring to in 5.2 or 5.4? I think it should be the 2 yr or 3 yr flood for all. I really support this concept, just want more clarity.



←  
Spring flood on Otter Cr S. of Rte. 17 along Rte. 23.

Continue on Reverse →

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Or mail to:  
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116 State Street  
Montpelier, VT 05620

|               |       |       |
|---------------|-------|-------|
| Name          |       |       |
| Chris Robbins |       |       |
| Address       |       |       |
| 8 Gorham Ln.  |       |       |
| City          | State | Zip   |
| Midd.         | VT    | 05753 |

1

**Optional:** VAAFAM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No

We need to make it easier to compost manure & move it off the farm to where it can be used, if the farm already has excess nutrients. Other organic waste (food waste etc.) can be composted with it.

Open-air manure lagoons are not a good idea. In other states they are moving away from them. They overflow & pollute groundwater. In MN when I lived there, farmers were going toward concrete pits under barns.



# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Offer Creek Watershed

① cover crop deadlines will not work in this area.  
Most of our farmers do not have corn removed  
by Oct. 1<sup>st</sup>

② we desperately need an A&S type person  
in the southern part of this state to work  
with our farmers

③ Training /education delivery "on the web" will not  
work for all farmers - many still don't have or  
are willing to use computers. Snail mail info +  
tools such as pesticide applicators do how is more  
useable for some. Perhaps in addition to ?

Continue on Reverse

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Montpelier, VT 05620

|         |       |     |
|---------|-------|-----|
| Name    |       |     |
| Address |       |     |
| City    | State | Zip |

1

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 Yes       No



④

# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Need to get more horse owners involved.  
Vermont Horse Council, Dog River Riding Club,  
Northwest Riding & Driving, etc. We can invite you  
to member meetings.  
You can contact me at bigdoug-43@yahoo.com.

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

|         |             |       |  |
|---------|-------------|-------|--|
| Name    | Doug Smith  |       |  |
| Address | 8263 Rt 22A |       |  |
| City    | State       | Zip   |  |
| Addison | Vt          | 05491 |  |

1

**Optional:** VAAFm is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No







# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



- Can NRCS set date for cover cropping depending on district?

- We need to move to an animal unit basis.

- Can we find an alternative to a full 590 NMP for SFO.

- Separate land and animals for farm size distinction.

- Make the 1 in 4 rule for manure stacking ease-by-ease instead of a general rule.

- Make a differentiation between "compost" and "manure".

- Make a distinction between solid + liquid manure.

- Make difference between compost and manure stacking rules  
- compost needs longer time. 180 days not enough.

The weather clause is too ambiguous.

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

|         |       |     |
|---------|-------|-----|
| Name    |       |     |
| Address |       |     |
| City    | State | Zip |

1 **Optional:** VAAFAM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?  
 Yes       No

- section 3.1 is ambiguous.

# Optional Public Comment Form

Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program

MIDD



I am grateful for your work improving our beautiful state.

I farm 22 Acres diverse fruit Flower egg vegetable Hops on Middlebrook rd in Ferrisburgh Flowerpower VT. My family and I are outdoors working daily.

There is currently a large satellite manure lagoon being built by Allandra Farm not 120 feet from my property line and 100 feet from the road where bike tours ride. (Combustible)!!

Penn state manure studies show dangerous sulfide plumes sinking and traveling over 200 feet. Death zone.

E. coli will saturate my spinach and lettuce operation; customers for my U-pick Beans and flowers will be overwhelmed by the noxious odor.

My farming operation will be ruined by this satellite pit, and I expect it to be relocated. My Lawyer, James Dumont, awaits an answer.

Certainly Allandra farm, with 11 farms and 2,000 acres, ~~has~~ has safer and more sensible options.

The fact that I was not informed of this plan and had to hire a lawyer to protect myself is absurd.

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
Or mail to:  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

|             |                    |       |  |
|-------------|--------------------|-------|--|
| Name        | FlowerPower VT     |       |  |
| Address     | 991 Middlebrook rd |       |  |
| City        | State              | Zip   |  |
| Ferrisburgh | VT                 | 05456 |  |

1

**Optional:** VAAFPM is offering non-regulatory Technical Assistance visits for Vermont Farmers to discuss and evaluate a farm's water quality responsibilities under the draft RAPs. Would you like to request a visit from a partner water quality organization to discuss options specific to your farm?

Yes  No



On a larger level, broader view, Vermont Ag/Dairy, is huge in our state.

People living in New England assume the cows leave the barn, and are kept humanely. Organically raised cows do not sicken, and do not need (can't have) antibiotics.

Diseases are spreading from cows to people, and they are antibiotic resistant.

I feel CAFO dairies are wrong on many levels, and they certainly concentrate waste.

Allandra Farms is located on the ridge above Vergennes 3 miles across.

Little Otter creek receives all of their waste.

The town of Ferrisburgh watershed uses the stream next to the Lagoon / mudcreek / little otter and the fact that Allandra removed the buffer, established trees, 3 years ago, and that the Lagoon is 20 feet from the stream is not proper.

This area floods yearly, and remains wet as quicksand due to the Mud Creek bending at that part of the field.

I urge you to visit Stop the Foo Pit facebook page to view our case.

And visit the Lagoon yourself on Middlebrook Rd.

SRAP has agreed to assist us in this matter. We will test ourselves.

Thank for your attention,

Anne Matthews FlowerPower VT

Enosburg Opera House  
11/16/15

Optional Public Comment Form  
Required Agricultural Practices (RAP) Regulations For  
The Agricultural Non-point Source Pollution Control Program



Climate Change

Land subject to flooding - Any cycle length  
no surface spreading of liquid manure  
all such lands should be permanent  
grass

NO Brainer & currently  
not possible

Soil water saturation and  
liquid manure.

No spreading -  
We had 19" of rain in June  
& July - neighbor ignored this  
& spread heavily. 3 days  
later, 3 1/2" rain swept  
manure through 3 acre dense  
marsh & swamp buffer and  
polluted over 10 beaver ponds,  
turning exit stream orange  
for 1<sup>st</sup> time in 35 years.

What really works? Grass farming.  
Needs more than education.

also needs  
holistic  
approach

Needs financial incentives  
not more research

Continue on Reverse

Submit Form to:  
Vermont Agency of Agriculture,  
Food and Markets  
116 State Street  
Montpelier, VT 05620

Name Doug Flack  
Address 3971 Pumpkin Village Rd  
City Enosburg State Zip 05450

Much liquid manure spreading is  
dumping - farms have too much for  
land base. This is very public.



5.4(C) Annual croplands subject to flooding shall  
 my land that floods there is no overflow it  
 has basically one inlet & the same outlet the  
 water rises as the river rises & goes down as  
 the river goes down as long as the river is  
 high & this is after creek above the falls in  
 Vergennes, the flood water remain no flow or  
 over flow the water is stagnant. Depends on  
 the fall & weather getting some crops established  
 by said date water seeps water in many  
 the crop line depends on amount of high water.

2.15 definition of intermittent water when definition  
 is used.

5.5 D soil test phosphorus 200 ppm we need to  
 be able to apply low phosphorus such as bedded  
 rock with "lots of bedding" involved at least to  
 crop removal. my soils that are over 200 ppm  
 are naturally that way & are not subject to  
 erosion. we have been very careful not to apply  
 P to these fields for years and haven't seen  
 change in soil tests.

Continue on Reverse

E-mail Comment to: [AGR.RAP@Vermont.gov](mailto:AGR.RAP@Vermont.gov)  
 Or mail to:  
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 116 State Street  
 Montpelier, VT 05620

|         |                |       |  |
|---------|----------------|-------|--|
| Name    | Dale C. Briggs |       |  |
| Address | 218 Briggs Rd  |       |  |
| City    | State          | Zip   |  |
| Addison | Vt             | 05491 |  |

1

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Yes  No

12/15/2015

Dale Briggs

DALE C. BRIGGS  
218 BRIGGS ROAD  
ADDISON, VT 05491-9748

Another concern is allowing spreads of snow from Dec 15 to April 1 over the period that the snow is on it does not look good to the general public & will have the potential to cause more regulations which we have too many of

Many of the requirements for ST0 are going to encourage smallholders, retired farmers to step having owned a part of their operation, they will have a significant impact on our local programs, about up operating on busy persons' hands. The program gives lots of power to the regulatory of us which is too much in one persons' hands.

!! no manure or 10% slope in hay to be a hard skip for many farmers but just myself, much of our land slopes & properly managed manure does not run off it would not hurt much land is available to spread on. also does surface water include ditches please clarify.

Public Comment Form for (RAP) draft changes

To: Ryan Patch VT Dept. of Agriculture

From: Justin Poulin Farmer "S"

**Sec 3. 3.1c "Farms potential to generate Nutrients"**

How is nutrient defined? Does compost from hay generate nutrients? A clear definition of "nutrients" is needed.

LAW

**Sec 4. 4.10(a) "Small Farms Shall annually certify Compliance".**

This is just added paperwork and another hurdle for a farmer to jump, a farmer that is compliant to all the rules (RAP's) but forgets to send in the annual form is now non-compliant!

Just because a farm certifies compliance doesn't assure that it is compliant. Annual Certifying of compliance should only apply to those farms who have problems or have had problems with compliance. If a farm is compliant then it shouldn't have to certify. You may say, "well how will we know if they are compliant"? Answer: "The same way you would know if they are non-compliant".

LAW

**Sec 4. 4.10(e) & 4.12(b) "4 hours of training every 5 years"**

Again this rule will not assure anything, I know of people who attend required trainings and forget 90% of what they learned the moment they leave the training session.

This is about following the rules, if a farm is following the rules or practices what is the need for training. If a farm is not following the practices or rules then training should be required.

**Sec5. 5.2(e) "Field Stacking of manure on unimproved sites"**

i) "Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding"

This would eliminate most sites on low land farms in central VT.

Some of these flood plan maps are broad blanket areas and don't account for high spots or distances from waterways or water sources that normally would not flood even in high water situations. There very well could be very suitable sites for stacking on these lands, and with consideration from the secretary should be allowed.

LAW

**Sec 5. 5.2(e) (ii) "200' Set back from property lines"**

Many property lines are other fields or pastures. Again this may eliminate the best Stacking site in a field.

The agency should have the ability to amend this setback if the reduction of the setback is enabling utilizing the best site for stacking.

LAW  
/ allows  
down to  
100'

Section 1: Introduction

1.1 Overview

Section 2: Financial Performance

2.1 Revenue and Profit

2.2 Expenses and Assets

2.3 Balance Sheet

2.4 Cash Flow Statement

2.5 Financial Ratios

2.6 Risk Management

2.7 Future Outlook

2.8 Conclusion

2.9 Appendix

2.10 Glossary

2.11 Index

2.12 Acknowledgements

2.13 Contact Information

2.14 Disclaimer

**Sec 5 5.2(e) (iii) "Field stacks shall not be placed in the same location more then once every 4 years"**

This again limits the potential for farms to stack manure in the best location. Most farmers evaluate many factors when picking a site. Distances from roads and water sources, accessibility from roads and in wintertime to the site are some considerations, these may limit all but maybe 1 site, if soil test indicate normal or acceptable levels, then this site could be used annually if approved by the Agency.

**Sec 5 5.3(a) "590 NMP"**

The best Nutrient Management Plan doesn't amount to anything if it is not followed. Just because a farm has a NMP doesn't mean compliance with the RAP's. And many farms with out NMP's can be and are in compliance with the RAP's.

These plans are expensive(ours for our farm will be around \$5000.00, luckily we received a EQUIP grant for it) yes you can write your own if you have the time and desire, (those quality's are limited after a day of farming, many of us farm because we didn't want to sit at a desk or a computer, we wanted to be outside.) Not all farms can invest the money or Time or the resources in such a plan. If there is not a resource concern then why the need for a plan.

If a farm is having trouble with compliance to the RAP's the a plan would be justified.

**Sec 5 5.3(c) "Soil Sampling"**

**"Soils every 3 years", "Manure annually"**

The cost associated with this could be prohibitive for many.

This should only be required if you are required to have NMP because there was a failure of compliancy with the RAP's.

**Sec 5 5.4(c) "Cover crop, Broadcast by Sept15th Drill by Oct 1<sup>st</sup>"**

Many Farms, if not are farms in central VT can be still harvesting by Oct 1<sup>st</sup> and not even begun by Sept 15<sup>th</sup>. Many years corn is still standing well into Nov. Selective harvesting to harvest lowlands first my not make sense, moisture levels may not be correct, all of the farms land may be lowlands.

Cover crop application before harvest is expensive and unpractical for small farms.

The most economical way to cover crop is broadcast. Many well established cover crops in central VT can be broadcast and well established if put on in early Nov. Drills are expensive, the WRCD's drill is not very easy to get (impossible).

**Sec 5 5.5(e) " No Manure application if Phosphorus is above 20 ppm and/or slopes exceed 10% with out a 100" buffer"**

On our a farm we did our first NMP in 2008, many of our fields had very minimal to no manure application prior to that plan. 90% of our fields are excessive in phosphorus (see attached field summary). I was told this was due to an aggressive application of cheap or subsidized phosphate in the 40s and 50s.





One set of fields that we farm we know the history quite well, it is the Brassard farm.

Larry Brassard bought this farm from his father in 1969, he farmed it until 1989, at which time he sold the cows and continued to hay. He spread his last load of manure in 89, in the early 2000 we took over cropping the fields, every year up to 2008 hay yields declined almost to the point of it being unviable to continue cropping the land. This the year that we did our first NMP, we had not applied any manure or other inputs at this point. The results of the soil test showed excessive levels of phosphorus, remember no manure had been applied for nearly 20 years. We have since been applying composted manure and wood ash biannually in the fall. Hay yields have double and almost tripled since 2008. But based on your rule we would not be able to apply manure due to the phosphorus levels, this land will be not worth harvesting if we can not apply manure, ( we just need to apply the manure with common sense, as we are now doing to mitigate the risk of runoff).

These same fields also would exceed the 10% slope set back rule two of the fields are long and narrow (see attached map) and have streams on either side of them. They are not even 200' wide, this rule would also not allow us to apply manure, and for the same reasons as stated above, does not make sense. We currently follow a 25' setback from these streams, which makes sense.

The Agency should have the ability to reduce theses Setbacks and 20ppm's if it can be shown that the risk will be minimal.

What will I do with my manure if all my fields are higher then 20ppm?

**Sec 5 5.7(c) "50 feet from Private well"**

We have 2 private wells within a pasture, we currently have the fenced 10-15' on either side, we have had no issues with complains In regards to the quality of the water that comes from these wells (ACTUALLY SPRINGS).

STANDARD  
CURRENTLY 15  
50'

Your rule would actually call for 50' on either side. This would account for an area of 100' around the well, that is a huge loss of land for us.(x 2). Leaving it up to the watery supply owner could be troublesome sometime neighbors don't see eye to eye and this could open up doors for someone to cause someone else a hardship. (not the case with us, water supply owners have stated that they are happy with our exclusion efforts)

Your rule might be better if stated as the following, " all private water supplies shall have at least a 12.5' exclusion on all sides, and maybe extended up to 50' if the agency determines a greater exclusion is needed due to water quality issues, no exclusion shall be required if the water supply owner so agrees"

In Summary I would like to say I see the value of a NMP it has helped us identify some useful things on our farm, I just question there need if a problem doesn't exist and the cost that can be associated with them. The requirements that are being proposed In regards to annual certification and training are not fail safes and are no guarantee to better water quality, these could be burdensome and difficult for many. When the rules (RAP's) are final there will be an expectation that they will be followed, if an individual does not, then apply the requirements.

mathematics and physics, and the other two are in the field of biology.

The first of these is the book "The Mathematics of Biology" by R. A. Fisher, which is a classic work in the field of population genetics. It is a book that has been read by many biologists and mathematicians alike, and it is a book that has helped to shape the way we think about evolution and genetics. The second of these is the book "The Mathematics of the Physical Sciences" by J. D. Jackson, which is a classic work in the field of physics. It is a book that has been read by many physicists and mathematicians alike, and it is a book that has helped to shape the way we think about physics and mathematics.

The third of these is the book "The Mathematics of the Life Sciences" by R. M. May, which is a classic work in the field of biology. It is a book that has been read by many biologists and mathematicians alike, and it is a book that has helped to shape the way we think about biology and mathematics.

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These are just a few of the many books that have helped to shape the way we think about mathematics and science.

For more information, see the book "The Mathematics of the Physical Sciences" by J. D. Jackson.

1992

The book "The Mathematics of the Physical Sciences" by J. D. Jackson is a classic work in the field of physics. It is a book that has been read by many physicists and mathematicians alike, and it is a book that has helped to shape the way we think about physics and mathematics.

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Thank you for considering my input, I would be happy to discuss these concerns in more detail if needed, (preferably in person as I hate typing!)

Justin Poulin

3302 West st

Brookfield, VT 05036

1-802-431-3645

1. The first part of the document is a letter from the author to the editor, dated 10/10/1954. The letter discusses the author's interest in the subject of the journal and the author's hope that the editor will accept the author's manuscript for consideration.

2. The second part of the document is a letter from the editor to the author, dated 10/15/1954. The editor thanks the author for the letter and the manuscript and informs the author that the manuscript has been accepted for publication.

3. The third part of the document is a letter from the author to the editor, dated 10/20/1954. The author thanks the editor for the letter and the acceptance of the manuscript and informs the editor that the author has received the proof of the manuscript.

4. The fourth part of the document is a letter from the editor to the author, dated 10/25/1954. The editor thanks the author for the letter and the proof and informs the author that the manuscript has been published in the journal.

5. The fifth part of the document is a letter from the author to the editor, dated 10/30/1954. The author thanks the editor for the letter and the publication of the manuscript and informs the editor that the author has received the final proof of the manuscript.

POULIN BEEF FARM, Brookfield VT  
Justin Poulin

Soil Test Results, 9/28/07

| Tract | Field Name              | pH  | OM % | P (ppm) | K (ppm) | Mg (ppm) | Al (ppm) | Ca (ppm) | Zn (ppm) | CEC (meq) | Ca:Mg ratio |
|-------|-------------------------|-----|------|---------|---------|----------|----------|----------|----------|-----------|-------------|
| 983   | 1 Garden Pasture        | 6.2 | 4.9  | 4.0     | 56      | 61       | 37       | 917      | 1.3      | 5.2       | 82:9        |
| 983   | 2 East Pasture          | 6.0 | 6.3  | 3.3     | 45      | 47       | 36       | 1219     | 1.1      | 6.6       | 77:5        |
| 983   | 3a Upper Pasture        | 5.7 | 5.5  |         | 51      | 84       | 61       | 739      | 1.2      | 4.5       | 52:10       |
| 983   | 3b Lower Pasture        | 6.0 | 5.4  |         | 49      | 82       | 34       | 1065     | 0.9      | 6.1       | 74:10       |
| 16642 | 1 Hall                  | 5.5 | 5.0  |         | 39      | 61       | 82       | 539      | 1.6      |           | 40:8        |
| 4911  | 1 Tyler south           | 5.2 | 5.0  |         | 47      | 37       | 101      | 390      | 1.9      |           | 27:4        |
| 4911  | 2 Tyler north           | 5.3 | 5.6  |         | 40      | 25       | 112      | 434      | 1.6      |           | 30:3        |
| 16641 | 1 Jones                 | 5.9 | 5.9  |         | 38      | 43       | 70       | 725      | 0.9      | 4.1       | 50:5        |
| 16641 | 2,3,4,5 Williams, Chase | 5.6 | 5.4  |         | 37      | 59       | 67       | 675      | 1.4      | 4.0       | 49:7        |
| 5656  | 1 Rebuilt House         | 5.1 | 5.2  |         | 39      | 22       | 133      | 246      | 1.5      |           | 17:3        |
| 16643 | 1 Ralph Rd              | 5.7 | 4.8  |         | 43      | 59       | 41       | 881      | 1.1      | 5.0       | 63:7        |
| 5463  | 1,2,3 Brassard          | 5.6 | 6.4  |         | 39      | 45       | 67       | 804      | 2.0      | 4.5       | 52:5        |

All fields show low pH, so lime would be beneficial everywhere. The two pastures east of the ridge are "Medium" in soil P, but all other fields are "Excessive"! Almost all fields are "Low" in K, except two of the pastures barely make it into the "Medium" range.



# Environmental Concerns Map

Date: 11/21/2007



Customer(s): Justin Poulin  
District: White River District  
Farm #: 1000 Tract #: 5463

Field Office: Berlin Service Center  
Assisted By: Jason Fleury  
State and County: VT, Orange

T5464

T5463

2

3

## Legend

- Tract Boundary
- Field Boundary
- Surface Water VHD
- 25' Manure Setback
- VT Sig. Wetlands (Class I & II)
- Deer Wintering Area

## Orange Blotics TYPE

- Animal
- Community
- Plant

1 inch equals 400 feet



Imagery Year: 2003







## Vermont Vegetable and Berry Growers Association

*Promoting the economic, environmental and social sustainability of vegetable and berry farming in Vermont since 1976.*

14 December 2015

We at the Vermont Vegetable & Berry Growers Association (VVBGA) appreciate the effort of the Vermont Agency of Agriculture (VAA) to develop comprehensive water quality regulations for farms. This is a difficult and delicate undertaking, with importance riding on the outcome. We have worked well with the VAA on many issues of common interest in the past, and value our productive working relationship. Indeed, produce farmers have been at the forefront of championing some of the practices emphasized by the draft RAPS: cover cropping, nutrient planning, and so forth. Our common interest in protecting the water quality of Vermont as well as fostering Vermont agriculture underpins the questions and comments that follow.

We have several major concerns about draft Required Agricultural Practices (RAPS) as presented. These fall into two major categories: general concerns about the overall approach of the regulations and specific objections to concrete proposals listed in the draft.

### **General Concerns:**

The commercial produce industry in Vermont is very diverse: 1-100's of acres in production, one crop to fifty distinct crops, single harvest to 12 months of continual harvest, conventional & certified-organic, river bottom to hillside. We have successful farms at all scales and in all locations. While doubtless there are vegetable farms contributing to water quality problems in the state that warrant a change in their approach, we can't look at the draft RAPS without seeing that they are primarily written with dairy and livestock farmers in mind, with many of the regulations having little relevance for vegetable and berry growers, but yet failing to allow for the differing practices of a distinctly separate farming sector.

While the draft RAPS propose three tiers of Small Farms, in general the regulations do not allow for the diversity of scale in their implementation. Many of the legitimate water quality concerns of the Agency simply are not statistically meaningful in the aggregate at the bottom end of the scale. As an example, from a public policy perspective, it is not productive for VAA to regulate & enforce phosphorous management down to the half-cubic yard of manure, but the draft RAPS require this if the farm ever uses any manure.

Vermont Vegetable & Berry Growers Association, PO Box 2091, S. Burlington, VT 05407  
[www.uvm.edu/vtvegandberry/VV&BGA/WelcomeVVBGA.html](http://www.uvm.edu/vtvegandberry/VV&BGA/WelcomeVVBGA.html)

Related to the above note about scale, many of the draft regulations are framed as a bright line (e.g. cover cropping by September 15<sup>th</sup> or October 1<sup>st</sup>, no manure if soil phosphorous exceeds 20ppm), when given the diversity of operations and risk factors, more nuanced approaches are warranted and will provide much more water quality reward for the state. We favor farm-based approaches that allow for differences in site, slope, soil type, crop, agronomic history, and so forth. This will provide farms with as much latitude as possible, while prohibiting or regulating practices where restrictions are necessary.

Similarly, while dates are convenient to establish when practices are or are not acceptable, Vermont has many diverse climates. The ground may well be frozen in Caledonia County when it is completely dry and reasonable to spread manure in Franklin County. VVBGA favors environmental standards as opposed to calendar requirements, e.g. 'latest locally successful planting date' for cover crops instead of 'October 1', 'fully thawed, tillable soil', instead of 'April 1<sup>st</sup>' for the winter spreading ban, and so forth.

## **Section 2: Definitions**

On reading the draft RAPS, we find many of the definitions are confusing, contradictory, and overly broad. Specifically:

- §2.09 Farm Structures. Greenhouse and high tunnels should be specifically listed, because they are not considered buildings in many jurisdictions, though they are indeed farm structures.
- §2.25(a) Small Farm. This needs to be clarified to state 10 acres in active farming, as many small produce farms with 1 acre in vegetables have many acres in unmanaged woodlots, wetlands, and other areas that should not count toward their threshold.
- §2.26 Surface Water. Is a constructed irrigation pond on private land a 'water of the state?' It should not be so considered, and this should be specifically stated as such, either in this section or in §2.30. Many of the regulations relating to setback, buffers, etc., do not make sense to apply to private, constructed irrigation ponds.
- §2.27 Wastes. We recognize that VAA is using the definition in the enabling legislation, but it is confusing to have potentially beneficial products (e.g. plant nutrients, minerals, compost) defined the same as hazardous materials (e.g. heavy metals, waste oils, etc.). These definitions should be split up and referred to separately or jointly as appropriate throughout the rules. Our suggestion is to split into: compost, manure, animal mortalities, fertilizers, petroleum products, etc. and define each individually.
- §2.29. Waste Management System. This should be titled as 'Manure Storage Facility' as the intended use of these structures are not storage of fertilizers, wash waters, minerals, etc. noted under 'Wastes' in §2.27.

## **Section 3: Required Agricultural Practices Activities**

§3.1(b): Remove reference to Schedule F. Many vegetable farms file other types of tax returns.

§3.1(c): Reference should be to animal units, instead of individual species. Many farms have several different types of livestock below threshold for each species. Also, reference to gross income is redundant and should be removed, since criteria are based on livestock numbers, not dollars involved.

§3.2 Question: If the intention of the rules are to exempt greenhouses, high tunnels, and their ilk from the RAPS, this list is adequate. If, as we suggest in our comments on §2.09, indoor production is farming, then an additional clause specifically denoting growing of crops in greenhouses, high tunnels, and other crop protection structures should be added.

#### **Section 4: Small Farm Certification**

§4.10(f) A 10-year initial inspection seems laughable at first glance. If the Agency is aiming to project a realistic timeframe for initial inspections, we hope that inspections will commence with farms believed or known to have water quality issues. We suggest enhancing the language of this section to that effect, perhaps using language from the §4871(e) of the enabling legislation.

§4.12 VVBGA recognizes the importance of water quality training and the continued learning contributed by ongoing training opportunities. We support a program structure similar to the Pesticide Applicator Training, with an initial training of a standard form, and follow-up training credits that can be secured through workshops of many forms and types, provided through many different channels.

#### **Section 5: Required Agricultural Practices: conditions, restrictions, and operating standards.**

##### **§5.2 Nutrient, Agricultural Inputs, and Waste Storage**

(c) As noted in §2 Definitions, language here should be clarified and directly addressed at manure management systems.

(e) Many vegetable farms have significant acreage in floodplains, and some are located entirely within a 100-year floodplain. We wonder: how big is a stack? We have small farms that may have ½ yard, 1 yard, 5 yards in a pile. Does this qualify as a 'stack' under the rules? We believe that small quantities should not. We have additional concerns about the draft standards for stacking and storing of organic wastes, and recommend the following:

(i) Organic wastes should be allowed to be stacked or stored on land 'subject to flooding' if the area does not typically flood. Excluding from the *Floodway or Fluvial Erosion Hazard zone* makes sense, excluding from everywhere on a 100-year floodplain that might only see water during an Irene-level event does not.

(ii) a-e. Farm scale again comes into play. With a 5-acre operation, many of these distances would impose substantial difficulty on

growers, and might well result in growers using a less suitable site for organic waste storage instead of a better site that doesn't fit the draft criteria. We favor a simpler, uniform standard akin to that listed in vi): "Unimproved manure stacking sites [shall] be located [no] less than 100 feet from private water supplies or surface water." Sec 4. 6 VSA §4810a(2)(B) would appear to allow this discretion.

(iii) Again, a good site is better than a bad site, even if the good site is used more often. Nothing in the law requires sites to move.

(iv) For small farms composting on site, they will need more than 180 days to properly compost many materials. Composting is a valuable process with soil health and other ecological benefits. A 180-day storage prohibition needlessly limits this possibility. If the intent is to exclude compost and other organic waste piles, perhaps a definition of a 'stack' is in order.

### §5.3 Nutrient Management Planning

- (a) NRCS Code 590 plans are burdensome and overkill for many small vegetable farms, and will not lead to an improvement in water quality. Diversified vegetable farms may have 200 crops and planting dates during an ordinary season, which would make a full Code 590 very time consuming to develop on each farm. The pace of plan generation and approval by NRCS is also way below that of what would be necessary to implement such a plan on all farms. We recommend adding wording allowing an equivalent standard developed by UVM Extension or one approved by the Secretary.
- (b) Most fertilizer materials permitted under USDA National Organic Program rules are based on plant and livestock wastes. Most of these also contain some phosphorous, though the primary application goal may well be to provide nitrogen for a crop. While growers often end up applying phosphorous in excess of crop nutrient needs, there is no way around this for supplemental nitrogen. This should be accepted and recognized by the Agency and considered a 'standard agricultural practice.'
- (c) VVBGA suggests that there be a threshold below which farms do not need to test their manure, compost, or other organic waste prior to application. We have growers with 1 acre who may apply 5 yards of compost total for a year, presenting no serious water quality threat, and it is unnecessary and costly for them to test.

### §5.4 Soil Health Management Recommendations: Cover Crop Requirements

The title of this section should be changed to 'Erosion Control Requirements' or something similar, as that is what all of the practices in a-d address.

- (a) Vegetable production is qualitatively different from field crops such as corn, hay, small grains. Many vegetable crops require a very fine seedbed with zero residue in order for precision seeding and successful growth. In

order to achieve this, vegetable growers typically make several or many passes over the same field in order to work in and break up residue. As a result, vegetable farms oxidize their organic matter at a faster rate than those typical of other cropping systems. Conservation tillage, no-till, and other high-residue systems are not feasible for most vegetable crops.

While many of the produce growers of the state are on the cutting edge of adopting extensive cover cropping and green manure strategies for organic matter management, many vegetable farms simply do not have the land base necessary to support the acres of green manures necessary to maintain their soil organic matter. The organic matter deficit is made up with judicious applications of compost, manure, and other wastes. Many vegetable farms test at higher soil phosphorous levels, but rely on these organic wastes to prevent soil organic matter levels from declining over time.

Ironically, without the application of organic wastes, soils on vegetable farms will be more subject to erosion losses (with potential pollution resulting) and generally less resilient to extreme weather. In the wake of Tropical Storm Irene, the Agency's own guidance for improving climate resiliency advocates increasing soil organic matter as a major strategy to reduce risk. Annual cover cropping cycles rarely do more than maintain soil organic matter and without the use of organic wastes, few soil improvement options remain for many growers.

- (b) Vegetable farming is hard on the soil for reasons noted in 5.4(c). Requiring use of the Universal Soil Loss Equation for small acreage growers with diversified crops is unworkable. We have growers with 1-2 acres grossing \$50,000-100,000 or more on-farm. If each bed, with each different crop, with a different planting date is required to be sampled and calculated for soil loss, that would be absurd, but looking at the field as a whole is not accurate, since it does not paint a reasonable picture of what is happening on that field. We favor a requirement that farms use all reasonable measures appropriate to the farm and crop to limit soil erosion.
- (c) The cover crop requirement as written is unworkable for Vermont's produce industry. As noted in 5.2.e above, many produce farms lie within floodplains. Vermont vegetable growers have been at the forefront the movement to use more cover crops and green manures, and are looked to nationally as models and innovators in using cover crops. In the last 10 years, many of these same growers have been part of the vanguard in the movement toward year-round production, expanding cold storage facilities for root crops and their ilk, constructing high tunnels for winter production, and extending their growing outdoor season.

With an extended outdoor growing season, millions of dollars of crops are still in the ground after the **September 15<sup>th</sup> & October 1<sup>st</sup>** deadlines mandated for cover cropping in the draft RAPS. Unlike corn, where winter rye seed can be broadcast into the standing crop late in the season, or no-tilled through the corn stubble directly after harvest, many cold-tolerant vegetable crops such as Brassicas (kale, broccoli, cabbage, Brussels

sprouts, etc.), spinach, lettuce, and baby greens have crevices that will catch the seeds as they are broadcast into the field, rendering this an unworkable approach. Similarly, October and November are both major harvest months for root crops, Brassica crops, and greens.

We suggest the following:

1. Exempt from cover crop requirements all land with crops that are still actively being grown and harvested, where cover crop is not agronomically-feasible, as determined by UVM Extension or the Secretary.
2. Exempt from cover crop requirements greenhouses, tunnels and their ilk.

#### §5.5. Manure, and Waste application standards.

(a) -

(b) &(c) As noted in our general comments above, we favor use of environmental standards instead of hard dates, i.e., no spreading on frozen ground, when spring snowpack upstream exceeds average, etc. Two of these environmental standards are specifically enumerated in (e) iii & iv below.

- (e) Question: does this section apply to compost and other agricultural wastes? In (a), (b), and (d) those are mentioned. In (c) and (e) they are not. Based on our estimates, around 30% of vegetable soil tests would results in no manure, compost, or agricultural waste application ever again with the 20 ppm P prohibition. This is not a workable proposition for produce growers. VVBGA recommends the following:
1. Covered, protected cropping in high tunnels, greenhouses, and hoop houses should be exempt from restrictions on manure, compost, and organic waste applications. Crops inside these structures are farmed under intensive management systems that require substantial annual applications of organic residues (often 100+ ton/A rates) in order to maintain productivity and plant health. Since they are covered, they also afford very low risk of phosphorous runoff.
  2. Many (virtually all certified-organic) greenhouse potting mixes contain compost and other organic wastes. While an intensively transplanted field may contain as much as 2 tons of potting soil, generally the amounts are less. All potting soil use should be exempted from the rule.
  3. VVBGA recommends a different approach to field application of organic wastes. 20ppm phosphorous is an unnecessarily rigid standard that does not account for farm diversity. Soil type, distance to surface waters, river channel and lake bank stability, slope, timing, crop production practices, tillage, surface residues, and many other factors influence the actual water quality risk presented by any given farm. Any standard should stipulate for a risk-assessment approach to manure application. Farms with few

risk factors should be allowed to continue spreading. Farms with high risk factors should not. The NRCS state committee is currently revising the phosphorous index ('the P index') to account for local conditions and risk factors and also to include vegetable farms. This work is expected to be complete in 12-14 months and would be an appropriate and defensible metric for limiting water quality threats from manure and agricultural waste applications.

**§ 9.0 Construction of Farm Structures**

- a) As with fences, high tunnels are flow through structures that do not impair floodwaters, which should be specifically stated.

We look forward to continuing work on these standards in the coming months and will happily provide information and additional comments as is useful.

Sincerely,



Christa Alexander  
President





Composting Association of Vermont  
www.compostingvermont.org

*Reclaiming Organics For Good*

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December 18, 2015

Comments on draft Required Agricultural Practices

The Composting Association of Vermont respectfully submits the follow comments on the draft Required Agricultural Practices. Thank you for considering our recommendations.

Throughout the document, manure, and sometimes compost and other organic materials intended for application to cropland as nutrients or soil amendments are referred to as 'waste'. Section 2.27 defines these nutrients as 'waste' and lump them with wash water and pesticides.

Section 2.28 refers to a 'Waste Management System' when the subject of this section is nutrient management.

The use of the term 'waste' is used when more accurate descriptions for the referenced materials exist, such as: manure, material, residual, nutrient sources, or soil amendment. Some specific examples are noted below in the recommendations. With the passage of Act 148, ANR policy is moving away from the notion of any organic material being 'waste.' We ask the AAFM to make a parallel waste to resource shift evident in their policies and regulations.

**Recommendations:**

Replace 'waste' throughout the document when referencing manures and organic residuals.

Introduction: add the word 'restore' to the second sentence: "RAPs are.....techniques that will conserve and protect natural resources, maintain and RESTORE the health and productivity of soils..."

2. Definitions: Include a definition of compost

3.2 (b) Specify what you mean by 'by-products'.....'storage and handling of livestock manures, bedding, feed, and mortalities'

4.12 (a) add 'soil health and soil properties' to list of training topics

5.2 (b) Replace 'waste' with 'inputs'. Remove reference to 'carcasses.' This is covered under mortalities.  
(e) vi) typo: remove 'a' or make 'supplies' singular.

- 5.3 (a) line 2 - replace 'wastes' with 'material'  
(c) line 4 – replace 'waste' with 'nutrients'

- 5.4 (a) replace 'recommended' with 'essential', delete 'in order'  
add as second sentence: Soils with higher levels of organic matter have improved functions including improved infiltration, moisture holding capacity, reduced nutrient input requirements and resistance to soil-borne pathogens.

Add a 'soil organic matter' recommendation/incentive. *Ideally we want RAPs to include management plans that increase soil organic matter.*

- 5.5 (a) line 1 – replace 'wastes' with 'nutrients' or 'sources of nutrients'  
(b) Question: Is there a benefit to making spreading ban more flexible (at the discretion of the secretary) to allow spreading at other times (like this year) when winter temperatures are mild?

Submitted:

December 18, 2015  
Pat Sagui, Director



a member-owned cooperative, community-supported agriculture farm

15 December 2015

Intervale Community Farm grows 25-acres of certified-organic mixed vegetables in Burlington, Vermont. Our farm is entirely within the 100-year floodplain of the Winooski River, and we use many of the practices and materials addressed by the draft Required Agricultural Practices regulations. We have championed clean water and responsible farming for years, and it is in this spirit that I offer The Vermont Agency of Agriculture (VAA) comments on the proposed rules.

In general terms, I think that the rule as written does not fit vegetable farms very well. While we and other vegetable producers use manure, compost, plant cover crops, and so forth, the assumptions behind the rules are aimed much more at dairy and livestock cropping systems. Many of the testing, planning, and practices that are reasonable to require for the farm that plants a few silage or grain crops on large acreage aren't reasonable to require for each of the 250 or so crops we plant on our relatively small plots totaling 25 acres.

Related to the above note about scale, many of the draft regulations are framed as a bright line (e.g. cover cropping by September 15<sup>th</sup> or October 1<sup>st</sup>, no manure if soil phosphorous exceeds 20ppm), when given the diversity of operations and risk factors, more nuanced approaches are warranted and will provide much more water quality reward for the state. I think a farm-based approach that recognizes risk is based on soil type, slope, tillage practices, etc., would provide a lot more flexibility for farmers and yet do as well or better at protecting water quality.

Similarly, on April 1<sup>st</sup> the ground may snow-covered and frozen in Caledonia County, while it is fully dry and thawed in the Intervale in Burlington. The RAP should provide flexibility in dates to account for the different growing seasons around the state.

## **Section 5: Required Agricultural Practices: conditions, restrictions, and operating standards.**

### §5.2 Nutrient, Agricultural Inputs, and Waste Storage

(e) Our farm is entirely located within the 100-year floodplain. What defines a 'stack'? If we have 5 yards of compost in a pile, is that a 'stack', or does this only apply to manure?

(i) Organic wastes should be allowed to be stacked or stored on land 'subject to flooding' if the area does not typically flood. We have parts of the farm that flood annually, and parts of the farm that did not flood during Tropical Storm Irene. Excluding large scale storage from the *floodway* or *Fluvial Erosion Hazard zone* makes sense, but excluding from everywhere on a 100-year floodplain does not.

(ii) Again the question: do these setback requirements only apply to manure, or to all agricultural wastes?

- (iii) A good site is better than a bad site, even if the good site is used more often. I have two sites that make sense: they are above expected flood danger and close to hard surface roads. I suspect it is better for water quality to use those sites than to use lower sites or those requiring more off-road transport that can mar fields and ruin soil structure.
- (iv) We compost our vegetable wastes, and sometimes include off-farm manure and/or silage in our compost. In many cases, 180 days is insufficient for us to complete the composting process, particularly if we begin the piles in the mid-late fall, as we often do.

### §5.3 Nutrient Management Planning

- (a) I am not intimately familiar with the NRCS Code 590 plans, but I understand that they are time consuming and have been described as 'overkill' by several UVM Extension personnel whom I have spoken with. On our farm, we have 250-300 different planting dates and seven different fields. If each of these requires separate treatment in a formal plan, this would make the requirements of the National Organic Program application look like child's play. I think it is reasonable to require producers to have a simple nutrient budget for their crops, using the following elements: crop nutrient requirements, soil test results, nitrogen credits from soil organic matter/manure/compost/ag waste/cover crops, and fertilizers applied.
- (b) Most fertilizer materials permitted under USDA National Organic Program rules are based on plant and livestock wastes. Nearly all of these also contain some phosphorous, though the primary application goal may well be to provide nitrogen for a crop. I am applying nitrogen to meet crop nutrient requirements, but end up applying additional phosphorous beyond what I need. Permitted materials without phosphorous simply do not exist.
- (c) I think that there should be a threshold here. If I am only spreading 5-10 yards of compost or manure on the farm, should I really need to test it? It seems reasonable that I go with standard test results for typical manure, compost, etc.

### §5.4 Soil Health Management Recommendations: Cover Crop Requirements

- (a) Vegetable production is qualitatively different from field crops such as corn, hay, small grains. Many vegetable crops require a very fine seedbed with zero residue in order for precision seeding and successful growth. In order to achieve this, vegetable growers typically make several or many passes over the same field in order to work in and break up residue. As a result, vegetable farms oxidize their organic matter at a faster rate than those typical of other cropping systems. Conservation tillage, no-till, and other high-residue systems are not feasible for most vegetable crops.

We have leased our main production field (Winooski & Hadley soils) since 1999. Soil organic matter began at 1.8%. We have cover cropped most fields annually, had some small percentage in two-year green manures, and regularly applied compost and/or manure (*average* of 8-10 yards/A annually for 16 years.) Our most recent autumn 2015 soil tests show organic matter of 1.1-1.7%, depending on the subsection of the field. In 17 years, with all of the organic matter additions noted above, we haven't improved our situation; we lost ground. Without the compost and manure, which is at least half of our overall organic matter additions, we would have been much worse off. We simply do not have sufficient land to maintain (or better yet, raise) our soil organic matter with a complete reliance on cover crops and green manure.

Ironically, while the Agency notes the importance of increasing organic matter, I suspect that the overall impact of RAP on vegetable farms will be soil organic matter decline. Without the application of organic wastes, soils on vegetable farms will be more subject to erosion losses (with potential pollution resulting) and generally less resilient to extreme weather. In the wake of Tropical Storm Irene, the Agency's own guidance for improving climate resiliency advocates increasing soil organic matter as a major strategy to reduce risk.

(b)

(c) The cover crop requirement as written will reduce our gross farm sales by about 25%, roughly \$90,000-100,000. We are located entirely within a floodplain, and we are harvesting many storage crops and fresh market crops from the field during October and November. This week alone we harvested \$5,500-6,000 of spinach, kale, and Brussels sprouts. Admittedly this is a mild December, but it is not unusual for us to have similar harvests the final week of November or the first week of December.

Because the crops in question are delicate (like baby carrots) or required to be weed free (e.g. baby salad greens), we cannot overseed cover crops into them. Likewise, they finish in the field well after the latest reliable planting date for rye, (around October 20<sup>th</sup> on our farm), so planting a cover crop after the market crop is finished will not succeed.

I urge that you exempt from the cover crop requirements all land with crops that are still actively being grown and harvested and where cover crop is not agronomically-feasible, as determined by UVM Extension or the Secretary. Furthermore, any indoor production, such as greenhouses, high tunnels, and their brethren, should be exempt from a cover crop requirement.

#### §5.5. Manure, and Waste application standards.

(a) -

(b) &(c) As noted in our general comments above, we favor use of environmental standards instead of hard dates, i.e., no spreading on frozen ground, when spring snowpack upstream exceeds average, etc. One year out of three our farm is easily dry enough to spread prior to April 1<sup>st</sup>.

(e) Question: does this section apply to compost and other agricultural wastes? In (a), (b), and (d) those are mentioned. In (c) and (e) they are not. About 2/3 of our acreage exceeds 20ppm phosphorous, from 26-49ppm P. This standard would mean we could never spread again on that land. As noted above in 5.4(a), our soil organic matter would suffer as a result, which could easily lead to more soil erosion and water quality problems. As an alternative, I have several proposals:

1. Indoor cropping in high tunnels, greenhouses, and hoop houses should be exempt from restrictions on manure, compost, and organic waste applications. We often apply compost at rates exceeding 100T/A in order to maintain fertility and production in these intensive systems. But since they are covered, they also afford very low risk of phosphorous runoff.
2. Our organically-approved greenhouse potting mixes contains compost made with manures. Prohibiting this application of agricultural waste would prohibit us from using transplants and put us out of business. All potting soil use should be exempted from the rule.
3. VAA should use a risk-assessment approach, because soil type, distance to surface waters, slope, timing, crop production practices, tillage, surface residues, and many other factors influence the actual water quality risk

presented by any given application of manure or agricultural waste. Farms with few risk factors should be allowed to continue spreading. Farms with high risk factors should not. The NRCS state committee is currently revising the phosphorous index ('the P index') to account for local conditions and risk factors and also to include vegetable farms. This work is expected to be complete in 12-14 months and would be an appropriate and defensible metric for limiting water quality threats from manure and agricultural waste applications.

**§ 9.0 Construction of Farm Structures**

- a) As with fences, high tunnels are flow through structures that do not impair floodwaters, which should be specifically stated.

I want to see clean water in Lake Champlain where I swim frequently with my children. I want clean water so I can continue to use it for irrigating our crops even in light of new food safety rules. I urge you to implement the changes I suggest, because I believe that they will improve water quality more than draft rules as written. I look forward to hearing more in the future about the RAP and seeing the next proposals.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Jones', with a long, sweeping horizontal stroke extending to the right.

Andy Jones  
Farm Manager

**Comments on Draft RAP Regulations, The Agricultural Non-point Source Pollution Control Program**  
**14 December 2015**  
**Submitted by Michael Bald, Royalton, VT**

Having attended one of the statewide presentations and reviewed the Draft RAP with its referenced materials or statutes, I first have to point out that the Draft document is fairly straightforward and similar to the existing AAP document. That would be fine, except that things get much more complicated when supplemental information is offered by Agency of Agriculture personnel. The presentation session was helpful and important as an outreach tool, but it created confusion in my mind. The Draft RAP references pesticide regulations and groundwater protection rules (V.S.A.), but at the presentations many more policy references are highlighted: the Vermont version of the 590 NRCS program, federal cost-share options, the Clean Water Fund. Yet more topics SHOULD be mentioned or acknowledged in the Draft if it is to be an integrated, meaningful document, namely Climate Change and Pollinator Protection. Without clarity in how all these topics contribute to a program of agricultural practices, there is room for great confusion, complication, and contradiction.

Specifically, I do not see how the EPA and USDA support organic farming, the practice most concerned with soil health. What is their mission regarding Vermont agriculture? Do they offer financial and technical support to programs guided by the state, or are they in fact the leading force? It's an important question, whether agriculture is guided on the ground regionally by the people doing the work or by agencies seeking to impose one system nationwide, uniform in appearance and no doubt steered by layers of bureaucracy and corporate interest. It all boils down to that question: who exists to support whom? I'll illustrate later why the failure to support organic farming is important.

I offer two examples to demonstrate that the subject is broader than the written Draft suggests. The first example leads to a logical resolution fully up to speed with current conditions. The second example highlights the potential for detrimental effects.

1. This Draft makes no mention of BUILDING healthy soils, although Secretary Ross rightly mentions it in his spoken remarks. Cover-cropping and responsible manure practices help stabilize soils and add some nutrient material, but over the long term, particularly from a climate standpoint, the goal must be to IMPROVE soils. Some would read that as an effort to reduce pesticide usage, build organic matter, remedy compaction issues, etc. The bettering of soil health is clearly a positive for the climate as well as for water quality. This draft should recognize the role of soil in terms of carbon storage. IF building healthy soils is a stated goal, this Draft would then discourage the practice of burning organic matter. There may be legitimate occasions for burning, but brush piles do not as a rule require a burn. Brush-hogging open spaces at least returns cut material to the ground, but MANY landowners pile brush and send all that carbon into the air with mindless burning (look to behaviors following TS Irene). Why would the Agency of Agriculture NOT instruct that woody debris and brush be left in place or piled neatly to offer bird habitat and sources of future rich topsoil? Brush piles and burning may or may not qualify as sources of pollution from an agriculture standpoint, but they clearly DO qualify from a climate change standpoint. Additionally, they illustrate an ignorant and invalid clinging to old, flawed

practices and a failure to welcome new perspectives. Farm soils are typically low in organic content, yet the most basic and simple tool for correcting that deficiency is often located on the same physical property in the form of standing vegetation. The conversion of organic matter (brush) to rich soil offers nothing but convenient, quantifiable positives in terms of climate and clean waters.

2. A second example illustrates the disconnect between the simple, stand-alone Draft and the many related programs. The pesticide regulations established the Vermont Pesticide Advisory Council and set out a number of tasks for the agency. Pesticide usage should be reduced over time within a framework of targets, opportunities to use Integrated Pest Management should be pursued, and the Secretary should make recommendations on how to achieve reductions in pesticide usage and risks. That sounds like a strong vision, but the reality on the ground is different. Other programs come into play, namely the federal cost-share offerings. EQIP grants from NRCS encourage landowners to manage their invasive species, but applicants are directed to use chemical methods and approved chemical contractors only. There is no option for alternative methods, or Integrated Pest Management for that matter. Organic landowners, farmers and growers are eliminated from this program or discouraged from applying. That “policy” or internal NRCS approach throws organic farming AND IPM under the bus. The one agricultural method that does the most good for soil health is denied funding in Vermont. Conventional farmers get free weed control and a competitive edge at the marketplace. These policies and programs lead to no positives and do not illustrate a clear path to a clear vision. Dis-function and inconsistency reign. If working agreements with sister agencies or federal agencies are going to bluntly contradict the efforts of Vermont’s agricultural practices, something needs to give, because farmers are shouldering a lot of the load in cleaning up waterways. They should not be undermined by federal agencies running their own programs or agendas. Rather than torpedoing the organic farm movement, perhaps NRCS could partner with USGS and do something about the herbicide presence in everyday rainfall. That’s a non-point source...

Elaborating on the above, but focusing on pesticides:

The agency and federal partners SEEM to suggest that clean / healthy soils lead to cleaner water draining off the landscape and into waterbodies. I agree, further clarifying that healthy soils filter and buffer water in a one-directional process; the emphasis on soils has to come first. Clean water does not build clean, healthy, fully-functional soils. That said, I do not understand why the Draft seems to limit its focus to manure and nutrients on the working landscape. Structures and buffer distances are mentioned, but pesticides are essentially omitted as a practice. Referencing pesticide usage as a stand-alone topic under separate regulation is inadequate and irresponsible. The use of toxins or “economic poisons” clearly impacts soil health, and there is no program in Vermont tracking cumulative effects of all the applied toxins. In such a complex inter-connected system, the usage of pesticides must be included with nutrients and farm waste products, otherwise it falls from the conversation. If that falling is intentional, I would find that very disturbing.

Additionally, a simple reference to pesticide regulations is inadequate since it has been several decades since the regulations took effect and much has changed over that timespan. Agriculture is the agency in Vermont charged with overseeing pesticide usage. If the agency does not agree that the world of



pesticides has changed drastically since 1995, then it should state that viewpoint. Worldwide research and published findings have found harmful effects directly caused by numerous herbicides: glyphosate, the neonicotinoids, and atrazine. Waiting on the EPA “process” is no longer an option; atrazine has now been under review for ten years while it has been justly banned in the European Union. Endocrine disruption, reproductive impacts, and cancer have all been associated with various pesticides; it is time for Vermont to acknowledge that by including pesticides as a non-point source of contamination when they are applied. The Draft also fails to acknowledge treated seed as a wide-scope impact. Vermont cannot simultaneously conduct serious meetings to draft a Pollinator Protection Plan in 2016 if new agricultural RAPs deliberately exclude the negative impacts of pesticides.

Specific points /comments on the Draft RAP:

1. This Draft makes no mention of Integrated Pest Management, organic farming, climate change.
2. I see an almost fatalistic fascination with federal cost-share funding regarding land use and land management. This draft focuses entirely on water quality and seems to ignore the fact that healthy soils also contribute to healthy plant communities which then collectively utilize and contain large amounts of carbon. Healthy soils therefore positively impact climate and ecological balance.
3. The healthiest soils in agriculture typically arise out of organic management practices. A mindless reliance on federal funding and grants supports only conventional practices relating to weed control and invasive species (oddly not the case in neighboring states).
4. Voluntary cost-share programs come with bureaucracy (30% overhead) that creates a time lag. Landowners are content to wait, or forced to wait, on federal money when they should be taking immediate action. Agricultural issues are often inter-connected as a complex of moving parts; remedies are often equally complex and detailed. When a farm operator waits two years for grant processing and funding commitments, the delay holds back progress on many other fronts (reference the April, 2015 article by Kathryn Flagg in Seven Days).
5. Partnerships with federal agencies, specifically NRCS, are not detailed or referenced in this Draft. Apparently those agreements and programs carry significant weight, but the policies and visions need full and open detail.
6. It is clear from the VSA statutes establishing the Vermont Pesticide Advisory Council that a reduction in statewide pesticide usage is desired. Goals are quite specific, calling for an increase in the acreage managed by IPM. Is this happening over the long-term? If not, NOW is the time.
7. Incentives could support efforts to eliminate burning of brush piles. When roadways are rebuilt, large amounts of fill are brought in. From where? That is left to the sub-contractors, but I have seen several examples of road repair / stabilization where contaminated fill leads to an explosion of formerly absent invasive species. This has occurred adjacent to farmland at no fault of the farmer. A solution to that problem would see Agency of Transportation crews purchasing quality fill from local landowners.
8. Let's do better than trying to manage the contamination and movement of water over depleted ground. Let's commit to a restoration of healthy, functional soils.

Thank you for the good work and the opportunity to comment.

November 20, 2015  
Comments on Agricultural Water Quality Rules Draft

We agree with the importance of RAP's that are effective, workable and implementable. Our experience convinces us that it is possible to farm while improving water quality. We, and many Vermont dairies, do not farm as we did a mere six years ago, every year increasing our investments into practices and equipment that reduce soil and nutrient loss. Some of the rules assume that the entire State has the same conditions, that method of manure application isn't a factor, that all places that water can collect is a potential threat.... We do not agree, so here is our attempt to communicate why.

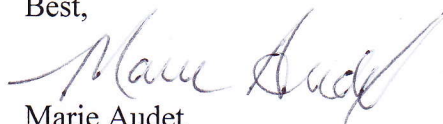
Summary:

- 1) Definition of Intermittent Waters is too broad. It has the potential to impose unneeded restrictions on productive land where there is no exposure. We can show you examples on our farm where low areas or some ditches start and end in the same field and do not have the potential for runoff, yet would be captured under the proposed definition.
2. Manure Application and Waste Standards. Note our suggestion on 5.5 (b) to remove dates and the Secretary's determination of statewide spreading bans. RAP's already specifically state "**Manure shall not be applied to fields that are: iii) saturated with water; or iv) Frozen and/or snow covered.**" County by county, conditions can vary greatly. The test should be the above, not the calendar or the Secretary.
3. 5.5 (d) "Actual or expected weather" is subject to broad interpretation and we suggest a recognized method of a 25 year/24 hours storm.
4. 5.5 (e) (i) NRCS 590 nutrient management plan should determine the manure to be applied. These NMP include the latest available science and data to determine the application of manure. At the public meeting in Middlebury, Laura suggested an intent to push changes to the 590--what does that mean? On what basis?
5. 5.5 (e) (ii) This blanket rule restricting all land exceeding 10% slopes in Vermont will unnecessarily and seemingly unscientifically remove productive land from production. This rule effectively removes all incentive to use new and evolving BMPs and technology utilizing aeration or injection with minimal or no till, for example .

Please see the attached where we have pulled out the sections on which we are commenting, and offer specific changes, and why.

Thank you for the opportunity to engage in the process. We look forward to more dialog.

Best,

  
Marie Audet  
for Blue Spruce Farm Inc.

2.15

Intermittent Waters means waters in conveyances where the presence of water is not continuous for 3 months or more and drains greater than 160 acres. ~~may occur periodically and infrequently such as during and immediately following a rain or snowmelt event. Intermittent waters include, but are not limited to, ditches, swales, channels or other water diversion features. A drainage ditch, swale or surface feature that contains water only during and immediately after a rainstorm or a snow melt shall not be considered to be an intermittent water. Reason: (this definition is too broad, it covers concentrated flows that have no significant contribution to phosphorus loading in to surface water.~~

5.2

(e) Field stacking of manure on unimproved **and non NRCS approved** sites:

i) Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding.

ii) Manure stacking sites shall meet the following minimum setback distances:

- a) 200 feet from property lines or domiciles;
- b) 200 feet from surface waters;
- c) 200 feet from private water supplies;
- d) 200 feet from any public water supply well;
- e) 100 feet from ditches, swales, diversions or other conveyances to surface waters;

iii) Field stacks shall not be placed in the same location more than once every 4 years;

iv) Field stacks cannot remain in one location for more than 180 days;

v) Field stacks shall not be located in areas of concentrated runoff such as water diversions or swales;

vi) Other site specific standards may be approved upon petition to the Secretary but in no case shall unimproved manure stacking sites be located less than 100 feet from a private water supplies or surface water:

5.4

(c) Annual croplands subject to flooding from adjacent surface waters are required to be planted to cover crops. Broadcast seeding must be completed by ~~September 15th~~ October 1<sup>st</sup> of each year. Seed established with drill seeders or otherwise incorporated shall be completed by October 4<sup>th</sup> 15th of each year. Reason: that still give the cover crop adequate time to establish.

~~(b) Manure and other wastes shall not be spread between December 15 and April 1. The Secretary may prohibit the application of manure to land in the State between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary determines that due to weather conditions, soil conditions, or other limitations, application of manure to land would pose a significant potential of runoff to State waters. Reason: RAP's already say "Manure shall not be applied to fields that are: iii) Are saturated with water; or iv) Frozen and/or snow covered" no reason to have a state wide limitation. Newport conditions is very different then Addison)~~

(d) Manure and other wastes shall not be applied when ~~actual or expected weather a 25 year / 24 hours storm is expected~~ and field conditions are conducive to flooding, runoff, ponding or other off site movement or can be reasonably anticipated to result in flooding, runoff, ponding or other off site movement. Reason: RAP's already have (e) to stop applications during high risk conditions.

(e) Manure shall not be applied to fields that are:

- i) Excessive in soil test phosphorus (> 20 parts per million) as determined by soil analysis, **unless Farm is following a NRCS 590 NMP**; or
- ii) Exceed 10% slope without permanently vegetated buffers to surface waters of at least 100 feet. ~~Manure shall not be applied within the buffer,~~ **unless Farm is following a NRCS 590 NMP or an improved application method i.e. Injection**; or
- iii) Are saturated with water; or
- iv) Frozen and/or snow covered

(f) Application of manure shall not occur within ~~400~~ 50 feet unless on EWD soils then 100 feet of a private water supply or 200 feet of a public water supply. The prohibition shall not apply to private water supplies that have been established inconsistent with the Department of Environmental Conservation Water Supply Rules. Reason: that is constant with past AAP, current MFO and LFO rules.

#### 5.7 Buffer Zones and Setbacks:

(a) A vegetative buffer zone of perennial vegetation shall be maintained between annual croplands and the top of the bank of adjoining surface waters consistent with all criteria in (i) through (vii) below.

- i) adjacent surface waters shall be buffered from annual crop lands by at least 25 feet of perennial vegetation.
- ii) Intermittent waters, ditches, ~~swales, diversions and other water conveyances~~ shall be buffered from annual crop land by at least 10 feet of perennial vegetation.

## **PUBLIC COMMENT FORM TO REQUIRED AGRICULTURAL PRACTICES (RAPs)**

1. Congratulations on your efforts to create these regulations and have regional presentations. As with any project such as this the devil is in the details and my questions and comments below are provided to help you improve your document(s).
2. A section entitled "Farm Size" should be added, perhaps instead of or in addition to 2.25, that provides a table such as that on your "What Farm Size are You" sheet but expanded to include all of the detail of animals and activities. The sheet is very informative and may be kept but the regulations themselves must be more clear to the average reader. This also true of the other sheets provided. They should be either included in the regulations or specifically referred to in the regulations.
3. The RAPs appear to be written for small farms. If this is not true, you should include language to include medium and large farms in the written regulations.
4. In addition to "Cover Crop" you should define "Companion Crop" to define crops similar to cover crops but not temporary nor tilled under during the life of the primary crop. ie. Clover/grass mix planted between rows of apple trees or Christmas trees.
5. A statement was made at the Randolph presentation that said "commercial fertilizer was not a threat like manure because it was expensive and no farmer would waste money" or words to that effect. Is that really true? Any farmer might decide that if 100 pounds of super phosphate per acre made things grow well last year that more this year might be even better. Both products should be included in the nutrient management plan and both products can have bad effects if improperly used.
6. Christmas trees are included in the RAPs but are they considered to be "cropland"?
7. In section 2.27 are "plant nutrients" intended to include commercial fertilizer? Does it include liquid fertilizer such as hydrolyzed or emulsified fish, and humates such as liquified coal, etc.? Are they considered a "waste" which would trigger SFO status?
8. A key difference between an Uncertified Farm Operation (UFO) and a Certified Small Farm Operation (SFO) appears to be whether they apply manure, compost or other waste to the farming acres. You may have an unintended consequence of discouraging farmers with 10 or more acres, particularly those with no livestock, to avoid improving their soil with manure, compost or acceptable wastes. Because Certified Small Farm Operations have more regulatory requirements and may have more in the future plus may have an annual fee attached in the future, many farmers may want to avoid that designation. It seems unfair that if the farmer applies commercial fertilizer he is not considered an SFO but if he applies manure, compost or other organic products he is an SFO. There should be some specified quantities of manure, compost or wastes or method of applying that trigger the SFO designation so that improving the soil is not discouraged. It is not to the benefit of the Agriculture Agency to have a huge number of SFOs to regulate. It is also not fair for there to be a bias in favor of the commercial fertilizer industry.

December 11, 2015

TO: Vermont Agency of Agriculture, Food and Markets

FROM: Mark and Amanda St Pierre

Pleasant Valley Farms

RE: Public Comment on Proposed RAP or Act 64 rules and regulations

We are submitting the following comments regarding the proposed drafts. In general throughout the document we are very concerned with the vagueness of regulatory authority that would be given to the Agency of Agriculture in oversight of farm and land management practices. "Upon discretion of the secretary " is used too frequently and we cannot guarantee or understand the future Secretary of Agriculture's thought process or motivation.

We have also been part of the acceptance of the Green Mt Federation/CVFC-Champlain Valley Farmer Coalition and the FWA/Farmers Watershed Alliance comments.

Specifically our concern is on the following items:

- It is not practical that a 1 foot at all times free board be required and allowed to be considered a violation if the Agency comes and there is not a 1 foot freeboard. Weather conditions and weather patterns are not controlled by us and very often this space being filled would be due to snow, and or rain fall. This requirement would lead to more fall spreading, poor management decisions based on the concern of maintaining the largest part of our pits to below the 1 foot. This should be taken out. (Possible solution would be that pits should be managed to allow the 1 foot free board for potential weather conditions throughout the storing season. Or if farmers need to use the 1 foot free board then the state should allow possible spreading on certain days to maintain that .)
- Lining of all manure pits: this should be on new pits being constructed. If there is no evidence that a pit has issues than requiring this on all farms becomes a huge cost to all of us (with programs and without and for little return.) This could be an obstacle for many of our smaller farmers with existing pits. The requirement could be that small farms have their pit certified by an engineer.
- Stacking requirement of 200 feet of property lines does NOT make sense should be the same as compost requirement of 100 ft from property lines. Section E) i-should be taken out "or otherwise subject to flooding". Leaves for too much interpretation of one very heavy storm event non typical, the agency could say a violation has occurred, when in fact this is a rare occurrence.

- In the 590 NMP the stacking requirements are laid out, no need for this to be redone in the RAP's. IF we already have the guidelines in place that most of us understand and follow why complicate it.
- Section 5.5 (b): It is unreasonable and too vague for the variance the Secretary has to move dates around. Either have the dates or do not have any dates and we wait for the Secretary to decide...today is a good day to spread. We have limited resources and equipment and have to manage per the time limit already set forth. Taking away the 15 days on either end is a huge obstacle in that management and will push folks to spread on more questionable days in order to make sure all our pits have sufficient room not just for our manure but for the weather we have to have storage for. We understand that this is in statue, however, the discussion at least needs to happen in house of how and when that would be used so the farming community can be on the same page. Would it be beneficial to do it by county?
- Section 5.5 (e) This section seems excessive and ridiculous to those of us who have invested countless hours and thousands of dollars developing our nutrient management plans according to the NRCS 590 standards. They should be taken out until further discussion and alternatives are recognized as being beneficial and perhaps re-looked at in 2018. If we have NMP than it should supersede this rule if allowed to exist. The cost of the 100 foot buffer on 10% slope is extremely high in loss of yields and the benefit is questionable when we already manage our land to our NMP.
- Section 5.7 We are very concerned with the definitions as pertaining to ditches and buffers. This needs to be futher discussed and defined so that ditches which perhaps have water flowing more often than not would have the buffer, however, ditches that have low to none normally would not need to have such buffers. Specifically using the definition of NY State on Intermitten stream; should be used to define which ditches should require buffers. Again this is a broad stroke and we need to narrow the scope for folks to cooperate and implement in a reasonable manner. This is a very important area that needs clarity in the definitions of which ditches and impact of such.
- In addition we would like the RAP to include a definitions/score sheets of an annual inspection. We feel it is important for all size farms to see what they will be inspected on specifically. The score sheet should be similar to milk inspectors score sheets and farms should recieve a grade of passing and not passing. With a list of improvements so farms can work to improve. It should also outline the improvements that are noted. Cooperation among the farming community with the Ag Agency is critical to implementing many new changes on the horizon. The current inspections are verbal and vague at times. Dialogue and discussion amongs the inspectors and the farmers opens the doors for suggested improvements. Farmers are always listed on the negative side and stay on the negative side forever. The positive work and investments are never listed and noted. This needs to be corrected. Signage for farms working in cooperative efforts with VT Ag Agency would be a huge tool to promote such cooperation.

There is also some beneficial discussion in regards to the fees imposed by the legislature and AG Agency on permitting. Many of us feel that money would be could to be used for programs within the county. All LFO MFO and SFO permit fees would come back to projects within the county.

We will continue to participate in the future rounds of drafts as they become available.

Sincerely, Mark and Amanda St Pierre



December 16th, 2015



Comments submitted by Farm Compliance Services, an independently owned agronomic consulting service. Compiled from comments from three FCS CAP-Certified, NRCS credited TSPs that work in New York state, Michigan, Wisconsin, Vermont and portions of Ontario. We provide CAFO-NPDES annual reports, NRCS CAP-CNMPs, NRCS CAP-NMPs, farm data analytic reporting and general agronomic recommendation services.

**Comments for Vermont proposed RAP draft, 2015:**

- **Section 4 - 4.1 (f)** - Suggests that you will inspect a "self-certified" farm once in 10 years. That seems inappropriate. We know of no regulation that works as intended when enforced once every ten years, and the verbiage suggests after the first inspection it could even long to a second.
  - How was the 10 years determined? How does inspecting a farm every 10 years improve Vermont's water quality before the year 2025?
  - Experience from several other states (NY, MI, WI, IA, IN, OH, MN, CA and PA) demonstrates that without annual or bi-annual inspections there is little evidence that farmers will comply with the self-certification requirements. This could be said for most regulated industry.
- **Section 4 - 4.1** – What is the penalty for not self-certifying or lying in the self-certifying process? How would state enforce the self-certification process if it only plans on visiting a farm once every 10 years?
- **Section 4.12 - (b)** -Requirements for LFO, MFO, SFO to receive "4 hrs. of training" - what training is being considered? How to drive a spreader? How to calibrate a spreader (required in, and to properly implement, NRCS 590 NMP standard and existing VT MFO/LFO permits). Who in the state of Vermont would conduct this training? Who would certify it and what is the goal for farmers taking this training? How does this training improve water quality in the state of Vermont? It is lack of enforcement that ensures that some farmers will choose not to comply with standard BMPs and other RAPs - this is country wide.
- **Section 5.2 - (c)** - This provision moves Vermont even further out of the engineering main-stream. If the law already states that anything after 2006 must meet the NRCS 313 standard, why not simplify to require all existing WSF meet the 2006 313 standard.
  - Has Vermont ever had a licensed P.E. sign off on 10-20 year old waste storage structures, specifically WSF with earthen walls? We have never seen a P.E. do this in any other state.

- Has Vermont asked privately licensed P.E. in the state if they would be comfortable "certifying" a 20-year-old earthen lined pit to a 2006 standard?
- "Vegetation shall be managed such that the WSF may be observed for structural integrity, leaks or overflows at all times."
  - What does this mean?
  - How does this provide guidance to farmers on managing WSFs
  - Vegetation, specifically trees, are found in many earthen structures throughout the state - how would one monitor the waste loss via pore space caused by an existing tree in an earthen side wall?
  - Allowing unverifiable and non-engineered structures, and the subsequent loss of manure (even if not discharged to surface waters), is of great economic detriment to farmers. Farmers should be encouraged to better understand, and utilize, the economic value of manure produced on-farm.
  - There is no mention of emergency volume or 25yr/24 hr storm events volume for existing WSF built before 2006. 1 ft. of free board rarely meets these existing NRCS 313 requirements.
- **Section 5.2 - (d)** - What equivalent standard are you referring to?
- **Section 5.2 - (e)** - Only dry manure with enough organic matter can actually be stacked. Nowhere in this statement does it prohibit a dairy farmer to "stack" liquid waste in a field - which in reality would be a winter application.
  - Can swine manure be stacked? It is a liquid product.
  - Can adult dairy manure with limited bedding be stacked?
  - Can milkhouse waste be stacked?
  - These are all "manure or other wastes" as stated in the RAPs.
- **Section 5.4 - (b)** - What is an equivalent model to RUSLE2?
  - Is there any evidence that completing an annual RUSLE2 calculation for crop land in Vermont has any correlation to improving state water quality?
  - Is there any evidence from any US state that RUSLE2 calculations directly correlate to improved water quality, locally, regionally, or nationally?
  - Our firms experience in many other states, including the state the RUSLE calculation was created in (MI), shows that Vermont has an unbalanced fixation on RUSLE2 related to water quality. At best, there is limited research that suggests running RUSLE2 and following either a single or multi-year rotation has any correlation to improved water quality on a watershed basis (all other states we know of run single-year management scenarios in RUSLE2 - Vermont is an outlier here).

- RUSLE2 shows the potential for soil erosion within a field; not soil loss into waters of the state.
- Has the state considered taking a more simplistic course of action to directly address erosion concerns instead of focusing on the RUSLE2 calculation?
  - Limiting tillage on specific slopes (over 6%). This is done for manure applications in the RAPs.
  - Is there evidence that cover crop on all soil types and all scenarios reduced erosion? Per RUSLE2 calculations - cover crop with conventional tillage has a greater rates erosion vs. no till or other minimal tillage options (vertical tillage, strip tillage, etc. with cover crop), as there is additional tillage to establish cover crops on certain soil types (heavy soils - clays).
- **Section 5.5 – (e, i) – “Manure shall not be applied to fields that are... Excessive in soil test phosphorus (> 20 parts per million) as determined by soil analysis...”**
  - We would like to know the scientific rational behind choosing 20ppm.
  - While we are not opposed to a “threshold” approach for limiting manure applications, we feel 20ppm would be prohibitive in much of Vermont.
  - A “threshold” approach should be based on reproducible, reliable research; this has been done in Vermont – the outcome of which is the Vermont Phosphorus Index which allows for the application of manure on fields >20ppm phosphorus if site-specific conservation practices have been put in place or if there is little risk of phosphorus reaching surface waters.
  - This particular suggestion strikes us as a measure which may achieve little, or no, benefit to waters of the state while being prohibitive and costly to farmers.
- **Section 5.7 - (A)** - Has the state considered allowing spreading setback from surface water conveyance as an off-set to buffers? Although buffers are one of the best mechanisms to limiting nutrient runoff at the field edge - many other states allow a manure spreading setback within the field - prohibiting manure allocations within the setback. This can address farmers concerns with planting narrow 10-25 ft. strips, managing these strips etc.
  - Example: "25 ft. vegetative buffer is required but can be supplemented by a 100-200 ft. spreading setback within the field if a buffer is not attainable". Refer to MI, WI, OH, IA, IN, MN and other states for reference.

**Ekolott Farm**  
**179 Scott Road**  
**Newbury, VT 05051**  
**802-866-5650**  
**riverside\_emus@hotmail.com**

**Comments re: proposed RAP regulations:**

We are a former dairy farm with 290 acres, 171 of which are tillable. Of the tillable acres, 84.2% (144 acres) are in the flood plain of the Connecticut River. We have a cow-calf beef operation and a commercial flock of emus. Corn silage is a significant cash crop for us. We also grow oilseed crops and small grains.

Here are some of our concerns:

- Unlike the topography along Lake Champlain, our riverfront acreage is highest in elevation along the riverbank, so normal run-off flows away from the river. The majority of our soils are well-drained Hadley silt loam.
- Unfortunately, we have been having increasingly abnormal flooding issues since Trans-Canada assumed ownership of the dams above and below our farm. We now often have rain events that shouldn't ordinarily cause flooding, yet flooding occurs, and the water remains on the land for longer periods than normal.
- The ceiling of 20 parts/million for phosphorus will be a huge game-changer for us. All our upland fields are above this threshold, which means that we can spread manure only on the fields in floodplain.
- If we can only spread manure on the fields in floodplain, then Trans-Canada needs to be part of the equation, since they own flowage rights and can flood the fields at any time. They have been exercising that right more often than the previous dam owners.
- It seems pretty well established that phosphorus does not move in the soil. Thanks to the Hadley silt loam, our upland fields don't have run-off into the river. Because of flooding, we cannot always get on the floodplain land, nor would we want to spread manure there if flooding was likely. So we need to be able to spread manure on the upland fields.
- The requirements for stacking manure will also be problematic. A setback of 200 feet from domiciles is reasonable, but requiring 200 feet from all boundary lines lacks some common sense. It is not always feasible to get that far from the road.
- We note that the new regulations give the Secretary the ability to cut off manure spreading earlier than December 15 if weather conditions warrant. Do they also allow for an extension beyond December 15 if the weather remains warm? (This year is a perfect example....)

Thank you for the opportunity to voice our questions and concerns. We attended the hearing in White River Jct. and found it very helpful. The presentation was clear and well-organized. We do understand the need to protect water quality.

Larry Scott and Peggy Hewes

## COMMENTS TO DRAFT REQUIRED AGRICULTURAL PRACTICE REGULATIONS

We all want to farm in ways to improve the productivity and health of the soil. We want to observe practices that improve the quality of our water. We want to learn ways to improve the way we farm to better accomplish these things. Will these RAPs help? Maybe. These regulations are going to require the Agency to devote significant resources to regulating farms that are not part of the problem. We hear 40% of the phosphorous in Lake Champlain is the result of farm runoff. What farms are the source and are those the farms who will be required by these regulations to change their practices? Will those farms get the supervision, the training, the resources they need to change? These regulations cover every farming operation in the state and ask too much of those who have the least to give and contribute the least to the pollution problem. The regulations do not provide a clear way for farmers to comply. Many issues are left up to the discretion of the Secretary of the Vermont Agency of Agriculture, Food and Markets who is given no criteria on which to base the decision.

Specific problems are noted as follows:

In section 1.3, last sentence, the words “appropriate” and “verifiable” should be deleted.

2.16 delete “at least 4” before “horses”

2.25 subsections (b),(c), and (d) do not follow the header, perhaps should read:

Small farm means a parcel or parcels of land on which 10 or more acres are used for farming:

- (a) That house. . .
- (b) That are used. . .
- (c) That the Secretary has designated. . .

Not clear, if there is more than one parcel, do all the parcels each have to have 10 or more acres used for farming or the farmed land on all the parcels together must total 10 or more acres used for farming. Subsection (b), what combination of animals reaches the threshold- if the farm has 10 cows, 4 swine over 55 pounds, 50 swine less than 55 pounds, and 50 sheep? Also for how long, just for one day or must the animal number be the average on the farm over the course of the year?

3.1 delete “considered by the Secretary as being” before “exempt”, subsection (b) \$2,000. Is too low, should be at least \$20,000., subsection (c) don’t know if you need the “whether” phrase because there is an “or” after subsection (b) but “whether or not” is better, “farm that is 4.0 contiguous acres or more”, same problem as 2.25 what about combinations, how were these numbers determined, formula should apply when the Secretary designates numbers and should be in the rule, this subsection is very confusing in conjunction with 2.25, for instance, the Agency made at least three mistakes in the Farm Size Definitions Draft-Sheet- the two requirements listed for an NRO both have to be met so there should be an “and” not an “or” between them and there should be an “or” not an “and” between the income requirement and

the 1040 Schedule F filing requirement; also the fourth requirement for a URO is misstated and should include a reference to managing livestock pursuant to 4.10(d). This is important because some farms with just pasture would come in under this provision. Subsection (d) provides no process or criteria for the Secretary to approve a farm management plan.

4.10 also provides no process, no transparency, leaves the determination up to the Secretary so farmers will have to go somewhere else to figure out how and when to self-certify; what is the difference between subsection (b) and the opening. Subsection (f) the “within 10 years of initial certification” inspection makes the whole scheme seem random and unimportant to the Agency but a lot of time and effort on the certifying farmer.

4.12 Hard to believe a Large Farm with 1000+ acres under cultivation and a small farm with 12 acres using compost has the same training requirements, and no requirements as to who has to go- could be any employee, should be a principal in the operation. Subsection (c) provides no criteria for the Secretary’s approval. Why doesn’t the Agency work with the Vermont Organic Farmers so that in their inspection of certified organic farms those inspectors cover the issues the Agency inspectors would under the rules. Also, NOFA could provide training for those farmers and then some of the duplicate work would be removed.

5.2 subsection (e) why should manure stacks be 200 feet from a property line? As long as the other set backs are met why wouldn’t 100 feet be sufficient? Not clear why field stacks can’t be in the same place more than once every 4 years. Very tough on small hill farms. 180 days could be difficult in long, wet springs. Subdivision (vi) the word “other” needs to be replaced by “different” or “additional” depending on the intent and what standards is the Secretary going to use to develop these standards?

5.3 Subsection (a) there seem to be other NRCS requirements out there such as NRCS CAP 138 that may be different. Turn subsections (b) and (c) into one Subsection (b) with two subdivisions to read:

(b) For all other farming operations subject to these rules:

(i) All sources. . .

(ii) All fields. . .

5.4 Subsection (b) “similarly accepted” means how and by who? Subsection (d) what criteria does the Secretary use for determining appropriate methods?

Hope these comments help to improve these regulations.

Sam Burr and Eugenie Doyle

The Last Resort Farm

2246 Tyler Bridge Road, Bristol, VT 05443

## Comments on Draft Required Agricultural Practices

### Comments on the Draft Required Agricultural Practices

| Section       | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preface       | I preface the following comment by saying that I understand from statements at the public meeting that some of the seemingly extraneous wording is included as mandated by the legislation and that developing this document must have been challenging since it is an attempt to meld 3 different regs into one. That said....-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| General       | This document is difficult to work through. There are three main reasons for this. 1. There is too much redundancy. For example, the first 3 paragraphs in 4.10 can easily be turned into one. 2. There is too much commentary/editorializing and 3. This document, although entitled "Required Agricultural Practices Regulations", is actually three regulations; the (A) RAPs, (B) Small Farm Operations Certification, and (C) Custom Manure Application Certification. The included discussion about farm structures and variances doesn't seem to fit into these regs and would seem more appropriate in Chapter 117. Compounding the confusion is that A and B use different criteria and definitions for regulation and they apply to slightly different but very similar groups. If it is to be kept together as one, this document should be divided into at least three stand alone sections, with clear headings and an overall title that lets people know that it is more than just the RAPs. |
| Applicability | This section seems to be a restatement of the introduction and purpose. The reader expects this section to clearly state to whom these regulations apply. It does not.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Enforcement   | This section mentions the provisions of 6 VSA 4991 – 4996 (which, of course, no one will look up). Those provisions provide for a reasoned, progressive enforcement procedure with chances given to the offender to work with the agency. The only tool that is very clearly mentioned in this section of the RAPs is removal of parcels of land from current use, perhaps the most devastating hammer available. The fact that it is the only remedy specifically mentioned implies that it is the preferred tool. This sets an threatening tone that is unnecessary and counterproductive.                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2             | add definition of "Flood Hazard Area" to help clarify Section 9.0(a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2             | add definition of "livestock wastes and byproducts" (this term later appears in 3.2(b))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2             | add definition: "Secretary"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2.07          | Please make it clear who is responsible for compliance in the case of leased lands. The property owner or the lessee. While it is implied in this definition for farm", it should be more prominently displayed in the section explaining to whom these regulations apply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2.25 no.1     | Small farm is a very generic term. Since this definition is a basis for regulation (certification) and the regulated entity is "Small Farm Operation" it would be clearer to have this be the definition of "Small Farm Operation". The fact that there is a different definition of a small farm as a basis for another regulation (Compliance with RAPs) in Section 3.1 makes this even more useful.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2.25(b)       | Small Farm definition. These are all "or". There should be some accounting for cumulative impact. Perhaps an animal load could be adopted whereby each category is assigned a value based on an indicator number of 1.0 . I.e. if 20 dairy cows is the trigger number, then 10 dairy cows would be 0.5 (10/20), 10 veal calves out of an allowable 30 would be (10/30), 0.33. If the total indicator number is 1.0 or greater, then it meets the animal number for a "Small Farm Operation".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Comments on Draft Required Agricultural Practices

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|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.25 ©     | Small Farm definition is the basis for the certification requirement. Section 4.10 refers to this definition to indicate which farms are required to certify. This section 2.25 is read that if the small farm has at least 10 acres (a) <u>and</u> meets <u>one</u> of the subsequent three criteria (b, c <u>or</u> d) it must certify. Interpreted literally (which of course all regulations should be, a 38 acre farm that does not trigger the animal count criteria but spreads manure or compost is not required to certify if they do not use irrigation, given the word "and" near the end of statement (c). In the handout "FARM SIZE DEFINITIONS DRAFT-SHEET" this third criteria is "Applies manure, compost or other waste to farming acres". This is consistent with what was said verbally at the public meeting and seems reasonable other than the problem with the definition of "Wastes" which is very wide-ranging . Wide enough to have the use of lime trigger certification. See related comment re: 4.10(d) |
| 3.1© No. 1 | It is noted that this list of animals (3.1(c)) used to trigger the RAPs, is different than the one in the definition of "Small Farm" used to trigger certification (2.25(b)). For example 3.1(c) includes bison, rabbits and trout that are not listed in 2.25. Also, "equines" (which include ponies) are listed in one but just "horses" in the other. Since 2.25 is the basis for certification, presumably a farm stocked with animals not listed in 2.25 (say 50 bison) would not be required to certify. It is unclear why these lists are different                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3.2 No. 1  | For better readability change "The agricultural practices on farms that meet the minimum thresholds set forth in section 3.1 that are governed by these regulations include" to : "These Required Agricultural Practices Regulations apply to farms that meet the minimum thresholds set forth in section 3.1. The agricultural practices that are governed by these regulations include:"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3.2 No. 2  | This Section 3.2 can be confusing and is likely not necessary. If the RAPs are those presented in Section 5 where a more detailed discussion is presented, then that should suffice. This Section 3.2 jumps between listing in general terms, the RAPs and describing some farm activities like sugaring and production of fuel. These are called out more comprehensively in the definition of farming. Picking a few to discuss here may imply that those not listed are somehow not of concern.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4.10       | The first three one-sentence paragraphs are essentially redundant and could be more clearly stated in one. This is not the only instance of redundancy that makes the rule less user-friendly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4.10(d)    | This exemption from certification refers to "...do not manage livestock, generate or use livestock manures or other livestock wastes..." There is no mention of other nutrients such as "compost or other wastes.." See related comment re: 2.25(c)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 4.11       | there is no 4.11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5.2(d)     | Is the date July 1, 2016? (not 2006)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5.2(e)     | At a public meeting this was clarified to mean that "unimproved site" means a site that has not been approved by NRCS. It is my understanding that getting a site approved by NRCS involves entering into a structured contract with NRCS that extends beyond what some farmers need, are looking for or are willing to accept. Change "Field stacking of manure on unimproved sites" to "Field stacking of manure on sites not meeting the NRCS standards"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 5.2(e)i)   | Clarify "subject to flooding". There is a common assumption that this means within the 100 year flood plain. At the public meeting, it was said that this is not the intent. Perhaps use "subject to seasonal flooding"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5.4        | In heading insert "Cropland and" before "Cover Crop Requirements" since the discussions about cropland are "shall" and "are required" based.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5.5        | It is noted that sections 5.5(a), 5.5(b) , 5.5(d) restrict the spreading of "manure and other wastes" while 5.5©,5.5(e)and 5.5(f) apply only to "Manure"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |



## Comments on Draft Required Agricultural Practices

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|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.5(e)ii        | In this manure spreading restriction regarding 100 foot buffers on slopes exceeding 10% add "except in the case where the surface water is at or above the elevation of the lands to be spread upon, in which case the buffer shall be 25 feet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5.5(f)          | The statement that the prohibition of spreading manure within 100 feet of a private water supply "shall not apply to private water supplies that have been established inconsistent with the Department of Environmental Conservation Water Supply Rules." is problematic since there are many rural water supplies that do not meet those rules. Water supplies such as old "springs" can be very vulnerable to pollution. The State Water Supply Rules (Table A11-2, page 108 of the Appendix) acknowledge this vulnerability and require that for shallow water sources the minimum separation distance from an inground septic system designed to modern standards shall not be less than 150 feet, and the minimum separation distance upslope of the shallow water source shall be 500 feet. If the bottom of the well or spring is higher than the ground surface at the disposal field then the minimum separation distance may be reduced to 50 feet. It would seem that the spreading of manure would pose the same or greater risk. Recommend that you check with ANR Water Supply Division. |
| 5.6             | This may be interpreted that an exemption must be requested annually at each seasonal ban. Since other than the soil tests results, the criteria are site dependent, it should be made clear that the exception runs with the site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5.7 (a)ii No. 1 | The top of bank of a swale is difficult to determine. Because of the nature of a swale, it can be completely vegetated. If the swale itself is vegetated, it would be a grassed waterway "treatment facility" as recommended in 5.4(d).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5.7 (a)ii No. 2 | The term "other water conveyances" includes a water tight culvert or other piping that protects the water from contamination. Insert "Surface waters including" before "Intermittent waters, ditches....".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5.7(b)          | This seems to be a restatement of 5.7(a) iii without the clarity regarding top of bank. If intended, this might be a new subsection saying "Manure and other wastes shall not be applied in such a manner as to enter surface water or intermittent waters". I do not believe that this is necessary and even if so the manner of application is an operational issue not a "Buffer Zones and Setbacks" issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 5.8             | The Vermont Solid Waste Management Rules address handling animal mortalities on the farm and composting. Exemptions from those rules are listed in section 6-1103 of the SWMR. There are some conditions relating to these issues that are not mentioned in this section of the RAPs such as the restriction of burials to "four or less animal carcasses per year". Perhaps the Solid Waste Division has reviewed and approved the RAP wording. If not, please have them do so in order to prevent any unintended violations by farmers relying on solely the RAPs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 5.8 ©           | 5.8 is entitled "Animal Mortality Management and Composting" This can be interpreted to mean just composting of animals. Perhaps this section regarding non- mortality composting should have its own heading so that it can be more easily located and be clear that it is about general food waste composting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5.8©            | Presumably the volume (1,000 cubic yards) is per year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 9.0(a)          | It is clear that structures may not be constructed in the Floodway or within a "Flood Hazard Area". But they "may be constructed outside this area yet within the 100-year floodplain". Under normal definitions, the 100 year flood plain is part of the flood hazard area, not "outside this area". Please clarify.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 9.0(d)          | The sketch should also show the distance from the top of bank to allow determination of compliance with 9.0©                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Appendix B      | There is no B, Just A and C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Appendix C      | There should be a required response time from ANR as there is for conventional Zoning Variances                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

Draft RAP Comments  
Dec 18 2015

To Whom It May Concern:

Thank you for addressing the very important issue of Water Quality in the state of Vermont.

I understand this is a great challenge and will take due diligence on behalf of the state to remedy the problem.

I also understand the intent of the ruling but the broad stroke regulations are unreasonable and put undue burdens on and barriers to Vermont's small-scale agriculture community.

After a grueling and head-scratching read through the draft rules, I have the following comments, questions and concerns.

General:

Very difficult to read and understand!

Item 2.17-

When does composted manure become by definition compost?

Does compost from non-animal manure sources fall under the same definition of "compost"?

Item 2.25 Definition of Small farm:

This is about as clear as mud! I am left terribly confused. Farming systems based on natural systems do not fit in tidy little boxes. How do small-scale diversified farms fit into this?

Section 4: Small Farm Certification:

Are non-profits exempt from this ruling?

I plan to be farming small scale with maximum of 20 – 30 sheep, 5-6 cattle, a dozen or so chickens, a couple pigs, an acre vegetable garden, on more than 10 acres. I plan to do rotational grazing such that the animals do not return to the same piece of ground within a 6-month period. I will use the winter bedding/manure with vegetable scraps for compost to add nutrients to my vegetable production. This seems to put me into a certified farm category?

Even if I prescribe to highly managed and conscious practices that do not contribute to any runoff into waterways, I will be required to spend a tremendous amount of

time, and resources to annually register to comply with the law. Where as a person with less than 10 acres can house up to the animal number threshold, in a more confined and poorly managed system that increases erosion, manure build up and loss of vegetation without the need to comply with the law.

I agree that trainings are important and should be required. As long as they are 1. Offered at no cost to the farmers, 2.offered at multiple times per year 3. Applicable to farmers with hillside farms with no surface water.

Item 5.2:

Field Stacks should not be located in the same location more than once every 4 years-

this is next to impossible.

What size determines a field stack? 1 cubic yard? 400 cubic yard?

Define location...

Define actual composition of material- ie actual manure vs bedding.

Field Stacks cannot remain in one location for more than 180 days:

We turn our compost weekly and move it about 20 feet each time, back and forth in the same area. Does this constitute changing location?

5.3: Nutrient Management Planning

This sounds like a simple activity that could benefit farmers. But from what I hear it is a gargantuan undertaking that large scale farmers usually hire out for. Small scale farmers do not have the funding, resources or time for such a huge project.

I would suggest a Plan based on scale of the farm. Small, medium and large, based on farm size.

A small NMP would be a simple document that has to be submitted once every 3-5 years, based on soil tests that prove to have high P, proximity to wetlands/surface water, and practices (rotational grazing vs confinement)

A small NMP could be submitted after spending no more than 4 hours of time composing the document. This scale is manageable for small farmers, can be educational and does not burden the small scale farmer.

5.4

b Do not have any idea what this means....

Seems like a vegetable farmers would never comply.

c.

Farmers harvesting late season crops will never be able to covercrop before September 15<sup>th</sup>...

5.8)c

this should not be a bullet under animal mortality-  
it should be its own category.

Compost is not defined, and it very different than manure.

is this 1000 cubic yards per year?

6.0

thank you for acknowledging rotational grazing. Maybe a rotational grazing plan could suffice for a nutrient management plan. Though I do not know what either entail

In summary,

I understand the intent of the ruling, but in practice it will prove to be a tremendous amount of paperwork and bureaucracy with little to know change in water quality. The draft rule is also very poorly written. It is very difficult to understand and leaves a part-time small scale diversified farmer with land in the same category as a full time confinement Dairy operation.

Confinement operations operate very differently than small scale rotational grazing operations and Vegetable operations. There is not a one size fits all solution to the problem.

I understand that there are few large scale farms in this state and they have a loud voice in the statehouse. But they are the number one polluter in the state. Until we change the allowable farming practices to more sustainable ones based on true rotational grazing, not confinement, we will not be able to change the water pollution problem.

Hopefully you have received comments from a wide range of diversified farms and take their comments seriously. We are all tremendously strapped for time. I know I would have liked to write a more in depth response to the draft report, but there are only so many hours in the day.

In a state such as Vermont, where farming is supposedly promoted and supported, this draft rule does the opposite.

I like to think of solutions and not just be a complainer, so heres another one that comes to mind as I scramble to finish this document.

I would recommend a required educational training for small scale farms, it could be once yearly for those farms in higher risk areas or every three years for those not in those high risk areas- like floodplains. A simple NMP could be filled out and submitted at this workshop. And good local, organic, grass-fed meal can be served to all the hard working farmers that are working their tails off to make this world a better place.

Thank you  
Brooke Decker  
Andover VT



We attended the hearing in Rutland on November 19 and would like to add our written comments on the draft RAP's.

We own a 560 acre livestock and maple farm in Chittenden that has been continuously farmed by our family since 1918. Our 90 acres of tillable land and 30 acres of pasture have historically supported a small dairy operation and until recently a commercial heifer raising business. As we are near retirement, we no longer have livestock year round. Our cropland is presently rented to a neighboring dairy farmer. We use our pastures for grazing dairy heifers during the growing season. Our farm was conserved with the Vermont Land Trust in 1996. In 1999, we were chosen "Conservation Farm of the Year" by Vermont's Natural Resources Conservation Districts and Department of Agriculture. We have always tried to operate our farm in an environmentally sound manner as well as make a profit.

We are looking to the future. Our youngest daughter has recently returned to the farm and we are considering various options to keep our operation financially viable. She is now the fourth generation working on this land, and we have all have concerns about the proposed RAP's.

As we mentioned at the hearing, our home farm has hillside fields, consisting of about 45 tillable acres, that are almost evenly divided by a small year round stream. Much of this land has a slope in excess of 10%. These fields have been in permanent grass since we started managing the farm in the 1970's. We have been spreading liquid manure on these fields since 1981. We have always been careful about how and when we spread. We do not think that we have ever had any significant negative impact on water quality.

The proposed rule that requires a 100 foot buffer for manure spreading on land with slopes in excess of 10% would severely limit our ability to use our land. About half of these fields would fall into that restricted area where we would not be allowed to spread manure, severely limiting our ability to make a living on farmland that the Vt Housing & Conservation Board felt was worth conserving with public money. We would be required to spread the manure at other locations or not allowed to use our liquid manure infrastructure that was designed and built with the assistance of public funds.

This rule does not differentiate the various ways farmland with a 10% slope could be managed for manure application. There is no difference in the buffer whether the land is tilled and exposed every year or if it is in continuous grass. There is no consideration as to whether the land slopes towards the stream or away from it. And it doesn't matter whether the manure is spread in June when the grass is growing or in November when it is dormant. We think this proposed rule should be modified to be much more flexible and reflect different management practices. All of the rules should allow farmers to manage their land in a way that is appropriate to their specific properties.

"One size fits all" regulations do not make sense. There are many different farming methods that take care of the land and protect water quality. RAP rules need to reflect that and be adaptable and flexible. The rules are often drafted by people who have little experience with working the land. Then it is left up to landowners to comply or get variances/permission. We'd like to cite a personal example:

We have a pasture that has been used by our family for grazing livestock for almost 100 years. Ten years ago our neighbors drilled a well about 15 feet from our pasture boundary. They have a 3 acre lot but said they chose to drill their well next to our

pasture because it was the least expensive place to drill. Now we have to get permission from our neighbors to pasture our cattle on our land (Draft RAP's, page 13, section 5.7 c). Where is the protection for the farmland owner's interest in these rules? We strongly feel that sound agricultural activities should be protected from encroaching residential use.

We have always tried to be good stewards of our land. For the past 3 years we have tried to be proactive, by working with NRCS and VACD, trying to sign up for programs to install exclusionary fences and cattle crossing on streams in our pastures. Working unsuccessfully with 3 different staff members of VACD, for the past two years has been extremely frustrating. Ryan Patch knows about this. We think he understands our frustration. Based on this experience, we have concluded that farmers who need financial and/or technical assistance to comply with RAP's should have a single person who advocates for them, helping them get through application process with the complicated government programs with various agencies. Most small farmers don't have the time or resources to deal with the bureaucracy and if there was a single advocate that can help them get through the process, the RAP's, if well written, simple, flexible and fair will not become an excessive burden on small farmers.

We understand the need for rules to protect the waters of the state. We appreciate the opportunity to share our ideas and opinions about the draft RAP's.

Sincerely,

Robert & Bonnie Baird

Baird Farm  
65 West Road  
N Chittenden, VT 05763

Draft Required Agricultural Practices Comments  
Submitted by: Graham Unangst-Rufenacht

Note: This is being submitted on the 20<sup>th</sup> of December, 2015 – 2 days after the official end of the public comment period on the Draft RAPs. At the meeting I attended at the Statehouse, it was said that comments sent after this period would be considered. I apologize for not getting them in by the 18<sup>th</sup>, but expect that the promise that they will be considered will be honored. Thank you.

- I am a seasonal grazer of grass-fed and finished beef cattle in central Vermont. I focus on growing grass and soil on leased land through long rest periods and frequent moves – that means that one of my primary goals is achieving better water quality through farming (not in spite of it). I graze more than 10 acres, make more than \$2,000 annually (gross), and have been grazing 8-13 beef animals (though I plan on increasing that number over time – likely to more than 20). I find it unreasonable that once I do fit into the “small” farm category, I will be lumped in with confinement dairy farms of up to 199 animals whose practices are anything but regenerative. I also find it unreasonable that I will be required to put together a Nutrient Management Plan and potentially pay fees for certification, training, etc. that will not affect water quality on and off the land I lease, but will affect the very slim margins in terms of time and economics which I already am doing my best to protect, and which are not enough to make a “livable wage” (regardless of my almost 10 years of professional experience). It is clear to me, that it is very difficult to make a just livelihood in small VT agriculture and that most folks who appear to be in debt, have other income supporting them, or are “gentleman / woman” farmers. This legislation (Act 64) and this current draft RAPs put more barriers up for small farmers and does very little for water quality.
- I attended a presentation at the State House on the Draft RAPs and was surprised to hear it explicitly stated that the Agency knows very little about and has had little experience with the “small farmers” in VT; rather, most of its experience is admittedly with Medium and Large dairy farms. I was disappointed to see this reflected in the “Vermont Dairy Promotion Council” material that was handed out with the other materials about the Draft. I understand it to be intentionally placed there as propaganda reflecting what I perceive to be the biased nature of this draft, as well as the general culture at the Agency of Ag in respect to the various demographics of farms, farmers, and small economies in the State. Time was taken to explicitly point out the economic importance of medium and large dairy in this State, which belies the reluctance of the Agency to create a draft which addresses the fundamentally ecologically destructive nature of confinement dairy.
- Considering the Agency knows very little about the “small” farm sector in the State, I am curious to see the data documenting the “small” farm sector's contribution to the “40%” of the phosphorous pollution in the Champlain basin which is being used to justify this crack down on small farms in particular. Furthermore, I would like to see data suggesting what *kinds* of farms using which *methods* of farming are contributing (dairy, beef, veggie, diversified, pasture based, grass fed, confinement, etc.) and how much to this problem. These numbers will be important for the legislature and the Agency to present to farmers and the general public in order for us to have any trust in the State's insistence that we are responsible and must take accountability for such a significant portion of this pollution. Are these draft RAPs an effort at affecting water quality, or obtaining information about and leverage over small farms which the Agency does not have?



- I fully support changes in Vermont agriculture that would result in improved water quality in the Champlain basin and elsewhere. I work in ecological and nature based mentorship and education, agroecological consultation and education, clinical herbalism, environmental advocacy, and farming – my work centers around healthy internal, social, economic and environmental ecologies. A number of times Laura (the presenter) spoke about the need for an “ethic” of responsibility and accountability in respect to water quality – and I absolutely agree. I am writing here because I am disappointed to find that this draft and Act 64 presents a “potemkin village” of embracing this ethic (effectively exacerbating the problems we have environmentally), and do little to address what I perceive to be the most egregious examples of poor agricultural practices leading to contaminated waterways, instead suggesting a dramatic and potentially illegal overreach focusing on imposing barriers on small farmers, establishing and expanding mitigation factors on farms with poor practices (buffers, satellite manure pits, etc.), and enforcing compliance with a logistically unachievable and ineffective plan.
- Legislation and Required Ag. Practices working to achieve water quality need to be based on an integrative environmental, economic, and social framework created through a transparent, inclusive, and diverse farmer / agroecologist / agronomist driven process. This process must legitimately ask, “what are the best ways to farm for the land and water, for the people and non-people living here, and how are we going to empower communities and people to get there?” That is not what this process or these draft RAPs look like. Though there has been a “working group” of farmers working with the Agency, very few farmers knew of its creation, and its constituents represented a particular geographic area (though legislation is effective statewide) and potentially a particular demographic of farm. I am glad that the Agency has chosen to travel Vermont presenting the draft, thank you for that effort - but for most farmers, this is the first time they've been made aware of this or been asked for input. We need more inclusion in this process and regulatory apparatus in general, particularly from the small farm / agroecology / permaculture / homestead / diversified farm sectors.
- There was mention of the substantial amount of funding available to support water quality initiatives in this State. I would like to see a draft which uses these funds to not simply mitigate damages from poor farming, but to support regenerative and sustainable farming practices and to transform how we farm in Vermont. Increasing buffer strips, requiring satellite manure pits, requiring a cover crop by a certain date – these are all mitigation strategies which allow ecologically and economically exploitative practices and means of farming to continue, in particular large confinement dairy operations. Not only do these mitigation efforts further condone these poor farming methods, but they subsidize their pollution by giving them significant money to keep doing what they are doing (manure lagoons in particular), and unfairly offer money and aid and tolerance to a particular demographic of farmer over another. We know that particular practices and ways of farming create more work, more waste, and are unhealthy and unsustainable ecologically and economically to our lands and communities – we know that particular practices and ways of farming generate top soil, sequester carbon, cultivate a healthy soil biology, keep more money and nutrients in our communities, and make our communities more resilient. Why does this water quality bill and general Agency policy condone and support medium and large scale destructive farming practices with tax payer dollars under the moniker of “water quality” – like building satellite manure lagoons, like supporting vast acreages of monocultures of GE crops in our flood plains, like being most concerned about the marketability of our nutrients and products out of state - as opposed to

requiring practices and farming techniques – such as particular grazing and animal husbandry / wivory practices, crop rotation and cultivation practices, and making sure our communities are fed – that will do away with the need for these other expenditures? I have spoken with people doing farm based extension work in Vermont who have also expressed their frustration with me around Act 64 and the draft RAPs, and said that they'd offered alternative ideas (including farm by farm assistance and assessment, etc.) which seem far more helpful and less antagonistic to the small farming community in particular.

- Several farms spoke about their fear that these RAPs will affect the tourist sector and the VT landscape aesthetic. I disagree. I think that the VT landscape dotted with overgrazed pastures, flood plain GE annual monoculture, medium and large confinement dairy, schools which feed the children U.S. commodity food products, water with toxic concentrations of nutrients and pollutants, etc. - are a liability to VT in a number of ways. The RAPs do little to affect any of these issues, and rather ensure that they will continue. I do not think that our concern should be a tourist-based aesthetic one – we need to take care of our neighbors, human and non-human, first. We need to transition and transform our farming and create a new dynamic agroecological landscape and food system in VT oriented towards growing soils on small diversified and grass based farms, employing regenerative practices, which ensure the well being of our communities and require the least amount of fossil fuel based energy and throughput as possible. This is not only my opinion, but was put forth by the UN as a required change in agriculture for humanity to survive the coming decades.
- There are no incentives for, mention of, or regulations requiring regenerative agroecological practices in these RAPS. What this effectively means, is that many of us in the small farming sector are doing our best to practice ecologically sustainable or regenerative farming and to feed our communities (and struggling to make a livelihood doing so), yet we are being blamed for ecological devastation caused by medium and large scale farms which externalize their costs (and are assisted and financially supported in doing so by the State) onto the tax payer and the environment. There is substantial data on the human health benefits, animal and vegetable health benefits, soil and environmental health benefits, economic and social benefits of particular agroecological practices and localized economies – yet this legislation and these draft RAPs ignore this evidence and do nothing to reward farmers who are not simply reducing the pollution they create, but increasing the ecological resiliency of the land on which they work. Small farmers in this State who do not fit into a particular scale of agrocommerce, who do not fit into the Agency's vision of the “Vermont Brand” do not feel recognized, empowered or supported by the Agency or the State. We need Required practices which are best practices, or which provide incentives and support to farmers who are creating infrastructure (soil building, biology building, community building) which actually improves water quality. In the Livestock Exclusion section, there is one example of particular grazing practices being recognized as suitable for riparian zones – can we get more of this in the RAPs? Supporting particular methods we know are helpful? This is not a mitigation factor you articulate – it is a practice which actually benefits riparian restoration – awesome, can we articulate and reward specific practices and results which go way beyond mitigation?
- At the presentation at the Statehouse, people suggesting that some of these draft RAPs are inappropriate given the particular nature of each farm (such as the 200' buffer from property lines for composting manure, the requirement to move it yearly and have a 4 year window before it being put in the original spot again...) were told that these numbers were more or less

placeholders, and that there would be allowances made for each farm by the Agency. Myself and other farmers support a farm by farm based regulatory (more ideally support and empowerment) process, but what this puts forth is specific numbers which all farms have to follow, unless the Agency says otherwise. This is not truly a farm by farm approach - it is placing all power and discretion in the hands of the Agency as opposed to through a transparent and democratic process which farmers can trust to treat them fairly and equitably.

- I agree that floodplain agriculture, particularly in annual GE monocultures or under poor grazing management, is a high risk area – but not necessarily to the detriment of a focus as well on uplands medium and large scale farms who operate at the top of our watershed. These are also very sensitive areas ecologically and contributors to many of the issues we see downstream; particularly as they affect erosion upstream. They are often on steep ground that is over grazed and compacted, or put to large annual monoculture, and often adjacent to (or in) small streams, ditches, wetlands, and forest areas.
- I am disappointed that commercial fertilizers, herbicides, pesticides and insecticides – and the farming practices that require substantial use of them – are not addressed with new regulations (that I have seen) in the Draft RAPs. Rather, all emphasis is on “manure” and animal related “wastes”. I think that it would also prove useful and sensible to distinguish between liquid manure and dry and / or composted manures in relationship to water quality.



To: Vermont Agency of Agriculture, Food and Markets  
From: Vermont Planners Association  
Contact: Sharon Murray, Legislative Liaison  
[frontporch@gmavt.net](mailto:frontporch@gmavt.net) | 802-434-4118  
Date: December 18, 2015

## Re: Draft RAP Rules

Thanks to Stephanie Smith and Jim Leland for taking the time to meet with our Executive Committee in November regarding proposed Required Agricultural Practices (RAP) Regulations, as presented in draft form in advance of the agency's formal rulemaking process. This draft was forwarded to VPA members for review – the following comments reflect our reading of proposed rules in relation to existing the AAP/RAP exemptions under 24 VSA § 4413(d), as well as feedback we've received to date.

### 1) General Comments

It is our understanding that as proposed:

- The rules are specifically intended to establish statewide requirements designed to improve water quality in the state, and to assure practices on all farms eliminate adverse impacts to water (Introduction).
- That the RAP Regulations, as proposed, represent farm management techniques that will conserve and protect natural resources, maintain the health and productivity of soils, and protect the state's waters from nutrient loading associated with farming activities (Introduction).
- The RAPs are standards to be followed to conduct agricultural activities in the state – and specifically activities which have a potential for causing pollutants to enter the groundwater and surface waters of the state, including animal waste management and disposal, soil amendment applications, and crop production and management (Applicability).

**Comment:** *To the extent that RAPs are defined in intent and application in relation to water quality protection, we support their exemption from municipal regulation under 24 V.S.A. Chapter 117 – clearly the AAFM, in association with ANR, is best qualified to address on-farm agricultural practices pertaining to crop and livestock production and nutrient and waste management, especially in this context. However, to the extent that the RAPs (as former AAPs) are defined to also include “farm structures” that may be used for purposes other than farming (e.g., events facilities, tasting venues); value added production (secondary processing and manufacturing activities, facilities); and the sale of goods to the general public – none of which directly relate to water quality protection – such “practices” should not be totally exempt from municipal regulation and oversight. RAPs should not be used as a subtle form of “right to farm” legislation separate from the stated intent of the rules. Uses or practices not directly related to water quality protection should not be included under proposed rules simply as a means to exempt them from local (and Act 250) review. We ask that the proposed rules be revised accordingly, as more specifically addressed below. VPA does recognize the importance of agriculture to our state, our communities, and Vermont's rural landscape, and will hold to a longstanding offer to work with the agency to develop other more suitable means to support farm-based rural enterprises under 24 VSA Chapter 117.*

It is also our understanding that the proposed rules in effect define four levels of jurisdiction or oversight:

- “Medium” and “large” farms which are fully subject to the rules, and separate agency permitting requirements.
- “Small farms” (as defined under Section 2.25 in relation to acreage and number of animals) that manage livestock, generate or use manure or other livestock wastes, or as otherwise required by the Secretary, which must certify compliance with the rules, including the RAP regulations. However, small farms with 10 or more acres of land used for farming that do not involve livestock or associated wastes are not required to certify compliance, unless otherwise required by the Secretary (under 4.10).
- Farming operations meeting “minimum threshold criteria” (as defined under Section 3.1 in relation to income, sales, acreage, number of animals and business plans) which are presumed to meet RAPs without certification – and are also exempt from municipal regulation under 24 V.S.A. § 4413.
- Farming operations which may at some point fall below the “minimum threshold criteria” (again as defined in section 3.1 in relation to acreage, income, number of animals, etc.) which are not required to meet the RAPs, do not qualify for the statutory exemption, and are therefore potentially subject to municipal regulation.

**Comments:** *These definitions or thresholds rely on criteria – including farm income, number of animals, sales, etc., that vary annually, or from season to season and, within a local regulatory (zoning) context, are impossible to determine, track, administer and enforce. Again this also concerns what should be incorporated under the RAPs – e.g., with regard to on-farm activities, sales and manufacturing or value added production – that relate more to land use and development than water quality protection. While it makes sense to look at the number (and mix) of livestock housed on a farm in relation to nutrient and waste management, VPA has consistently asked for bright lines when it comes to defining farm structures and associated uses as exempt from local zoning under Chapter 117 – e.g., based on acreage, building footprint, type of use, etc. We would all benefit from clear, consistent criteria that can be readily interpreted and applied by farmers, the agency, district commissions and municipalities. RAPS should clarify areas of jurisdiction, not add to the existing confusion.*

*These thresholds also appear to open up loopholes or gray areas in the state and local regulation of farm structures and practices within flood hazard areas under NFIP requirements –loopholes which VPA worked long and hard to close through previous legislation that specifically transferred NFIP jurisdiction to state. Presumably all farm structures in flood or fluvial erosion hazard areas that are exempt from local regulation will fall under the ANR General Permit – but it is not clear how this will apply to operations for which no permit or certification is required – including those which may, or may not be exempt from local regulation, depending on a particular set of circumstances under the minimum thresholds defined in 3.1. How will these situations be administered and enforced by the agency and/or locally – e.g., with regard to the previous case of the hoop house built in the floodplain without a municipal (or state) permit? More clarification is requested –we’d prefer not to revisit this issue in the legislature or the courts.*

## 2) Specific Comments, Recommendations

### Generally

- Replace “town” with “municipal” throughout (to also include cities, incorporated villages).
- Avoid “principally produced” in this context to avoid the need for 51% determinations (w/re to production, sales), which vary over time and are extremely difficult to administer and enforce.

## **Introduction, Applicability, Section 1.1 (Purpose)**

- Any intent under the proposed rules other than water quality protection (e.g., currently implied “right to farm” in relation to the 117 exemption) should also be clearly stated – if in fact this is re-established in the RAPs as proposed.

## **Section 2: Definitions**

- Agricultural Product (2.01) – in this context, delete “...and includes products prepared from the raw agricultural commodities principally produced on the farm” – as not directly related to water quality protection.
- Farming (2.08) – In this context (water quality protection):
  - Clarify “greenhouse” (commercial?)
  - Delete or clarify under (e) “preparation and sale of agricultural products principally produced” as not directly related to water quality protection – e.g., limit to “the storage and preparation of agricultural products produced on the farm.”
  - Delete under (g) “including training, showing, and providing instructions and lessons in riding, training, and the management of equines” as not specifically related to water quality – presume this is to include commercial riding stables—which should be covered under (b)?
- Farm Structure—as noted above, referencing the minimum criteria under 3.1 could create a host of issues in terms of local v. state administration and enforcement – would delete this in the definition, or be sure to review and redefine minimum threshold criteria under 3.1.
- Floodplain, Floodways (2.11, 2.12) – make sure definitions consistent w/ NFIP definitions and state rules – e.g., “floodplain” is more generally defined under both –“Flood Hazard Area” (or Special Flood Hazard Area) should be used and defined for consistency. NFIP maps (showing both SFHAs and floodways, where available) may or may not be on file w/ the municipal clerk. Would delete this in the definition, but may also want to include or reference the FEMA Map Service Center and VANR Resource Atlas, in the appendix in related resources (<https://msc.fema.gov/portal/>).
- “Fluvial Erosion Hazard Zone” was renamed in statute and related rules and procedures as a “River Corridor Protection Area” as also defined under Chapter 117 (and as opposed to “River Corridors” as mapped by VANR, which also include additional 50’ buffers). Suggest instead using this term for consistency. Would delete references to VANR maps and municipal plans and zoning ordinances under the definitions, given status and coverage of statewide maps issued by VANR for river corridors, and the municipal adoption of bylaws – many of which use older, but more specific geomorphic assessment data (as noted). Should discuss with Floodplain Management staff.
- Principally Produced (2.22) – suggest deleting in this context; again, not specific to water quality protection, and impossible to consistently administer and enforce, at any level.
- Small Farm (2.25) – define in relation to min/max acreage of land in cultivation/use (e.g., estimated/needed to accommodate specified number—or mix—of animals) or maximum capacity of operation (e.g., max #/mix of animal units/equivalents based on total estimated waste generation), or the maximum size of a farm structure, and not number of animals currently housed, which may change from season to season, owner to owner, or which may not adequately represent the size, footprint or variety of intended use. We all need some measure(s) that can be consistently applied, in relation to an overall size or capacity, within which farms may expand (or contract).
- Surface Waters (2.26) – Should clarify whether this includes perennial and intermittent streams and brooks, as it seems to...

## **Section 3 Required Agricultural Practices Activities**

- See general comments above, as specifically applicable to this section.

- Suggest eliminating 3.1 w/ re to “minimum threshold criteria” as establishing a gray area/loophole in the rules that will be hard for the state and/or municipality to track and enforce – e.g., by incorporating farming operations that meet the minimum threshold criteria under the definition of “small farm,” requiring state certification as specified; or by simply allowing municipal regulation of all farms that meet the minimum criteria (as redefined to be administrable at the state and local level – again a bright line). In effect exempting these from both state certification and municipal regulation creates the gaps/gray areas w/re to state v. local administration and enforcement under the RAPs, Flood Protection Rules and local bylaws that we would like to avoid. It should not be necessary to create yet another category, in addition to “small farm” that is generally exempt from both RAPs and local regulation – or that may, or may not be subject to local regulation, based on the particulars of each farming operation.
- 3.1(b),(c) Delete criteria referencing income, sales and number of animals on the farm –and whether or not a farm has a business plan –which do not directly relate to water quality, may vary from year to year, and are difficult to apply, especially w/re to determining exemptions from municipal regulation. Instead base on maximum acreage, type of use/operation and/or maximum livestock capacity (e.g., number of standardized animal units in relation to total waste generation, which would also accommodate a mix of livestock). Again, it is impossible, at least under 117, to determine whether a farm is subject to state or local regulation based on these types of criteria – we need brighter lines of jurisdiction that can easily be interpreted and applied.
- Section 3.2 – delete “principally produced” under each (to avoid 51% determinations), as unrelated to water quality protection. Also
  - (g) Qualify “The construction and maintenance of farm structures, farm roads and infrastructures “ as “intended and used solely for agricultural purposes” [as also exempt from local regulation]
  - (h), (i) delete “sale of” as unrelated to water quality protection

#### **Section 4. Small Farm Certification**

- (a) and (b) seem somewhat redundant given 4.10 language – could these be combined?
- The exemption for small farms with acreage but no livestock from certification requirements seems to address waste, but not nutrient, management – e.g., for more intensive crop production, greenhouses, etc.

#### **Section 5. Required Agricultural Practices**

- 5.1 Does this include direct discharges into highway ditches? This should be address here, and/or elsewhere (e.g., under buffers). Direct drainage into state or local highway infrastructure should require state or local access permits.
- 5.2(c) “freeboard” in this context may need to be defined/clarified (in relation to BFEs).
- 5.2 (e) as generally stated, should instead specify flood hazard areas, floodways and on land otherwise subject to flooding; would also check requirements re SPAs – may require additional analyses depending SPA Zone – 200 feet from public water supply well may not be sufficient, depending on soils, ground water table, etc.

- 5.5 (c) In our experience, these dates are arbitrary in relation to recent flood events that have occurred outside of this window (e.g., June – August). A 100-foot setback should be required from all streams subject to frequent flash flooding.
- 5.7 We question whether a 25-foot buffer is adequate, given VANR requirements and guidance for other forms of development (for more detail, see comments submitted separately by Alex Weinhagen). Buffers should also be maintained along all stormwater conveyance infrastructure, including roadside ditches.

## **Section 9. Construction of Farm Structures**

- Farm structures should be exempt from additional zoning requirements only to the extent that they are intended and used solely for agricultural purposes (storage, livestock), and not for other rural enterprises (e.g., events, farm stores/sales, value added production beyond basic processing) which also are not directly related to water quality protection. Again, VPA is willing to work with the agency to define limited administrative and/or site plan review under 117 to address other forms of farm-based rural enterprises. In the absence of local regulation, RAPs should include some basic site plan and performance standards for farm-based enterprises beyond water quality related criteria to address impacts to adjoining properties and municipal infrastructure. Given that these clearly are not related to water quality protection—wouldn't it be preferable to instead allow limited local regulation of on-farm rural enterprises?
- (e) Setbacks, Variances – we appreciate that this is addressed in much more detail than it has been in the past, consistent with Chapter 117, which will be helpful.
  - Some zoning bylaws require the designation of building (or development) envelopes – in addition to or in lieu of setback requirements – for development on larger parcels (e.g., >1 acre). These should be referenced in addition to setbacks, as applicable.
  - Variance/hardship criteria included under (e), if applied consistent with statute and case law, will be very difficult to meet, especially for new (v. existing nonconforming) structures. The alternative is a form of waiver, as also allowed under Chapter 117, which does not involve documenting hardship.





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Secretary Chuck Ross  
Vermont Agency of Agriculture, Food & Markets  
116 State Street  
Montpelier, VT 05620-2901

December 16, 2015

RE: Required Agricultural Practices Regulations for the Agricultural Non-point Source Pollution Control Program

Secretary Ross,

On behalf of the Farmer's Watershed Alliance (FWA), we want to thank you for the opportunity to review and comment on the proposed Required Agricultural Practices (RAPs). The FWA is committed to working with the Vermont Agency of Agriculture Foods and Markets (VAAFV) to develop and implement water quality regulations and programs that work towards improving the quality of our water while protecting the viability of our farms. Our membership has met multiple times to review, discuss and comment on the rules and the following document outlines our collective discussion. We are happy to provide further details or information on the document if needed.

***Farmer's Watershed Alliance comments on the proposed RAPS.***

### **Introduction**

This phrase: "...to assure practices on all farms eliminate adverse impacts to water," seems idealistic; consider changing to "...to assure practices on all farm minimize adverse impacts to water."

### ***Section 2: Definitions***

#### ***Add definitions for:***

- **Compost:** Likely best to use the USDA National Organic Program definition.
- **Fertilizer:** This should be defined and must include information on where organic fertilizers (such as bagged poultry fertilizer products) fall within the definition.

- **Agricultural Waste:** This term is used throughout the document and is not defined.
- **Cover Crop:** This term is used in Section 5.3c and is not defined.
- **Residue Management:** This term should be added due to our proposed changes in the Section 5.3c.

Refinement and/or expansion of some definitions will be important to help farmers understand the regulations and how their farm may be impacted.

- **2.15 Intermittent Waters:** This definition is a bit cumbersome and unclear in many respects. We suggest removing the term ‘swale.’ A swale could be any low spot in a field. We don’t believe this is the intended definition of swale for these regulations but it could be interpreted in that manner. There are several states including our neighbor NY that have solid definitions for intermittent waters. You might refer to these examples for a more accurate and specific definition.
- **2.25 Small Farms means:** It has been difficult for farms to understand what category of farm that they fall into and therefore what regulations they may need to follow. A table in this section would be helpful.
- **2.28 Waste Management System:** We are wondering if bedded packs are considered a waste management system and if they should be included in this definition or in the waste storage facility definition. Many small farmers are using bedded packs for manure management.

**Section 3:** No comments.

#### **Section 4: Small Farm Certification**

In general, this section needs to be made more clear to the farming community. There is considerable confusion around what requires a farm to become certified.

#### **Section 5: Required Agricultural Practices; conditions, restrictions, and operating standards.**

##### **5.2 Nutrient, Agricultural Inputs and Waste Storage**

###### **c.ii. At least 1.0 feet of freeboard shall be maintained at waste storage at all times.**

The farmers suggest removing this section. Farmers felt that a resource concern is only occurring the manure storage is spilling over and prior to that there is not a pollution concern. Given the erratic climate substantial rainfall/snowfall may require farms to use this freeboard in any given year.

**d.** Change this section to: *All waste storage facilities newly constructed shall be designed and constructed according to USDA NRCS standards...* Farmers feel that they are being asked to modify structures (such as lining) when they have not been proven to be faulty. Farmers felt that

unless proven to be faulty the expense to upgrade should not be incurred. Federal or state funds used to upgrade a pit that has not proven to be faulty would be a misuse of tax payer funds and a poor use of farmer funds. It is also unclear (based on research) that lining is necessary to seal all types of manure pits.

**e) Field stacking of manure on unimproved sites.**

**i.** Change this section to *Stacking or storage of manure or other wastes is prohibited on lands in a floodway*. Remove or otherwise subject to flooding as this is not easily defined.

**ii.a.** Current law is 100 feet and this should be kept. It is unclear as to the water quality basis for changing this law to 200 feet.

**iii. and iv.** Farmers felt that this new regulation should be removed. If farmers have identified through their NMP or LTP adequate sites for manure stacking these sites should be utilized but managed properly. Also in terms of farmers that are stacking manure for composting this regulation would not fit that process. It is also clear that Manure Stack and Compost need to be added to the definitions.

### **5.3 Nutrient Management Planning**

**c.** Is manure sampling necessary every year for extremely small farms? The farmers suggest keeping manure sampling to the same frequency as the soil sampling in this section.

### **5.4 Soil Health Management Recommendations**

**a)** SUGGESTION – this does not belong here as it is not a rule, but a description of soil health. This could be moved to the definition section.

**b)** If you are a certified farm, you are working with someone who can calculate T for your fields but if not certified how will the farmer be able to do this themselves? You are following T if you are meeting the 590 standard. *SUGGESTION: Include language if farm follows an NMP (590 standard) that they have to follow T; and consider options for other farm types not following a 590 NMP.*

**c)** Farmers feel that this section should be changed to: *Annual croplands subject to flooding from adjacent surface waters are required to maintain at least 50% residue coverage on the soil by December 1<sup>st</sup> of each year.* A definition will need to be added for residue. Farmers felt that some cropping systems such as grain corn provide residue sometimes greater than a cover crop and should be allowed. There are many options for seeding, establishing, and maintaining residue coverage on a field. Farmers should be allowed to decide how they will meet this standard instead of being dictated to implement one practice with predefined agronomics.

**d)** Farmers feel this section should be changed to: *Field borne gully erosion shall be managed using appropriate management strategies.* Farmers were concerned with the very prescriptive nature of the removed sections. Farmers recognize that the gully erosion needs to be managed

and fixed but feel that there are multiple strategies to do so and they can work with appropriate technical service providers to implement appropriate practices.

## **5.5 Manure and Waste Application Standards**

**b)** Farmers suggest changing this section to *Manure and other wastes shall not be spread between December 15 and April 1*. Farmers felt that an undefined ban date would make it extremely difficult to work with custom operators to schedule spreading. It would be impossible to know how late an applicator could come if there was always uncertainty about the ban dates being shifted around.

**d)** Farmers suggest removing this section as they felt that neither they nor anyone else can accurately predict the weather.

**e)** Farmers felt that if a farm has developed a NMP that meets the 590 NRCS standard that these regulations need not apply as they are already addressed in the 590 standard. Farmers develop plans to minimize potential manure, nutrient and soil loss based on a nationally recognized standard that includes indices such as RUSLE2, the P-index, and N-index that minimizes with best practices (cover crops, rotations, buffers) the potential for manure, soil, and nutrient loss.

The suggestion for this section is to state that all farms should manage manure applications as outlined in their 590 NMP and if they do not possess a 590 NMP they shall otherwise not apply manure to fields that are.....

## **5.6 Winter Manure Spreading Exemptions**

**b. vi.** Farmers suggest that frozen and snow covered ground be defined. When is ground considered frozen?

## **5.7 Buffer Zones and Setbacks**

**ii.** Farmers suggest that swale be struck from this section. It is difficult to define swale and may include any low spot in a field.

We greatly appreciate the opportunity to provide input on the RAPs. We look forward to working with the VTAAF on this process.

Darlene Reynolds, President

Farmers Watershed Alliance

Public Comment Form for (RAP) draft changes

To: Ryan Patch VT Dept. of Agriculture

From: Justin Poulin Farmer "S

**Sec 3. 3.1c "Farms potential to generate Nutrients"**

How is nutrient defined? Does compost from hay generate nutrients? A clear definition of "nutrients" is needed.

**Sec 4. 4.10(a) "Small Farms Shall annually certify Compliance".**

This is just added paperwork and another hurdle for a farmer to jump, a farmer that is compliant to all the rules (RAP's) but forgets to send in the annual form is now non-compliant!

Just because a farm certifies compliance doesn't assure that it is compliant. Annual Certifying of compliance should only apply to those farms who have problems or have had problems with compliance. If a farm is compliant then it shouldn't have to certify. You may say, "well how will we know if they are compliant"? Answer: "The same way you would know if they are non-compliant".

**Sec 4. 4.10(e) & 4.12(b) "4 hours of training every 5 years"**

Again this rule will not assure anything, I know of people who attend required trainings and forget 90% of what they learned the moment they leave the training session.

This is about following the rules, if a farm is following the rules or practices what is the need for training. If a farm is not following the practices or rules then training should be required.

**Sec5. 5.2(e) "Field Stacking of manure on unimproved sites"**

i)"Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding"

This would eliminate most sites on low land farms in central VT.

Some of these flood plan maps are broad blanket areas and don't account for high spots or distances from waterways or water sources that normally would not flood even in high water situations. There very well could be very suitable sites for stacking on these lands, and with consideration from the secretary should be allowed.

**Sec 5. 5.2(e) (ii) "200' Set back from property lines"**

Many property lines are other fields or pastures. Again this may eliminate the best Stacking site in a field.

The agency should have the ability to amend this setback if the reduction of the setback is enabling utilizing the best site for stacking.

**Sec 5 5.2(e) (iii) "Field stacks shall not be placed in the same location more than once every 4 years"**

This again limits the potential for farms to stack manure in the best location. Most farmers evaluate many factors when picking a site. Distances from roads and water sources, accessibility from roads and in wintertime to the site are some considerations, these may limit all but maybe 1 site, if soil test indicate normal or acceptable levels, then this site could be used annually if approved by the Agency.

**Sec 5 5.3(a) "590 NMP"**

The best Nutrient Management Plan doesn't amount to anything if it is not followed. Just because a farm has a NMP doesn't mean compliance with the RAP's. And many farms with out NMP's can be and are in compliance with the RAP's.

These plans are expensive(ours for our farm will be around \$5000.00, luckily we received a EQUIP grant for it) yes you can write your own if you have the time and desire, (those quality's are limited after a day of farming, many of us farm because we didn't want to sit at a desk or a computer, we wanted to be outside.) Not all farms can invest the money or Time or the resources in such a plan. If there is not a resource concern then why the need for a plan.

If a farm is having trouble with compliance to the RAP's the a plan would be justified.

**Sec 5 5.3(c) "Soil Sampling"**

**"Soils every 3 years", "Manure annually"**

The cost associated with this could be prohibitive for many.

This should only be required if you are required to have NMP because there was a failure of compliancy with the RAP's.

**Sec 5 5.4(c) "Cover crop, Broadcast by Sept15th Drill by Oct 1<sup>st</sup>"**

Many Farms, if not are farms in central VT can be still harvesting by Oct 1<sup>st</sup> and not even begun by Sept 15<sup>th</sup>. Many years corn is still standing well into Nov. Selective harvesting to harvest lowlands first my not make sense, moisture levels may not be correct, all of the farms land may be lowlands.

Cover crop application before harvest is expensive and unpractical for small farms.

The most economical way to cover crop is broadcast. Many well established cover crops in central VT can be broadcast and well established if put on in early Nov. Drills are expensive, the WRCD's drill is not very easy to get (impossible).

**Sec 5 5.5(e) " No Manure application if Phosphorus is above 20 ppm and/or slopes exceed 10% with out a 100" buffer"**

On our a farm we did our first NMP in 2008, many of our fields had very minimal to no manure application prior to that plan. 90% of our fields are excessive in phosphorus (see attached field summary). I was told this was due to an aggressive application of cheap or subsidized phosphate in the 40s and 50s.

One set of fields that we farm we know the history quite well, it is the Brassard farm.

Larry Brassard bought this farm from his father in 1969, he farmed it until 1989, at which time he sold the cows and continued to hay. He spread his last load of manure in 89, in the early 2000 we took over cropping the fields, every year up to 2008 hay yields declined almost to the point of it being unviable to continue cropping the land. This the year that we did our first NMP, we had not applied any manure or other inputs at this point. The results of the soil test showed excessive levels of phosphorus, remember no manure had been applied for nearly 20 years. We have since been applying composted manure and wood ash biannually in the fall. Hay yields have double and almost tripled since 2008. But based on your rule we would not be able to apply manure due to the phosphorus levels, this land will be not worth harvesting if we can not apply manure, ( we just need to apply the manure with common sense, as we are now doing to mitigate the risk of runoff).

These same fields also would exceed the 10% slope set back rule two of the fields are long and narrow (see attached map) and have streams on either side of them. They are not even 200' wide, this rule would also not allow us to apply manure, and for the same reasons as stated above, does not make sense. We currently follow a 25' setback from these streams, which makes sense.

The Agency should have the ability to reduce theses Setbacks and 20ppm's if it can be shown that the risk will be minimal.

What will I do with my manure if all my fields are higher then 20ppm?

#### **Sec 5 5.7(c) "50 feet from Private well"**

We have 2 private wells within a pasture, we currently have the fenced 10-15' on either side, we have had no issues with complains In regards to the quality of the water that comes from these wells (ACTUALLY SPRINGS).

Your rule would actually call for 50' on either side. This would account for an area of 100' around the well, that is a huge loss of land for us.(x 2). Leaving it up to the watery supply owner could be troublesome sometime neighbors don't see eye to eye and this could open up doors for someone to cause someone else a hardship. (not the case with us, water supply owners have stated that they are happy with our exclusion efforts)

Your rule might be better if stated as the following, " all private water supplies shall have at least a 12.5' exclusion on all sides, and maybe extended up to 50' if the agency determines a greater exclusion is needed due to water quality issues, no exclusion shall be required if the water supply owner so agrees"

In Summary I would like to say I see the value of a NMP it has helped us identify some useful things on our farm, I just question there need if a problem doesn't exist and the cost that can be associated with them. The requirements that are being proposed in regards to annual certification and training are not fail safes and are no guarantee to better water quality, these could be burdensome and difficult for many. When the rules (RAP's) are final there will be an expectation that they will be followed, if an individual does not, then apply the requirements.

Thank you for considering my input, I would be happy to discuss these concerns in more detail if needed, (preferably in person as I hate typing!)

Justin Poulin

3302 West st

Brookfield, VT 05036

1-802-431-3645



POULIN BEEF FARM, Brookfield VT

Soil Test Results, 9/28/07

Justin Poulin

| Tract | Field Name              | pH  | OM % | P (ppm) | K (ppm) | Mg (ppm) | Al (ppm) | Ca (ppm) | Zn (ppm) | CEC (meq) | Ca:Mg ratio |
|-------|-------------------------|-----|------|---------|---------|----------|----------|----------|----------|-----------|-------------|
| 983   | 1 Garden Pasture        | 6.2 | 4.9  | 4.0     | 56      | 61       | 37       | 917      | 1.3      | 5.2       | 82:9        |
| 983   | 2 East Pasture          | 6.0 | 6.3  | 3.3     | 45      | 47       | 36       | 1219     | 1.1      | 6.6       | 77:5        |
| 983   | 3a Upper Pasture        | 5.7 | 5.5  |         | 51      | 84       | 61       | 739      | 1.2      | 4.5       | 52:10       |
| 983   | 3b Lower Pasture        | 6.0 | 5.4  |         | 49      | 82       | 34       | 1065     | 0.9      | 6.1       | 74:10       |
| 16642 | 1 Hall                  | 5.5 | 5.0  |         | 39      | 61       | 82       | 539      | 1.6      |           | 40:8        |
| 4911  | 1 Tyler south           | 5.2 | 5.0  |         | 47      | 37       | 101      | 390      | 1.9      |           | 27:4        |
| 4911  | 2 Tyler north           | 5.3 | 5.6  |         | 40      | 25       | 112      | 434      | 1.6      |           | 30:3        |
| 16641 | 1 Jones                 | 5.0 | 5.9  |         | 38      | 43       | 70       | 725      | 0.9      | 4.1       | 50:5        |
| 16641 | 2,3,4,5 Williams, Chase | 5.6 | 5.4  |         | 37      | 59       | 67       | 675      | 1.4      | 4.0       | 49:7        |
| 5656  | 1 Rebuilt House         | 5.1 | 5.2  |         | 39      | 22       | 133      | 246      | 1.5      |           | 17:3        |
| 16643 | 1 Ralph Rd              | 5.7 | 4.8  |         | 43      | 59       | 41       | 881      | 1.1      | 5.0       | 63:7        |
| 5463  | 1,2,3 Brassard          | 5.6 | 6.4  |         | 39      | 45       | 67       | 804      | 2.0      | 4.5       | 52:5        |

All fields show low pH, so lime would be beneficial everywhere. The two pastures east of the ridge are "Medium" in soil P, but all other fields are "Excessive"! Almost all fields are "Low" in K, except two of the pastures barely make it into the "Medium" range.

# Environmental Concerns Map

Date: 11/21/2007



Customer(s): Justin Poulin  
District: White River District  
Farm #: 1077 Tract #: 6483

Field Office: Berlin Service Center  
Assisted By: Jason Fleury  
State and County: VT, Orange

T5484

T5483

2

9

## Legend

Tract Boundary

Field Boundary

Surface Water VHD

25' Manure Setback

VT Sig. Wetlands (Class I & II)

Deer Wintering Area

## Orange Biotics

### TYPE

Animal

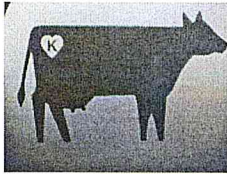
Community

Plant

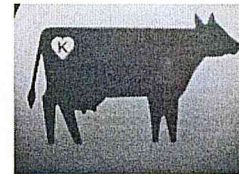
1 inch equals 400 feet



Imagery Year: 2003



# KAYHART BROTHERS LLC



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Vermont Agency of Agriculture, Food, and Markets  
Attn: RAP's  
116 State Street  
Montpelier, VT 05620-2901

To Whom it may concern;

We appreciate the opportunity to comment on the proposed Required Ag Practices. The laws and guidelines that you form will help govern our industry and ensure that the agricultural community is doing their part in improving water quality in Vermont. We feel very strongly that whether a farm is large, medium, or small, we all play a role and have a responsibility. Living on the shores of Lake Champlain we are intimately aware of the beauty of the lake and are very vested in protecting that asset.

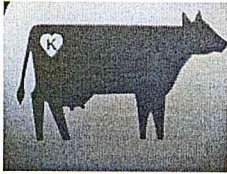
We have gone through the proposed RAP's and will try to outline our comments in areas that we felt were of specific concern.

Section 4.10(f): We understand that it may be a question of manpower but having a goal of inspecting all Small Farms within 10 years seems way too long. If a small farm is not inspected until year 10 and then is given a list of practices to implement, it could be 15 years until any improvements are made. This is way too long. We also feel like the idea of 'self-certification' is a little optimistic at best.

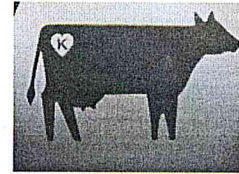
Section 5.2(e): Field stacking of manure. It seems a bit excessive to rotate stacking sites on a 4 year cycle. Approved sites are approved because they are deemed to be in a good location with minimal opportunity to harm groundwater. We are fine with the four year rotation but would like to add that exceptions should be at the discretion of the secretary on a case by case basis.

Section 5.5©: It seems like no two harvest years are the same in Vermont. Some years October 15 may be fine, while other years the harvest season may drag on past this date. Might this be a good opportunity to require manure injection if applied after October 15.

Section 5.5(E): We have a lot of concern over the banning of applying manure to fields that test over 20 ppm of phosphorus. We strongly believe that application rates should be based on science which would include phosphorus indexing and a comprehensive NMP that would ensure nutrient application does not exceed plant uptake. Over 10% of our fields have phosphorus levels in excess of 20ppm. Some of these fields are our most productive. We utilize cover crops and manure injection whenever possible to combat excess phosphorus loss. The fact that some soils are high in P attests to the fact that once applied, it stays there. Some high P soils are the result of parent material of the soil and not the result of excessive application.



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116 State Street  
Montpelier, VT 05620-2901

Section 5.7(ii): Buffer zones and Setbacks This section requires a buffer of 10 feet of perennial vegetation around or by any ditches, swales, intermittent water, etc. In the Champlain Valley in particular there are a lot of "raised bed" fields. These fields have been crowned and are usually constructed to have a lot of narrow strips, between 175 and 200 feet apart. The main purpose is to inhibit ponding and improve drainage. The base of these strips probably should not be called a ditch. With a 180 foot raised bed, you end up with 90 feet on each side of the crown. Because the crops are planted parallel to the length of the bedding system, there is a natural inhibition to soil erosion.

We appreciate the opportunity to comment on the proposed RAP's.

Sincerely,

Stephen Kayhart  
Member, mgr

Timothy Kayhart  
Member, mgr



**Lake Champlain**  
International  
Clean Water. Healthy Fish. Happy People.



December 18, 2015

Vermont Agency of Agriculture, Food, and Markets  
Attn: RAPs  
116 State Street  
Montpelier, Vt 05620-2901

Sent via email to: AGR.RAP@vermont.gov

Dear Agency of Agriculture, Food, and Markets:

These comments on the State of Vermont Agency of Agriculture Food & Markets “Draft Required Agricultural Practices”<sup>1</sup> are offered on behalf of the citizen members of the undersigned organizations. Consistent with the federal Clean Water Act, Vermont’s Water Quality Standards, and Vermont’s Water Pollution Control law—as recently amended by Act 64—we recognize that a swimmable, fishable, and drinkable Lake Champlain is the only option.<sup>2</sup> Vermont must lead the way toward policies that ensure that the process of growing our food does not end up poisoning our water. This isn’t just an ecological and legal imperative; it is also an economic necessity that includes a financially healthy and sustainable agricultural sector.<sup>3</sup> We have a long way to go and we are not moving nearly fast enough.

### AAF&M Must Not Continue to Unnecessarily Delay Adoption of Long-Overdue Enhancements to Agricultural Pollution Control

Overhaul of the Accepted Agricultural Practices is a welcome, important, and overdue step. By opting for two lengthy, unnecessary rounds of pre-rulemaking comment on the Draft RAPs, AAF&M is inexcusably delaying the adoption and implementation of badly-needed pollution control measures. Because it could have and should have adopted these changes years ago, AAF&M must now move swiftly to strengthen, finalize, and enforce more effective regulations. The following chronology underscores our concern.

In January 2013, pursuant to the mandate of 2012’s Act 138, the Vermont Department of Conservation delivered a “Water Quality Remediation, Implementation, and Funding Report, Part I” to the Vermont legislature (the “Act 138 Report”). In the report’s introduction, Vermont Agency of Agriculture Food and Markets staffer Laura DiPietro is credited with being a “principal author” and the Agency as a whole is credited for providing “technical input.” The Act 138 Report is notable because it recognizes that the AAPs fall short of living up to their pollution control potential and

<sup>1</sup> Hereinafter referred to as “Draft RAPs.”

<sup>2</sup> See 33 U.S.C. § 1251(a)(2) (establishing national goal that “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983.”); 2015 No. 64 § 1(a)(3) (“The federal Clean Water Act and the Vermont Water Quality Standards require that waters in the State shall not be degraded”)

<sup>3</sup> For a more complete discussion of this issue, please see “Building a Clean Water Economy”

<http://www.rutlandherald.com/article/20151213/OPINION06/151219836/1018/OPINION>

*... because a swimmable, drinkable, fishable Lake Champlain is the only acceptable option*

proposes several specific enhancements that are now—nearly three years later—contained in the “pre-rulemaking” Draft RAPs. These include:

- Livestock exclusion from streams
- Cover crop and buffer requirements
- Nutrient management planning for small farms
- Mandatory farm self-certification of compliance
- Mandatory continuing education classes for farmers

Most tellingly, the report recommends that AAF&M “[m]odify the AAPs to reflect new knowledge, technology, and provide better guidance in an effort to achieve a higher level of compliance.”<sup>4</sup>

In November 2013, “to ultimately achieve a clean Lake Champlain and to provide reasonable assurances in the new Lake Champlain TMDL, the Vermont Agencies of Natural Resources and Agriculture, Food, and Markets” proposed a “set of policy commitments for consideration.”<sup>5</sup> Like the multi-faceted Act 138 report, the comprehensive “Proposal” commitments included detailed recommendations for improvements to the clearly-inadequate AAPs. As the excerpt below demonstrates, these closely track the Agency’s latest draft-for-discussion proposals:

Vermont recognizes that further reductions of agricultural nonpoint source pollution will necessitate the following actions pertaining to the AAPs to reduce water pollution and achieve a more consistent and equitable regulatory environment for all farms:

1. Modify the AAPs Rule and Implementation Strategies to:

a. Conduct whole farm inspections of small farm to improve overall AAP compliance;

b. Initiate an AAP compliance certification process for all small farms;

c. Include additional and improved farming management practices on lands planted to annual crops, such as a minimum 25 foot vegetated buffers (in grass or trees) along all perennial streams and 10-foot vegetated buffers (in grass or trees) along field ditches;

d. Include a requirement for all farms to complete a nutrient management plan (NMP) matrix, which will direct farms that meet a specific threshold to develop and implement a 590 NRCS standard NMP;

e. Include a requirement to stabilize field gully erosion caused by site-specific agricultural management practices;

f. Explicitly exclude livestock from perennial streams where erosion is prevalent and in all production areas (see livestock exclusion program below);

g. Improve soil quality, further reduce soil loss, and decrease the impacts of soil erosion on water quality by: adopting a standard less than or equal to an average soil loss tolerance of “T,” as defined by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), for the prevalent soil type and applied to all farm fields in annual crop production;<sup>6</sup>

The Vermont Proposal for a Clean Lake Champlain goes on to spell out details of each of the foregoing “actions pertaining to the AAPs” and those details largely reflect the substance of the Draft RAPs. The Proposal indicates that the agencies “expect that these proposed policies will be discussed and refined during the coming months.” More than

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<sup>4</sup> Act 138 Report at 16.

<sup>5</sup> State of Vermont Proposal for a Clean Lake Champlain, Draft for Discussion at 3, hereinafter “Proposal” (Nov. 20, 2013).

<sup>6</sup> Proposal at 6-7.

twenty-four months have passed, there has been plenty of discussion but not much in the way of evident refinement has occurred, and the Agency still has not committed to a formal proposal for rulemaking.

Finally, in May 2014, Vermont submitted its “Lake Champlain Phosphorus TMDL Phase 1 Implementation Plan.” It also includes several pages of discussion of proposed measures that are nearly identical to those included in the Draft RAPs. Furthermore, it indicates that “[t]he following actions related to the AAPs will require rulemaking, a process which will take approximately 12 months, and would be initiated in the fall of 2014 with an expected implementation date of winter 2015-16.”<sup>7</sup>

We appreciate the Agency’s commitment to public input. Our staff and members have taken advantage of the many chances to comment on long overdue improvements to existing water pollution control regulations. In fact, since the proposals reflected in the Draft RAPs were first put forth in the Act 138 Report, then fleshed out further in the “Proposal for a Clean Lake Champlain” more than two years ago and again in the 2014 Phase I Implementation Plan, the public has had no fewer than 37 opportunities to attend meetings and provide comment (14 on the Act 138 report<sup>8</sup> and 23 more since the 2013 draft Proposal<sup>9</sup>). This number does not include the numerous hearings focused specifically on AAP reform during last year’s Act 64 debate in the legislature or the additional 10 meetings on the pre-rulemaking Draft RAPs themselves.

At a certain point public process can morph into counterproductive delay. We have now reached that point and, rather than continue in the legal limbo land of pre-rulemaking, AAF&M must act. In light of the foregoing history, there is no argument that the RAPs are not ripe for finalization through formal rulemaking which already includes mandatory opportunities for public comment and allows the agency to make changes to its proposed rule in response.<sup>10</sup> We, therefore, formally call for AAF&M to abandon its plan for a second pre-rulemaking comment period and to accelerate the initiation and completion of formal rulemaking so that enhanced pollution control measures are being implemented and enforced without further delay.

### Vermont Policy Should Focus on Building Healthy Soils Rather Than Tolerating an Unacceptable Level of Annual Soil Loss

The loss of nutrient-laden soils from farm fields chokes habitat and seeds toxic cyanobacteria blooms. This erosion is a substantial part of Vermont’s water pollution problem. Fortunately, preventing soil loss is one of many ways in which what is best for clean water (and climate change reduction efforts) is also best for the farm economy in the long term.

For these reasons, we strongly support the AAFM’s proposal to lower the 2T standard of acceptable average annual soil loss allowed by the AAPs.<sup>11</sup> Unfortunately, the proposal in RAP § 5.4(b), to require that farmers cultivate cropland to achieve “less than or equal to the soil loss tolerance (T),” may not go far enough.<sup>12</sup> The Act 138 Report, authored by Agency of Natural Resources and AAF&M personnel, explains that “Managing to T... is not tied to water quality protection” and “would equate to some accepted annual loss of soil and associated nutrients at the farm.”<sup>13</sup> Given the dire condition of Lake Champlain and the dramatic and unprecedented reductions needed from farms, we cannot afford to continue accepting loss of soil and nutrients from Vermont farms year in and year out.

In fact, the Act 138 Report recognizes further that nutrient management planning based on NRCS standards, such as those required for Certified Small Farm Operations under RAP § 5.4(a), “is an agronomic tool, originally designed to

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<sup>7</sup> State of Vermont Lake Champlain Phosphorus TMDL Phase 1 Implementation Plan, hereinafter “Phase I Plan” at 71 (Emphasis added). <http://www.watershedmanagement.vt.gov/erp/champlain/docs/LCTMDLphase1plan.pdf#zoom=100>

<sup>8</sup> See Table “UPDATED Consultation Meetings to Prepare the Vermont Statewide Water Quality Trust Fund Report, 2012” at <http://www.watershedmanagement.vt.gov/erp/htm/annualreports.htm>

<sup>9</sup> <http://www.watershedmanagement.vt.gov/erp/champlain/docs/2015-09-25-Updated-Timeline.pdf>

<sup>10</sup> 3 V.S.A. § 840 (setting forth robust requirements for public notice and comment during formal rulemaking process)

<sup>11</sup> Vermont Agency of Agriculture Food & Markets, Accepted Agricultural Practices § 4.04 *Soil Cultivation* (2006)

<sup>12</sup> Emphasis added.

<sup>13</sup> Act 138 report at 15

optimize nutrient application and utilization as part of a cropping system. It was not explicitly intended to be a water quality tool.”<sup>14</sup> For that reason, the Act 138 Report recommends that:

Vermont should investigate water quality-based alternative nutrient management planning approaches that could be tied into the state’s agricultural regulations (Medium Farm Operations (MFO), Large Farm Operations (LFO),<sup>27</sup> and AAF&Ms), such as alternatives to management based on soil loss tolerance, T. Further justification for an alternative approach is the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)’s movement towards new soil loss tolerance factors for the Universal Soil Loss Equation. The anticipated change in these factors may result in changes in land use practices on highly erodible soils that increase the potential for erosion.<sup>15</sup>

It seems unwise, therefore, to peg state erosion and nutrient pollution prevention measures to an approach that is not designed to protect water quality and a standard controlled by a federal agency that has recently considered weakening it.

Draft RAP Section 5.4 recognizes states that “[s]oil management activities that increase organic matter, reduce compaction, promote biological activity, reduce erosion and maintain nutrient levels are recommended in order to provide long term sustainability of agricultural soils.” It includes examples of several such practices. The “R” in RAPs stands for required, not “recommended.” Given AAF&Ms acknowledgment of the benefits flowing from these practices, especially in accomplishing key pollution prevention objectives of reducing erosion and maintaining nutrient levels, the final RAPs should require rather than simply recommend these practices.

#### The RAPs Should Provide Clearer, Stronger, More Easily-Enforceable Waste Management Requirements

Preventing “agricultural wastes including chemicals, petroleum products, containers, and carcasses” from impacting surface of groundwater is a common-sense, bare minimum requirement. Section 5.2(b) establishes this requirement by calling for “proper” storage, handling, and disposal. Unfortunately, it provides no further guidance as to what is “proper” as regards each of these different categories of waste. The RAPs should provide clearer, waste-specific guidance to ensure that farmers understand their obligations clearly and that regulatory personnel have a clearer standard for enforcement purposes.

A stronger preventative approach to manure and other waste storage is also called for. Draft RAP § 5.2(c) requires maintenance of at least 1 foot of freeboard in waste storage facilities at all times. New York takes a more precautionary approach that Vermont should follow. Specifically: “The NYS DEC requires a depth marker or staff gauge marking the maximum fill mark in a manure storage; with an appropriate freeboard of 1 foot plus the amount of precipitation from a 25-year, 24 hour storm event. The freeboard provides extra storage capacity in the event of a large rainfall event or other emergency situations.”<sup>16</sup> Vermont requirements on this aspect waste storage should mirror the more conservative New York Standard, especially in light of the increasing risk of extreme precipitation events resulting from ongoing climate change.

#### The RAPs should require tracking of cropland and fields subject to flooding.

We support the Draft RAPs’ requirement of cover crops in “annual croplands subject to flooding from adjacent surface waters.” This is a proven method for reducing erosion and nutrient loss from flooding. Similarly, we support Draft RAP § 5.5(c)’s prohibition on spreading manure on flood-prone fields during times of high flood risk. Given the small number of enforcement personnel relative to the large number of farms subject to the RAPs, AAF&M should require farmers, under penalty of perjury, to identify those fields within the ambit of 5.4(c) and 5.5(c) as part of the certification process established under Section 4. AAF&M can then use this data to create maps that its inspectors and members of the public can use to more easily monitor compliance with the cover cropping and spreading ban requirements.

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<sup>14</sup> Act 138 report at 15

<sup>15</sup> Id. (Emphasis added)

<sup>16</sup> New York State Department of Agriculture and Markets, Agricultural Environmental Management Information Sheet: Fertilizer and Manure Storage <http://www.nys-soilandwater.org/aem/forms/AEMInfoManFertStorage.pdf>



The RAPs should Set Forth Stronger Buffer Definition for Manure Spreading Restrictions

Section 5.5(e)(2) fails to define what type of permanently vegetated buffer must be present to allow spreading on fields with slopes exceeding 10%. If AAF&M intends this to include forested buffers, rather than grassed buffers, then 100 feet is an inadequate buffer size on a heavily sloped field. Many forested areas consist of bare dirt at the surface level, providing little to slow or absorb surface flow of manure from upslope fields. Moreover forested areas also typically lack canopy during early spring and late fall—times of the year coinciding with intensive manure spreading. In these instances, the RAPs should therefore require either a grass buffer separating the field and the forest or a forested buffer of at least 250 feet.

Conclusion

There is near-universal agreement that the status quo of agricultural water quality regulation is not working. We urge AAF&M to weigh, expeditiously, all of the comments expressed or incorporated by reference here, to dispense with yet another unnecessary round of informal process, and to move forward as soon as possible with a stronger proposal in formal rulemaking.<sup>17</sup>

Thank you for considering these comments.

Sincerely,



Anthony Iarrapino, Esq.  
Michelsen Iarrapino PC  
*Counsel for Lake Champlain International*



Rebekah Webber  
Conservation Law Foundation  
*Lake Champlain Lakekeeper*



James Ehlers  
Lake Champlain International  
*Executive Director*



David Deen  
Connecticut River Watershed Council  
*Upper Valley River Steward*

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<sup>17</sup> In addition to the joint comments set forth above, LCI herein expresses its support for the separate technical comments contained in the letter submitted by the Conservation Law Foundation and the Connecticut River Watershed Council. LCI especially appreciates and underscores the concerns of those partner organizations regarding the Draft RAPs unlawful attempts to limit the universe of farms to which they apply and to create a presumption of no discharge for farms complying with the as-yet unproven pre-rulemaking, discussion-draft RAPs. Similarly, LCI supports concerns about the limited frequency of planned inspections, the inadequacy of buffer distances for all fields, and the failure of the Draft RAPs to provide for effective livestock exclusion from surface waters as envisioned by Act 64.

### **General comments**

The proposed RAPs are a major step in the right direction compared to the AAPs they replace.

A couple of most significant observations:

- No mention of biosolids; it's possible that other VT regs are adequate, but wonder if they need to be mentioned
- I think the provisions requiring record keeping and reporting for nutrient management need to be strengthened. The only way to document actual implementation of NM is through such records
- Section 5.4 on soil health mentions maintaining soil nutrient levels. Where soil P levels are already excessive, the goal is not to maintain, but bring down into more optimum range. RAPs should reflect this possibility
- Section 5.4 re: cover crops – the criterion should be establishment of an effective cover crop, not just seeding
- I would like to see a bit more stringent requirements for getting an exemption to winter spreading prohibition to make sure that someone is not seeking frequent waivers for self-inflicted issues (e.g., undersized or poorly managed storage structure)
- Livestock exclusion applicability needs clarification – currently applies to “production area” which do not appear to include pasture/grazing land. Hopefully, this includes pasture
- Provisions for training and responsibility of custom applicators need to be clarified so that they apply to anyone who actually does the applying, not just the business owner or boss.

### **Specific issues**

p. 1 Applicability

line 7 why is the word “control” used instead of “prevent”? The word “control” could be interpreted to mean regulate the rate of or influence the path of pollutants, rather than prevent the pollutants from entering water.

p. 1 Section 1.1 Purpose

line 3 refers only to “nutrient losses” Are sediment losses excluded from consideration? What about agchemicals?

p. 2 2. Definitions

2.04 definition of cover crop refers only to erosion/runoff control and adding OM to cropland. Should include uptake of excess nutrients remaining in soil after crop harvest to purpose/definition.

p. 3

2.17 Definition of manure should include silage leachate in “may also contain.....”

p. 4

2.25 Definition of small farm – unless it’s always implicit in rules like this, should make clear that parts (a) through (d) are “OR” rather than “AND” i.e., a property meets the requirements for small farm if it satisfies any one of the listed criteria

p. 5

2.28 Definition of Waste Management System – part 1 should define “adequately sized” storage. Does this mean adequately sized by NRCS design standards? Other standards? Sized to contain how many days of manure production + precipitation + freeboard?

p. 8 4.12 b Training

Requirement for 4 hours of training every 5 years seems very small and probably inadequate

p. 9 5.2 (c) (d) Waste storage facilities

Except (d) for facilities constructed, expanded, modified after 2006, no mention or implication of size requirements, i.e., number of days of waste to be stored.

p. 9-10 5.2 (e) Field stacking

There appears to be a conflict between ii.b. minimum setback of 200 ft from surface waters and and 200 ft from private water supplies and part vi “Other site specific standards.....in no case shall unimproved manure stacking sites be located less than 100 feet from a private water supplies [sic] or surface water.”

p. 10 5.3 Nutrient Management Planning

(b) “...all sources of nutrients shall be accounted for...” Should spell this out more specifically to include sources like existing soil nutrients (soil test), legume contribution, N mineralization from past manure apps, etc. Otherwise, “all sources” could just be interpreted as manure and commercial fertilizer.

p. 10 5.4 Soil Health....

(a) “...maintain nutrient levels...” What about when nutrient levels (e.g., P) are already excessive? Goal should not be to maintain those. Add qualifier like “agronomic” or “appropriate” or “acceptable”

p. 11 5.4

(c) cover crop – these requirements speak only to seeding, not to establishment of an effective cover crop. Can there be a requirement (with exceptions/waivers due to extreme weather perhaps) that an effective cover crop is actually established??

p. 11 5.5 Manure and Waste Application Standards

(c) manure not spread on fields subject to flooding. Would like to see similar provision for extension of the date window by the Secretary as given in (b).

p. 11

(e) might want to specify the soil test P criterion as determined by Modified Morgan method as recommended by UVM

(e) what is relationship of this section with part (b)? Does (e) mean that even outside the dates specified in (b) manure is not to be spread on saturated or frozen/snow-covered ground? I certainly agree with that interpretation, but perhaps it should be clarified.

p. 12

(g) Can it be made clear that this record-keeping requirement is required for all fields receiving manure and that it applies to the farm/field regardless of whether application is by landowner or contractor?

p. 12 5.6 Winter Manure Spreading Exemptions

I strongly believe that the requirements for (a) should include a justification for the request (e.g., bad weather prevented full fall application, unavoidable mechanical breakdown of waste management system). The purpose of such a provision would be: (a) prevent easy or excessively liberal exemptions granted pro forma by Secretary; (b) identify cases where producer regularly applies for exemption for reasons of their own making; and (c) help note cases where additional work needs to be done on the farm (e.g., repeated requests for exemption due to “pit overflowing” would indicate undersized pit.

(b)vi if saturated soils are excluded why not also exclude frozen soils??

p. 13 5.7 Buffer Zones and Setbacks

(b) is this (or most of this) section really necessary? Prohibits manure/waste application within 25 ft of sw or 10 ft of intermittent waters – this is already accomplished by parts i and ii requiring same buffer widths, plus part iii prohibiting manure/waste application within the buffer. May need to keep “applied in such a manner as to enter surface water or intermittent waters.”

p. 14 6.0 Livestock Exclusion Standards

(a) It is not clear that this applies to pasture land. Part (a) refers to “production area” and definition of production area in Section 2 does not appear to include pasture or grazing land. This should at least be clarified but I strongly urge that it apply to true pasture land

(a)i “defined” is pretty nonspecific. Producer could “define” entire stream course through property as a crossing or watering area. Somehow need to restrict this to limit potential extent of such areas.

p. 17 10.0 Custom Manure Applicator Certification

(b) How and to whom will custom applicators demonstrate knowledge of RAPs and 590?

p. 17-18

(c) Strongly advise that demonstration of knowledge and competency be through **passing** a written test, not just taking one and not just attendance at a training.

p. 18

(d) what’s the difference between a “certified custom applicator” and “employees and seasonal workers” Shouldn’t the person driving the manure spreader be required to meet standards of

knowledge and competency in (c), whether they're the business owner, the boss, an employee, or a seasonal worker?

Don Meals  
84 Caroline St.  
Burlington, VT 05401

DECEMBER 18, 2015

**Vermont Department of Agriculture**

116 State Street

Montpelier, VT 05602

To Whom It May Concern,

I'm a fifth generation dairy farmer working, nurturing and improving land that has been in the family since 1876. We are milking more cows now than the family did 'way back when', but one thing that hasn't changed is our commitment to good management practices with our land and animals (horses and cows). We've been doing this long before it was a fancy word in Montpelier. We have been increasing yields from our land and cows to insure a profitable dairy farm that will be here to continue for generations to come. We've done it this by using on farm nutrients in a responsible manner by using AAPs. Our family farm has been protecting and preserving our natural resources (land and water) not for years or decades, but for generations.

There were no sewage treatment plants in Vermont until the late 1950s/early 1960s. Towns and cities, such as St Albans, Burlington, Winooski, Swanton and Montpelier to name a few, flushed raw sewage into Lake Champlain for decades. St. Albans turned 200 years old last year, big wonder why St. Albans Bay turns green in the summer.

So now the Governor, the Secretary of Agriculture, etc. squarely blame dairy for the lake problems, particularly Missisquoi and St Albans Bays. It's hard for me to take credit for the lake and bay problems. I'll refer the Secretary and Governor to read *The Sewers of 1913* in the Saturday, May 30, 2015 edition of the St. Albans Messenger. I guess we've come full circle for the farmers to get all the credit for lake problems.

In the 45 years that I've milked cows, this administration has the reputation of the worst for support and trust among dairy farmers. These new RAPs, as written, will put more dairy farmers out of business than bulk tanks did in the 1960s. Congratulations!

If the State of Vermont and Federal Government continue to ignore the legacy phosphorus in the bays, then new RAPs aren't going to do anything to improve the lake in our lifetime. But the Agency already knows this!

Section 1 General comment

When I read that the Secretary of Agriculture wants the power to come into my barn and remove cows from it, I ask myself "What country are we in? USA?"

Section 1.3 Enforcement

The best to prevent correction of a problem are is to fine or penalize by taking the farm out of Current Use then the farm has less dollars to use for correction.

Section 2.15 Intermittent Waters

Define ditches & water channels. A swale is not a ditch therefore it can't be considered as intermittent water or ditch. Definition is too broad; it covers concentrated flows that have little to no significant phosphorus added to surface water.

Section 3 General comment

I don't think the Department should use resource dollars as manpower to control what our local town Select Board, etc. do for a meager stipend. In other words, tax free.

Section 5.2 (d)

Before the State comes on a farm, any farm, to demand manure storage structure be moved, lined or redone at great expense to taxpayers (cost share) and the farmer, the State should be required to drill test wells to prove the structure is deficient.

Section 5.2 (e) iii

Most farms that stack manure in Vermont don't have four (4) good locations to get off the road in the winter time (deep snow). This is an undue burden.

Section 5.2 (e) iv

180 days is unnecessary; stacked manure turns to compost if not disturbed and is no threat to water quality.

Section 5.4 (c)

There are 1000s more acres of cover crops today that there were 5 years ago. Putting deadlines on a good practice is stupid. A lot of corn is harvested in October, after October 1, to get proper starch levels. Broadcast cover crops get best results. It is stupid to loosen soil in the fall and cause more erosion.

Section 5.5 (a)

The Secretary of Agriculture and the Department missed an opportunity to build trust within the dairy industry. This year, December 15<sup>th</sup> deadlines should have been lifted, extended for 5 days, once, maybe twice, because the bare, unfrozen ground is no different today that on October 15<sup>th</sup> or November 15<sup>th</sup>. A good faith action when 99% of field work was done anyways would not have harmed water quality. April 1 and December 15 are arbitrary dates.

Section 5.5 (e) i

Excessive in soil test phosphorus (> 20 ppm which equates to 10 lbs. per acre). Corn requires 114 lbs. per acre; cotton requires 63 lbs. per acre; oats require 40 lbs. per acre; alfalfa requires 120 lbs. per acre. How will Vermont dairy farmers continue to survive if they can't use this nutrient to grow a crop of corn or alfalfa? The standard should probable by 200 ppm.

Section 5.7 (a) ii

Should say "intermittent water shall be buffered from annual crop land by 10 feet with vegetation."

Section 9.0 Construction of Farm Structures

Local Boards should oversee this.

Respectfully submitted,

**Michael Howrigan**

18 December 2015

Dear Secretary Ross,

Thank you for this opportunity to comment on VAAFMs first draft of the Required Agricultural Practices (RAPs). We appreciate all of the effort that has gone into writing these rules thus far, as well as the Agency's extensive efforts to gather public input.

It is very important to NOFA-VT and the hundreds of farmers with whom we work that these rules accomplish the state's water quality goals while avoiding undue negative impacts to farm viability and maintaining sufficient flexibility to account for the diversity of farming operations in Vermont.

### General Comments

- Different categories/sizes of small farms need to be more clearly define and delineated according to how they are covered/not covered by the RAPs. We support the following definitions, as suggested by Vern Grubinger, or a similar set of definitions, and ask that they be included in the definitions section and used accordingly throughout the text of the rules:
  - *Very Small Farms contain more than 4 but less than 10 acres of actively farmed land, per section 2.25 a., and have generated an average gross income of \$2,000 or more over the previous three calendar years. Very Small Farms must comply with this Rule but do not have to file an annual certification of compliance. On a case-by-case basis the Secretary may require that such a farm file certification of compliance if the evidence suggests, and a public hearing confirms, that the farm is engaged in practices that threaten surface or ground water quality.*
  - *Certified Small Farms contain more than 10 acres of actively farmed land, and they exceed the minimum number of animal units described in section 2.25b, and/or they will use more than 1 ton, or 3 cubic yards, of manure and/or animal-based compost on any single acre of their farmland in the current calendar year. Certified Small Farms must comply with this Rule and certify their compliance annually.*
  - *Uncertified Small Farms contain more than 10 acres of actively farmed land and they will not use more than 2 tons, or 6 cubic yards, of manure and/or animal-based compost, on any single acre in the current calendar year. Uncertified Small Farms must comply with this Rule but are not required to certify their compliance annually. The Secretary may require that they file certification of compliance if the evidence suggests, and a public hearing confirms, that they are engaged in practices that threaten surface or groundwater quality.*
- VAAFMs should develop broader-reaching and more consistent methods of communicating with farmers about updates and changes to specific requirements. Small farm certification could facilitate communication with Certified Small Farms if the Agency were to request certain current contact information for farms when they submit certification of compliance with RAPs annually. For example, how will the Agency communicate changes to winter spreading bans if the ban starts *earlier* in a given year due to unusual weather patterns, etc.?



- In sections of the RAPs where the Secretary is given authority to make exceptions or bring farms into compliance on a case-by-case basis, the conditions and procedures required for such exceptions need to be clarified. For example, section 5.2(e)(vi) gives the Secretary authority to approve site-specific standards for manure stacking. What are the conditions and procedures for this approval?
- In general (and especially in Sections 2.25, 3.1, and 4) the rules need to clarify who is responsible for certifying compliance (i.e. the landowner or the lessee). For example, if a landowner leases 50 acres to a farmer and that landowner makes over \$2000 in income from that lease, would they be considered a “farm” under section 3.1, even though they’re not actively farming the land? For Small Farms (as defined in section 2.25) under section 4.1, would the landowner and/or the lessee be responsible for certifying compliance with RAPs annually?

## Comments by Section

### Section 2: Definitions

- Section 2.05: The current definition of “Cropland” doesn’t include perennial crops, only row crops and annuals.
- Definitions of various wastes (manure, compost, fertilizer, etc.) should be clarified and used more consistently throughout the RAPs. NOFA-VT supports Vern’s suggested definitions, which include the following:
  - Animal mortalities: *any part of dead animals.*
  - Manure: *animal excrement, i.e. urine and/or feces, with or without bedding.*
  - Compost: *well-decomposed organic (carbon-containing) materials that have been heated to at least 131° F for a minimum of 3 days, in a pile or windrow that has been mixed or managed to ensure that all materials heat to the minimum temperature. If made in a vessel or in a static pile then the minimum temperature must be maintained throughout the compost by using some form of agitation or forced aeration. (This is consistent with the National Organic Program’s standards.)*
  - Fertilizer: *plant nutrients other than those from compost or manure, including synthetic and organic sources of nutrients, and bulk soil amendments such as lime and wood ash. Some fertilizers may be made from, or contain, animal-based compost (e.g. heat-treated poultry manure, worm castings, etc.) or be made from or contain a form of an animal mortality (e.g. blood meal, bone meal, crab meal, feather meal, fish meal, etc.) For the purposes of this Rule, to be considered a fertilizer a product containing any manure and/or animal mortalities must have an overall C:N ratio of less than 10, otherwise it will be considered to be a manure, animal mortality or a combination of the two. (Add appendix with list of organic fertilizers and their C:N ratios.)*
  - Livestock Waste: *any combination of manure, animal-based compost, and/or animal mortalities.*

- Section 2.25(a): Clarify what would be considered areas *not* actively used for farming and therefore not included in the 10-acre calculation (e.g. wetlands, woodlands (but not sugarbushes), abandoned fields, or areas used for retail sales of agricultural products such as a farm stand and its associated parking lot).
- Sections 2.25(b): Minimum thresholds for animal numbers should be changed to equivalent animal units to address varying combinations of different animal species. The way this section is currently written doesn't appropriately address diversified farming operations with different types of livestock.

### Section 3: Required Agricultural Practices Activities

- Section 3.1(b): \$2,000 annual income threshold seems very low to bring an operation under the farm definition considering that, for example, the sale of a single animal could easily reach the \$2000 threshold. Acknowledging that this figure is taken from certain standards related to current use, perhaps the minimum threshold for the purposes of defining a "farm" could instead be based on the amount of income claimed on the 1040F. The minimum threshold for farms under organic certification, for example, is \$5000 annually.
- Section 3.1(c): Same comment as section 2.25(a) above: Minimum thresholds for animal numbers should be changed to equivalent animal units to address varying combinations of different animal species. The way this section is currently written doesn't clearly or appropriately address diversified farming operations with different types of livestock.

### Section 4: Small Farm Certification

- Section 4.1(c): 30 days is not enough time to notify the Secretary of lease/land ownership changes and to certify compliance. We estimate approximately 85% of certified organic dairy and livestock farms have lease/land ownership changes annually. Notification of lease and land ownership changes and updated certification of compliance should be submitted along with annual certification of compliance with RAPs.
- Section 4.1(f): Specify who may conduct small farm inspections, and allow for inspections required under this section to be completed in combination with partner organizations' inspections (such as Vermont Organic Farmers' annual inspections of certified organic farms), as deemed appropriate by the Secretary. Any opportunities to combine inspections required by these rules with other inspections already taking place on farms will streamline the inspection process and significantly reduce the administrative burden on the Agency as well as the burden on farmers.
- Section 4.12(a): Specify who may provide farm operator training, including partner organizations as approved by the Secretary. More clarity is needed in general around pay structure and other requirements for farm operator training. For example, will there be limitations around financing training opportunities provided by partners (e.g. if NOFA-VT/VOF were to provide farm operator trainings, would we be allowed to charge a fee to cover costs)?
- Section 4.12(b): Is it sufficient for one person per farm to complete the training every 5 years?

## Section 5: RAPs Conditions, Restrictions, and Operating Standards

- 5.2(d): Need to clarify whether the requirements around design and construction of waste storage facilities refer to current NRCS standards or 2006 standards, if they have changed. If a facility was designed and constructed according to NRCS standards after 2006 (but prior to the promulgation of these rules), is it still considered approved?
- 5.2(e): Need to clarify what constitutes an “improved” site. For example, is laying gravel down considered “improving” a site?
- 5.2(e)(ii)a: The minimum setback for property lines should stay the same as specified in the AAPs (i.e. 100 ft.), as increasing this setback has no inherent positive impact on water quality.
- 5.2(e)(iv): What is considered a “location” for the purposes of moving field stacks every 180 days and not placing field stacks in the same location more than once every 4 years? Moving field stacks every 180 days may actually increase overall compaction, and may not allow managed compost piles to fully decompose, depending on time of year and temperatures.
- Section 5.3: What is the time period for compliance with NMP standards? Will small farms have a similar timeframe allotted to MFOs to complete nutrient management planning (i.e. 3-4 years)? Has the agency analyzed the number of small farms needing to complete NMPs compared with the number of approved Technical Service Providers (TSPs) providing nutrient management planning assistance to attain whether this is achievable in a given timeframe? We are concerned that the NRCS 590 standard may be too expensive (even with cost-share funding, due to the up-front costs to farmers) and require too much time away from the farm for smaller operations. We recommend a more flexible standard, which could include a standard developed by UVM Extension, or the option to complete NRCS Conservation Activity Plans (CAPs). Our understanding is that CAPs are required to meet state (as opposed to USDA) 590 standards, which may be less burdensome, while still allowing producers to receive cost share funding.
- Section 5.3(c): Manure testing should be done every 3 years along with soils.
- Section 5.4: Change title to “Soil Health Management Requirements” or “Erosion Control Requirements.”
- Delete 5.4(a).
- Section 5.4(c): The suggested deadlines for planting cover crops are unrealistic and don’t account for statewide variability in climate. Some farmers still have regular season crops in the ground through Oct. 1 or longer, including cold season vegetable crops and long-season field corn. In particular, the rules should provide alternative erosion prevention options for farms where long-season, cold-tolerant crops (such as kale or spinach) preclude the planting of cover crops. This section should also provide specific parameters for what will be considered “annual croplands subject to flooding” (e.g. based on National Flood Insurance maps).

- Section 5.5: Need to clarify that animal grazing does not constitute manure spreading for the purposes of the winter spreading ban.
- 5.5(b): How will the Agency communicate changes to spreading ban dates?
- 5.5(e): Wouldn't these parameters be included in a nutrient management plan? Manure should be applied according to NMPs.
- 5.5(g)(a - e) should be 5.5(g)(i - v)
- 5.5(g)(e/v): The Agency should refer to existing weather records (e.g. from NOAA) for given time periods rather than asking farmers to document weather. Weather records at the time of application could be meaningless or misleading if taken out of context (e.g. if the weather is clear on the day of application but downpours and floods the next day). Recordkeeping expectations will need to be clearly communicated, as many producers aren't currently maintaining these records.

#### Section 6: Livestock Exclusion Standards

- Section 6.0: Needs clarification generally. What is the deadline for compliance with these requirements? Is there a minimum threshold for the number of animals that must be excluded from a given waterway at one time? What about 1 or 2 animals?
- Livestock exclusion will present a significant cost for many producers. Of 209 certified organic dairy/livestock farms, 97 reported using some form of the following for a livestock water source (which to our understanding would be classified as "surface waters"): ponds, streams, springs, and/or rivers. However, our records show that the vast majority of farms have already taken some measures to exclude livestock from waterways. Of the 285 farms reporting using pastures for livestock (certified and uncertified) 282 farm operations have reported taking at least one of the following measures to protect waterways and sensitive riparian habitats: Limit access with fencing, Using designated crossings and drinking areas, Feeding animals away from water sources, Limit time livestock accessing waterways.
- 6.0(a)(i): What are the specific requirements for "defined livestock crossings or defined watering areas"?
- 6.0(a)(ii): How frequently must grazing plans be updated? In our experience, most farmers don't update grazing plans often if ever, once established. Requirements for plans to be updated regularly would add a significant burden for farmers.
- 6.0(a)(iv): What is considered "adequate vegetative cover"?

#### Section 10: Custom Manure Applicator Certification

- 10(f): Why are custom manure applicators required to complete 8 hours of training as compared to 4 hours for farm operators? We recommend allowing custom applicators to take the same 4-hour training as farm operators. This would streamline and simplify the training process statewide while ensuring that farm operators and applicators are receiving the same information during trainings.



# WHITE RIVER NATURAL RESOURCES CONSERVATION DISTRICT

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whiterivernrcd@gmail.com ~ 802-295-7942 x 112

VAAMF  
Montpelier, VT  
November 20<sup>th</sup> RAP Focus Group Comments  
Submitted 12/17/15

On behalf of small farmers and landowners in the White River, Basin 14, and Connecticut River watershed, the White River NRCD is submitting a summary of comments on the draft Required Agricultural Practices (RAPs). The White River NRCD collaborated with the Connecticut River Watershed Farmers Alliance and Ryan Patch, VAAMF, to host two focus groups on November 20<sup>th</sup> in Randolph and White River Junction. Between the two meetings, 31 small diverse farmers participated in discussion. Below is a summary of comments collected from the participants.

## **2.25: Small Farm Definitions**

- Animal numbers become confusing. Each variety of livestock has a different number for the small farm definition. For simplicity, replace animal numbers with animal units. This would include all livestock, including small farms with a variety of animals.
- Clarity is needed with the “AND”/ “OR” language regarding small farm definitions. For example, the language for a small farm leads a reader to the understanding that if they have 10 acres or more used for farming AND meet the SFO definitions for animal thresholds they need to certify. There is some confusion over the language of more than 10 acres, such as if a farm has more than 10 acres, but is under the animal threshold, do they need to certify as an SFO? On the flip side there is also confusion and disconnect between identify SFOs regarding no livestock, but managing crop land. Clarity could be through adding in the certified SFO definition: 10+ acres used for cop production with use of manure, wastes, nutrients

## **5.2 Field Stacking Manure On Unimproved Sites**

- ii) The property line setback of 200 feet is extensive. Are property lines water quality concerns? A suggested alternative is allowing flexibility if the farmer has permission from the neighbor.
- ii & iv) Requiring 4 separate stacking areas, and limiting stacking storage to 180 days is a limitation to farm nutrient management. A suggested alternative is to allow NRCS approved field stacking sites for longer and consecutive storage. One good site is better than 3 year of poor siting.

### **5.3 Nutrient Management Planning**

- Extend the sampling schedules such as soil sampling every 5 years. From a farm management perspective this is more practical in time and financial management.

### **5.4 Soil health management recommendations**

- The Connecticut River watershed needs cover cropping assistance to meet these standards.

### **5.5 Manure and Waste Application Standards**

- From a management perspective this section regarding detailed spreading setbacks becomes cumbersome. In Orange and Windsor county, most small farms are hillside and valley farms and would be significantly affected by the 10% slope requirement.
- Monitoring nutrient management based on soil testing becomes a concern for many farms. Questions regarding the environmental relationships with high phosphorus levels rise regarding the manure ban on fields >20ppm phosphorus. Farms with long history of farming or on certain soil types have naturally high phosphorus levels. The nutrient management plans already capture management of these fields in the plan. It is another level of restriction to farms who may already have limited resources.

### **5.6 Winter manure spreading exemptions**

- a) Flexibility is welcomed. One recommendation to minimize paperwork, is to allow the secretary to provide extensions for multiple years. Farmers know their fields best and may have fields with significant distance from surface waters or resource concerns that would benefit from manure exemptions each year.

### **5.7 Buffer Zone setbacks**

- There is concern over the use of fertilizers and lack of definition and recognition of fertilizer use in the buffer area. If manure is not permitted, why is fertilizer permitted? A suggestion is to at least include fertilizer in the definition section and recognize fertilizer as a managed nutrient.

### **Summary:**

Overall, farmers in Orange and Windsor County are engaged in the RAP process. There is much concern that the RAPs and SFO certification will be too burdensome, and small farms will stop farming to the capacity that they could be. Most farmers expressed that they have the best compass for the land they manage equipping them with the ability for judgement. All understand the important of water quality and land management, but are concerned these rules become burdensome for their businesses.

Thank you for carefully considering the feedback from the local farming community.

Public Comment Form for (RAP) draft changes

To: Ryan Patch VT Dept. of Agriculture

From: Justin Poulin Farmer "S

**Sec 3. 3.1c "Farms potential to generate Nutrients"**

How is nutrient defined? Does compost from hay generate nutrients? A clear definition of "nutrients" is needed.

**Sec 4. 4.10(a) "Small Farms Shall annually certify Compliance".**

This is just added paperwork and another hurdle for a farmer to jump, a farmer that is compliant to all the rules (RAP's) but forgets to send in the annual form is now non-compliant!

Just because a farm certifies compliance doesn't assure that it is compliant. Annual Certifying of compliance should only apply to those farms who have problems or have had problems with compliance. If a farm is compliant then it shouldn't have to certify. You may say, "well how will we know if they are compliant"? Answer: "The same way you would know if they are non-compliant".

**Sec 4. 4.10(e) & 4.12(b) "4 hours of training every 5 years"**

Again this rule will not assure anything, I know of people who attend required trainings and forget 90% of what they learned the moment they leave the training session.

This is about following the rules, if a farm is following the rules or practices what is the need for training. If a farm is not following the practices or rules then training should be required.

**Sec5. 5.2(e) "Field Stacking of manure on unimproved sites"**

**i)"Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding"**

This would eliminate most sites on low land farms in central VT.

Some of these flood plan maps are broad blanket areas and don't account for high spots or distances from waterways or water sources that normally would not flood even in high water situations. There very well could be very suitable sites for stacking on these lands, and with consideration from the secretary should be allowed.

**Sec 5. 5.2(e) (ii) "200' Set back from property lines"**

Many property lines are other fields or pastures. Again this may eliminate the best Stacking site in a field.

The agency should have the ability to amend this setback if the reduction of the setback is enabling utilizing the best site for stacking.

**Sec 5 5.2(e) (iii) "Field stacks shall not be placed in the same location more then once every 4 years"**

This again limits the potential for farms to stack manure in the best location. Most farmers evaluate many factors when picking a site. Distances from roads and water sources, accessibility from roads and in wintertime to the site are some considerations, these may limit all but maybe 1 site, if soil test indicate normal or acceptable levels, then this site could be used annually if approved by the Agency.

**Sec 5 5.3(a) "590 NMP"**

The best Nutrient Management Plan doesn't amount to anything if it is not followed. Just because a farm has a NMP doesn't mean compliance with the RAP's. And many farms with out NMP's can be and are in compliance with the RAP's.

These plans are expensive(ours for our farm will be around \$5000.00, luckily we received a EQUIP grant for it) yes you can write your own if you have the time and desire, (those quality's are limited after a day of farming, many of us farm because we didn't want to sit at a desk or a computer, we wanted to be outside.) Not all farms can invest the money or Time or the resources in such a plan. If there is not a resource concern then why the need for a plan.

If a farm is having trouble with compliance to the RAP's the a plan would be justified.

**Sec 5 5.3(c) "Soil Sampling"**

**"Soils every 3 years", "Manure annually"**

The cost associated with this could be prohibitive for many.

This should only be required if you are required to have NMP because there was a failure of compliancy with the RAP's.

**Sec 5 5.4(c) "Cover crop, Broadcast by Sept15th Drill by Oct 1<sup>st</sup>"**

Many Farms, if not are farms in central VT can be still harvesting by Oct 1<sup>st</sup> and not even begun by Sept 15<sup>th</sup>. Many years corn is still standing well into Nov. Selective harvesting to harvest lowlands first my not make sense, moisture levels may not be correct, all of the farms land may be lowlands.

Cover crop application before harvest is expensive and unpractical for small farms.

The most economical way to cover crop is broadcast. Many well established cover crops in cerntral VT can be broadcast and well established if put on in early Nov. Drills are expensive, the WRCD's drill is not very easy to get (impossible).

**Sec 5 5.5(e) " No Manure application if Phosphorus is above 20 ppm and/or slopes exceed 10% with out a 100" buffer"**

On our a farm we did our first NMP in 2008, many of our fields had very minimal to no manure application prior to that plan. 90% of our fields are excessive in phosphorus (see attached field summary). I was told this was due to an aggressive application of cheap or subsidized phosphate in the 40s and 50s.



One set of fields that we farm we know the history quite well, it is the Brassard farm.

Larry Brassard bought this farm from his father in 1969, he farmed it until 1989, at which time he sold the cows and continued to hay. He spread his last load of manure in 89, in the early 2000 we took over cropping the fields, every year up to 2008 hay yields declined almost to the point of it being unviable to continue cropping the land. This the year that we did our first NMP, we had not applied any manure or other inputs at this point. The results of the soil test showed excessive levels of phosphorus, remember no manure had been applied for nearly 20 years. We have since been applying composted manure and wood ash biannually in the fall. Hay yields have double and almost tripled since 2008. But based on your rule we would not be able to apply manure due to the phosphorus levels, this land will be not worth harvesting if we can not apply manure, ( we just need to apply the manure with common sense, as we are now doing to mitigate the risk of runoff).

These same fields also would exceed the 10% slope set back rule two of the fields are long and narrow (see attached map) and have streams on either side of them. They are not even 200' wide, this rule would also not allow us to apply manure, and for the same reasons as stated above, does not make sense. We currently follow a 25' setback from these streams, which makes sense.

The Agency should have the ability to reduce theses Setbacks and 20ppm's if it can be shown that the risk will be minimal.

What will I do with my manure if all my fields are higher then 20ppm?

#### **Sec 5 5.7(c) "50 feet from Private well"**

We have 2 private wells within a pasture, we currently have the fenced 10-15' on either side, we have had no issues with complains In regards to the quality of the water that comes from these wells (ACTUALLY SPRINGS).

Your rule would actually call for 50' on either side. This would account for an area of 100' around the well, that is a huge loss of land for us.(x 2). Leaving it up to the watery supply owner could be troublesome sometime neighbors don't see eye to eye and this could open up doors for someone to cause someone else a hardship. (not the case with us, water supply owners have stated that they are happy with our exclusion efforts)

Your rule might be better if stated as the following, " all private water supplies shall have at least a 12.5' exclusion on all sides, and maybe extended up to 50' if the agency determines a greater exclusion is needed due to water quality issues, no exclusion shall be required if the water supply owner so agrees"

In Summary I would like to say I see the value of a NMP it has helped us identify some useful things on our farm, I just question there need if a problem doesn't exist and the cost that can be associated with them. The requirements that are being proposed in regards to annual certification and training are not fail safes and are no guarantee to better water quality, these could be burdensome and difficult for many. When the rules (RAP's) are final there will be an expectation that they will be followed, if an individual does not, then apply the requirements.

Thank you for considering my input, I would be happy to discuss these concerns in more detail if needed, (preferably in person as I hate typing!)

Justin Poulin

3302 West st

Brookfield, VT 05036

1-802-431-3645

Friday, December 18, 2015

Secretary Chuck Ross

VAAFMM

116 State Street, Montpelier, Vermont 05620

Dear Secretary Ross,

Thank you for considering written comment on the Required Agricultural Practices Regulations for the Agricultural Non-Point Source Pollution Control Program associated with Act 64 of the Vermont General Assembly (2015 session).

To date, the agency has done effective outreach and I am hearing many intelligent, informed opinions from producers as a result of the excellent presentations by the water division. In general, there is much to support in the proposed regulations, so my comments will serve as constructive criticism of some points. And these comments are from me as a personal observer and do not represent the Friends of Northern Lake Champlain advisory board. It is the board's intention to present an organizational letter following the second draft in the spring.

Recognizing that there is an urgent need for outreach and technical education for Vermont farmers and land owners, regulation must go along to set specific boundaries and guidelines for behavior. To make the regulations work with the educational process, it is very important to stress the "site-specific" valuations that expert agency personnel can apply to complex individual field conditions. Interpretation of the farms' Nutrient Management Plans, recognition and focus on Critical Source Areas, and the agency inspectors' Revised Universal Soil Loss Equation 2 calculation should serve as the main determinant in making regulation, instead of relying solely on simple measurements of slope and buffer widths.

Land use options which are intended to reduce soil erosion and P loss should be emphasized first and followed up with edge-of-field constructions which are designed primarily to remove sediment or to capture dissolved P that is lost as a result of poor land use.

Tillage practices receive little mention in the first draft and are a key to reducing soil erosion and the need for expensive edge-of-field constructions. Tillage effects on P loss are site specific, but less P loss generally occurs with

minimum or no tillage than with conventional tillage. Although no-till can increase the proportion of total P lost as dissolved P in tile drained areas; minimum tillage can be used on tilled ground that follows a comprehensive plan including excellent cover crop management, constructed wetlands and/or bioreactors. Another benefit of reduced tillage is to reduce the perceived need for fall plowing, which leaves soil open to water and wind erosion for the majority of the year. It would be preferable to see Sedgeway cultivators working in manure in the fall or spreading on cover crop, to the common practice of plowing down manure with moldboard and chisel plows after corn silage harvest.

Required cover crop in flood areas has drawn criticism from some producers, because of their objection to disturbing the soil prior to fall and/or spring flooding. Adoption of early harvest dates are needed to establish effective cover crop on these flood prone lands and compensation for reduced yield should be examined. Another field construction that is underutilized on Vermont river bottom land is flood escape chute grass ways. Flood waters erode river bottom land most severely as the flood waters exit from the low lying areas and can be seeded down permanently to hardy grasses that trap sediment and hold soil when flood water subside from river bottom land.

Regarding manure application standards, can allowances be written in for land that tests over 20 ppm if the farm removes P from manure by removing bedding solids and/or a nutrient recapture system? Can the field receive special consideration if following an extended hay crop rotation schedule, practicing counter slope plowing or minimum tillage or establishes grassed water ways? Likewise, when working with sloped land, instead of measuring slopes and 100 ft. buffers, why not use the findings of the RUSLE2 and demand proper land use techniques.

The winter spreading ban timetable continues to draw criticism from producers and citizens that see millions of gallons of liquid manure spread when it has little value for plant life in order to beat a deadline. Many farms are still not getting the message that it is not okay to spread before December 15 or after April 1 if the ground is frozen or snow covered, just because the calendar says it is legal to spread. Good intent was expressed by the agency to be more flexible in fitting the dates to the changing climate and it will do much to promote a spirit of cooperation with producers to make these calls at opportune times.

Another suggestion is to look at the newly passed Aglands bill in Ohio, that has language regarding rain forecast before manure spreading. If a half inch rain is forecast, farmers are not allowed to spread 24 hours before the predicted rain. This will lead to some criticism about the variability of weather forecasts, but farmers are expert at predicting harvest weather conditions and should be making an honest effort to avoid spreading in the rain.

Custom manure operation certification is a major accomplishment of Act 64. Due to the high turnover rate of employees in these operations, annual training should be made available to custom owners to assist them in training their new employees.

Most farms are willing to work for water quality; to gain rapid adoption RAP's that improve their productivity and revenue should be prioritized. P fertilization rate reduction in soil that has high soil test P, reduced tillage, double cropping with cover crops, and extended crop rotations are land use practices that improve soil fertility and productivity and revenue. These four practices have higher P reduction % and lower cost of P reduction (\$/lb.) than more expensive edge-of-field constructions such as buffers. \*

Young Vermont farmers are a committed and vital link to Vermont's future. And they are asking if there is a future to working in our state. Will the state allow them to manage their farms so they can participate in modern agriculture or will they be regulated out of business and out of the state? By regulating based on sound management of soil conservation and water quality there is a happy medium and many understand that working to improve the fertility of their soil and water quality go hand in hand.

Sincerely,

Kent E Henderson, DVM

\*Iowa Nutrient Reduction Strategy, 2014, page 23, Table 13. Example Statewide Results for Individual Practices at Estimated Maximum Potential Acres, Phosphorus Reduction and Farm-Level Costs.



December 18, 2015

Chuck Ross, Secretary  
Vermont Agency of Agriculture, Food, and Markets  
116 State Street  
Montpelier, VT 05620

Dear Secretary Ross:

I am writing on behalf of the 246 member cities and towns of the Vermont League of Cities and Towns to comment on the draft Required Agricultural Practices Regulations (RAPs) for the Agricultural Non-point Source Pollution Control Program.

The Required Agricultural Practices Regulations (RAPs) will play a vital role in helping improve water quality in Vermont by establishing statewide water management requirements for farms. The draft RAPs do a great job of providing baseline agricultural practices that will help conserve and protect natural resources, maintain the health and productivity of soils and protect Vermont's waters from nutrient loading associated with farming activities. We thank the Vermont Agency of Agriculture, Food, and Markets (VAAF) for working closely with the Vermont Department of Environmental Conservation (DEC) to develop workable solutions to many of the problems that contribute to pollutants entering groundwater and surface water in the state.

As you are aware local governments will also be working diligently to help clean up the waters of Vermont as we implement the mandates specified in Act 64. A major component of what municipalities are doing to address Act 64 mandates is stormwater management. All municipalities will have to comply with the new Municipal Roads General Permit obligations that are intended to achieve significant reduction in stormwater-related erosion from municipal roads, both paved and unpaved. Municipalities will implement a customized, multi-year plan to stabilize their road drainage system. The plan will include bringing road drainage systems up to yet to be determined standards, and additional corrective measures to reduce erosion as necessary to meet the Lake Champlain TMDL or other water quality restoration efforts. Given the close proximity between farm lands and municipal right-of-ways in the state, it is vital that the Agency of Agriculture, Food, and Markets take this close nexus into consideration as the RAPs are drafted.

A great concern we have with the draft RAPs is the lack of consideration for the impact nonpoint source pollution that is created on farms will have on municipal right-of-ways in municipalities across the state. The RAPs make wide mention of ditching, swales, channels and other water diversion features which include those that are in the jurisdiction of municipalities. Municipal right-of-ways are oftentimes adjacent to farms and the associated farm practices that take place on the farms. The drainage and ditching that is allowed to take place on farms oftentimes directly or indirectly flows or drains into municipal drains, culverts, ditches, swales, channels and the like. Once pollutants that originate on a farm come within a municipality's right-of-way, the municipality becomes fully responsible for the management of the pollutants therein. We are concerned that the

*Sponsor of:*

VLCT Employment  
Resource and Benefits  
Trust, Inc.

VLCT Municipal  
Assistance Center

VLCT Property and  
Casualty Intermunicipal  
Fund, Inc.

proposed RAPs do not have adequate mechanisms to prevent, as much as possible, the direct and indirect channeling of pollutants into areas of municipal jurisdiction.

Within Sec. 5.1 direct discharges should not only include “surface waters of the State” (which we presume includes *all* municipal waters), but also include “intermittent waters” as defined in Sec. 2.15. Most areas of concern from municipalities as it relates to farm discharges are those that not only make it to surface waters but also contribute to intermittent waters such as municipal ditches along roads. It is also important the RAPs contain clear and consistent terminology throughout, and as much as possible use the defined terms found in Sec. 2.

The minimum setback distances provided in several areas of the RAPs is also of great concern to municipalities. In Sec. 5.2(e) the minimum setback distances for “surface waters” and “ditches, swales, diversions or other conveyances to surface waters” are 200-feet and 100-feet respectively. We strongly encourage VAAFMM to increasing the distances and to use the defined term of “intermittent waters” in places of “ditches, swales, diversions or other conveyances to surface waters.” Additionally, Sec. 5.2(e)(iv) should prohibit manure stacking sites located less than 100 feet from “intermittent waters” so as to address municipal ditches adjacent to farms. In Sec. 5.5(f) the prohibition for manure application within 200-feet of a “public water supply” needs to be clearly defined and prohibitions to manure application should be extended to areas adjacent to surface and intermittent waters. Winter manure spreading prohibitions for winter spreading in areas with established channels of concentrated stormwater runoff to surface waters should extend to areas in close proximity to intermittent waters. With regard to buffer zones and setbacks the minimum 25-foot buffer zone proposed in Sec. 5.7(a)(i) for surface waters, and the 10-foot buffer in Sec. 5.7(a)(ii) for intermittent waters are inadequate and the distances in these vegetative buffer areas should be increased. The same buffer standards in Sec. 5.7(b) are also inadequate and should be increased.

There are general concerns over the wide discretion the Secretary of VAAFMM and the Agency of Natural Resources (ANR) are given with regard to certain exemptions and variances. It is understandable that there needs to be flexibility for the agencies and farms to address those concerns that fall outside this “one size fits all” model, however there needs to be greater assurances that when variances or exemptions are approved the RAPs will be enforced as strictly and consistently as possible. For example pursuant to Sec. 4.10(f) small farms must be inspected within 10-years of initial certification and at intervals thereafter that the Secretary deems “appropriate.” We have concerns not only with the frequency of inspections being too infrequent, but also that the frequency of such inspections may be adjusted up or down with no time range clearly defined. Given the size and impact many of these “small farms” have on water quality inspections need to be more frequent and time limits need to be specific because the nature of activities on farms can change significantly over even a 5-year time span.

The groundwater investigations that are triggered in accordance with Sec. 8.0(b) should be investigations that are led by the Secretary of ANR rather than the Secretary of VAAFMM. The complaints addressed in Sec. 8.0(b) are complaints that originate off-premise of a farm and therefore the proper Agency with jurisdiction for such complaints would be the ANR. Therefore once the a complaint is received pursuant to this section, the Secretary of ANR should conduct the investigation, provide the written notifications, identify and remediate sources of drinking water and groundwater contamination and address waste storage facilities that violate the state’s Groundwater Quality Standards.

Thank you for the opportunity to comment.

Sincerely,

Gwynn Zakov  
Municipal Policy Advocate



Secretary Chuck Ross  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, Vermont 05620-2901

December 16, 2015

Comments on Draft RAP's

Secretary Ross,

On behalf of the board of directors of Green Mountain Dairy Farmers, I am submitting the following comments in response to the draft RAP's. Green Mountain Dairy Farmers recognize and appreciate the time and energy you and your staff have committed to this process. We hope that our comments and suggestions will be helpful in your process going forward.

## SECTION 2- DEFINITIONS

Clarification of the following are needed:

“Subject to flooding”-What does this mean and what does it refer too?

“Compost”- is manure ever considered as compost? And if so does this impact “field stacking of manure” requirements

“Agricultural fertilizer” – how is organic fertilizer defined? Would organic fertilizer containing manure be subject to buffers and setbacks?

“Agriculture waste” what is the definition?

“Intermitted waters” – definition is confusing and needs to be refined.

### 2.25 SMALL FARMS

If a farm does not utilize manure will it be subject to certification? This is not clear. Does 10 acres of hay ground that has manure applied once a year need to be certified, clarification is needed.

When is a 590 NMP required?

## SECTION 4

### 4.12 REQUIRED FARM OPERATOR TRAINING

Who is required to go through the training?

Owner/operator/manager/employee?

Is the intent to have at least one person from the farm go through the training, or is it the person in charge of the day-to-day operations?

Is the training requirement enough? Should it be a yearly training?

Is there the opportunity to have an on-line training? Who will certify the training?

## 5.2 NUTRIENT, AGRICULTURAL INPUTS AND WASTE STORAGE

Define “agricultural waste”

Field stacking of manure on unimproved sites.

Replace “unimproved” with “unapproved”

NRCS and certified soil scientist have requirements or standards that would be useful to review and adopt for this section.

## 5.4 SOIL HEALTH MANAGEMENT RECOMMENDATIONS: COVER CROP REQUIREMENTS:

Support the required use of cover cropping in floodplain fields.

Would be useful to have more flexibility with cover crop dates/if looking for residue requirement/ 30% could be a better

Also might encourage earlier planting of cover crop

## 5.5 MANURE AND WASTE APPLICATION STANDARDS:

Keeping the dates as they are and still allowing the Secretary to have the discretion (as is now)

“Fields subject to flooding”

Definition would be helpful

Is there a distinction made between injected or surface applied

What constitutes injection? ie aer-way/gen-til/ect

“Expected weather”

Who determines this? How are producers notified?

More clarity is needed

>20ppm and 10% slope are not based on science. These seem unattainable and we suggest that they be removed. Are there other states that have done research and have science based recommendations?

We would support the NMPs ability to determine where and when manure would be applied

If a farm did not have a NMP they would need to refrain from spreading in those cases as described above.

## 5.7 BUFFER ZONES AND SETBACKS

We support consistent buffers for all farms

“Swale” and “water conveyances” are confusing it would be helpful to better define these.

Is there the ability to utilize injecting closer to a ditch?

Do organic producers have more challenges in establishing buffers, if so is there a way to allow them to use compost?

SECTION 10

CUSTOM MANURE APPLICATOR CERTIFICATION

What is the definition of “farm generated organic matter”? Is this compost?

We support 20 hours of training in each 5-year period

Green Mountain Dairy Farmers appreciates the opportunity to give comments and suggestions. We look forward to continued collaboration in this process.

Sincerely,

Jane Clifford, Executive Director  
Green Mountain Dairy Farmers

## RAP Comments Meeting 12/3/15

- 1) Definition of Small Farm – Is not clear. Should be done by weight of animals or animal units.
- 2) Crop Farmers – Section 4.1D do not have to certify but have to notify the secretary, what's the difference? Contradicts Section 2.25 definition of a small farm because 10 or more acres are being farmed.
- 3) Cover Crops – The dates are unreasonable, a lot of corn isn't even off the ground yet, and there shouldn't be an application date. An alternative is percent of ground cover by a certain date (ex. December 1) no matter when or how it is put on.
- 4) Manure Stacking – Need to define Compost. Moving the stack every year has the potential for farms not to have enough appropriate sites to be moved to, as well as more detriment to water quality.
- 5) Production area definition for Horse farms. Does it include just the barns or also paddocks? Is there a size of paddock needed? They aren't supporting an animal...the animal is supplemented feed outside of what the paddock provides if any.
- 6) Leased Land notification of 30 days should be removed as it is not relevant. All land a producer operates would be in their nutrient management plan.
- 7) Nutrient Management Planning – Not enough staffing to do the plans. Forcing people to work with NRCS. Very few private sector Technical Service Providers (TSP).
  - a. Only require a 590 standard NMP for certified small farms if 50% or more of all the farms fields (owned and leased) soil tests are > 20P PPM, this would encourage farmers to manage their lands on their own and direct the TSP's to work with those that really need them
- 8) Manure Spreading – The dates do not work, it doesn't take into account weather or ground conditions. Dates have been a detriment to water quality because they have to get the manure spread no matter what the weather or ground conditions resulting in manure being spread on frozen ground or put on excessively.
  - a. Can you look at New York's formula which takes into many variables for the purpose of automatic exemptions?

- b. Does the weather condition statement need to be in there? You stated at the public meeting that you wouldn't be able to win the case anyway. Is this just to quiet neighbor complaints?
- 9) Buffers – Strike “swale” as it is very hard to define and is not defined in the Draft RAP's, could be any low spot in the field.
  - a. Define intermittent waters better – “include, but not limited to” leaves it wide open
  - b. New York's definitions for intermittent waters should be considered.
  - c. Invasive species in the buffers, herbicides and pesticides used to control them could potentially effect water quality
- 10) Education – Who is going to reach the people that have to follow the RAP's and How? Maple producers, horse people, etc do not know they are required to follow these rules.
- 11) Floodplains – definition needed. Are you using FEMA (100 year) flood maps? Or what are you using?

## RAP Comments Meeting 12/3/15

Nanci, Tina, Cassidy, Alan, Bridget, BJ, Jennifer, Hillary, Ted, Rico

- 1) Definition of Small Farm – Is not clear. Should be done by weight of animals or animal units.
- 2) Crop Farmers – Section 4.1D do not have to certify but have to notify the secretary, what's the difference? Contradicts Section 2.25 definition of a small farm because 10 or more acres are being farmed.
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## RAP Comments

2.10

Floodplain means the land in the community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the National Flood Insurance Program maps. (Please clarify, and define flooding)

2.11

Floodway means the channel of a watercourse and adjacent land areas which are required to carry and discharge a one-hundred year flood within a regulated flood hazard area without substantially increasing flood heights. Floodways are depicted on the National Flood Insurance Maps on file with the Town Clerk. (Please clarify)

2.15

Intermittent Waters and/or Ditch means waters in conveyances where the presence of water ~~is not continuous for 3 months or more and drains greater than 160 acres. may occur periodically and infrequently such as during and immediately following a rain or snowmelt event.~~ Intermittent waters include, but are not limited to, ditches, swales, channels or other water diversion features. A swale or surface feature that contains water only during and immediately after a rainstorm or a snow melt shall not be considered to be an intermittent water and/or Ditch. Reason: (this definition is too broad, it covers concentrated flows that have no significant contribution to phosphorus loading in to surface water.

5.2

(e) Field stacking of manure on unimproved and non NRCS approved sites:

- i) Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding.
- ii) Manure stacking sites shall meet the following minimum setback distances:
  - a) 200 feet from property lines or domiciles;
  - b) 200 feet from surface waters;
  - c) 200 feet from private water supplies;
  - d) 200 feet from any public water supply well;
  - e) 100 feet from ditches, swales, diversions or other conveyances to surface waters;
- iii) Field stacks shall not be placed in the same location more than once every 4 years;
- iv) Field stacks cannot remain in one location for more than 180 days;
- v) Field stacks shall not be located in areas of concentrated runoff such as water diversions or swales;



vi) Other site specific standards may be approved upon petition to the Secretary but in no case shall unimproved manure stacking sites be located less than 100 feet from a private water supplies or surface water:

#### 5.4

(c) Annual croplands subject to flooding from adjacent surface waters are required to maintain a 30% cover over the soil going into the winter. ~~be planted to cover crops. Broadcast seeding must be completed by September 15th of each year. Seed established with drill seeders or otherwise incorporated shall be completed by October 4<sup>st</sup> of each year.~~ Reason: that still give the cover need to protect the soil.

#### 5.5

(b) ~~Manure and other wastes shall not be spread between December 15 and April 1. The Secretary may prohibit the application of manure to land in the State between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary determines that due to weather conditions, soil conditions, or other limitations, application of manure to land would pose a significant potential of runoff to State waters.~~ Reason: (RAP's already say "Manure shall not be applied to fields that are: iii) Are saturated with water; or iv) Frozen and/or snow covered" no reason to have a state wide limitation. Newport conditions is very different then Addison)

(d) Manure and other wastes shall not be applied when ~~actual or expected weather~~ a 25 year / 24 hours storm is expected and field conditions are conducive to flooding, runoff, ponding or other off site movement or can be reasonably anticipated to result in flooding, runoff, ponding or other off site movement. Reason: RAP's already have (e) to stop applications during high risk conditions.

(e) Manure shall not be applied to fields that are:

i) ~~Excessive in soil test phosphorus (> 20 parts per million) as determined by soil analysis;~~ or Reason: ( 20 ppm is a agronomic value that was never intended to determine whether manure should be applied. UVM's Modified Morgan Available P2O5 doesn't tell you total P2O5 in the soil just the portion available to the crop.)

ii) Exceed 10% slope without permanently vegetated buffers to surface waters of at least 100 feet. Manure shall not be applied within the buffer, unless farm is following a NRCS 590 NMP or an improved application method i.e. Injection; or

iii) Are saturated with water; or

iv) Frozen and/or snow covered

(f) Application of manure shall not occur within ~~400~~ 50 feet unless on EWD soils then 100 feet of a private water supply or 200 feet of a public water supply. The prohibition shall not apply to private water supplies that have been established inconsistent with the

Department of Environmental Conservation Water Supply Rules. Reason: that is constant with past AAP, current MFO and LFO rules.

#### 5.7 Buffer Zones and Setbacks:

(a) A vegetative buffer zone of perennial vegetation shall be maintained between annual croplands and the top of the bank of adjoining surface waters consistent with all criteria in (i) through (vii) below.

i) adjacent surface waters shall be buffered from annual crop lands by at least 25 feet of perennial vegetation.

ii) Intermittent waters, ~~ditches, swales, diversions and other water conveyances~~ shall be buffered from annual crop land by at least 10 feet of perennial vegetation.

iii) application of manure or wastes is prohibited within required vegetative buffers.

iv) use of fertilizer to establish and maintain a required vegetative buffer is allowed consistent with nutrient management plan requirements and agronomic recommendations.

v) tillage shall not occur in a vegetative buffer except for the establishment or maintenance of the vegetative buffer.

(vi) harvesting of the required vegetative buffer as a perennial crop is allowed.

(vii) Variances to required buffers may be considered by the Secretary on a site specific basis according to standards approved by the Secretary. Site specific buffers may be approved based on field characteristics such as field contours, soil types, slopes, proximity to water, nutrient management plan requirements and other relevant characteristics when the Secretary determines that the site specific buffers are adequately protective of surface waters.

(b) Manure and other wastes shall not be applied within 25 feet of surface water or within 10 feet of intermittent waters or applied in such a manner as to enter surface water or intermittent waters.



FARMER COALITION INC.

## Champlain Valley Farmer Coalition, Inc.

*Farmers working together for a clean Lake Champlain  
and thriving agriculture in Vermont.*

Secretary Chuck Ross  
Vermont Agency of Agriculture, Food & Markets  
116 State Street  
Montpelier, VT 05620-2901

November 16, 2015

RE: Required Agricultural Practices Regulations for the Agricultural Non-point Source Pollution Control Program-DRAFT

Secretary Ross,

On behalf of the Champlain Valley Farmer Coalition (CVFC), we want to thank you for the opportunity to review and comment on this draft of the new Required Agricultural Practices regulations. We recognize the time and effort you and your staff have spent on this document and want you to know we are in support of your goal to implement strategies and rules that will prevent degradation and improve water quality in Lake Champlain and in all the waterbodies in the state of Vermont.

A group of CVFC directors and members met to review the document, and this letter serves as a summary of that discussion and our formal comment on the Draft RAPs as released. I will start with the overall thoughts about the RAPs as drafted and then the details by section. It was important to us to NOT just have a laundry list of things we didn't like, so you will see that for any items we did not agree with, we have provided alternative solutions for your consideration.

### **Overall comments:**

It is important to require all farmers to be accountable for their impacts on water quality. Recognizing that the rules set forth in this document need to be efficiently enforceable, we also felt overall that many of the thresholds for compliance were 'one-size fits all' solutions. In general, we felt setting targets for the desired outcomes and trusting farmers to determine the best approach to meet those targets would actually provide a higher level of resource protection. Our varied landscape and climate makes it difficult to apply narrow, specific requirements. Alternatively, trusting farmers to determine the site-specific practices to apply on their farms to meet the target would accomplish the goals more effectively and likely with a more desirable outcome, as long as these standards and targets are adequately enforced. For example, in Section 5.4 instead of setting a date a cover crop should be planted by, setting a target for percent soil coverage. This would achieve the end goal of reducing erosion, but allow for farmers to implement the best strategies on their individual fields to meet that goal.

### **Section 2- DEFINITIONS:**

There were terms used in the document that we felt should be defined in this section to clarify the intent of these rules.

#### **Add definitions for:**

**'Subject to flooding':** Does this include definitions 2.10 Floodplain and/or 2.11 Floodway or does it mean something different altogether?

**Compost:** When is manure considered compost? This could be an important designation when considering the 'Field Stacking of Manure' requirements.

**Agricultural Fertilizer:** Many fertilizer materials are utilized (especially by Certified Organic producers) that are manure based. This could have direct impacts on certification requirements and buffer establishment practices. Perhaps defining it as materials registered with VAAF and have a documented ‘guaranteed analysis’.

**Agricultural Waste:** This term is used throughout the document, however, is not defined.

In addition, there were definitions we thought needed changes or clarification.

#### **2.15 Intermittent Waters:**

Strike ‘swale.’ This is not well-defined and could be any low spot in a field. This could be very cumbersome to identify and enforce. As it relates to buffers, it also goes beyond the intended rules.

Strike ‘but are not limited to’.

More clearly define, ‘during and immediately after rainfall/snowmelt’ as a period of time of flow.

The definition here seems to also include ‘ephemeral waters’ as well as intermittent waters.

NY has guidelines already set for this:

***From RULES AND REGULATIONS FOR THE PROTECTION FROM CONTAMINATION, DEGRADATION AND POLLUTION OF THE NEW YORK CITY WATER SUPPLY AND ITS SOURCES***

***Intermittent stream*** means a watercourse that during certain times of the year goes dry or whose lowest annual mean discharge during seven consecutive days with a recurrence interval of ten years (MA7CD/10) is less than 0.1 cubic foot per second and which periodically receives groundwater inflow. A drainage ditch, swale or surface feature that contains water only during and immediately after a rainstorm or a snow melt shall not be considered to be an intermittent stream.

If intermittent waters are more specifically defined, in the buffer section you could then refer to other waters specifically as well (i.e. ditches).

#### **2.25 Small Farm**

This section needs more clarification on who meets the requirements for certification. Is it a) AND any of b), c), or d)? Is it a) or b) or c) or d)?

It is hard to tell from this section whether or not a farm that does not utilize manure or compost for nutrients is subject to certification and/or NMP development. Would a farm managing 300 acres of crops (with no livestock) and only used commercial fertilizer not need to be certified? And conversely would someone with a 10-acre hayfield that gets manure need to be certified and have a 590 NMP?

#### **Section 4 – Small Farm Certification**

See definition of 2.25 Small Farm above. It is still unclear who would be required to ‘certify’ compliance with proposed RAPs and/or have a 590 Nutrient Management Plan.

#### **4.12 Required Farm Operator Training**

CVFC is fully supportive of providing training and education to all farm operators. We do have the following suggestions to enhance and clarify this section.

a) Clarify ‘who’ would be required to attend the training. Is it the owner, operator, manager, employee? In situations where the owner and operator are different, this could be an important distinction. Was the intent that ‘at least one’ representative of the farm obtain training or that specifically the person responsible for the day to day operations of the farm?

b) CVFC believes training should be required more frequently, especially in light of how quickly things will be changing in the next five years. We suggest 4 hours per year.

c) In order to have farmers receive training annually, perhaps have flexible opportunities for this training and consider an online training. How will this training be ‘verified’? Could a certificate be issued after completion? Sixty (60) days to approve training opportunities could be limiting for partners who want to offer trainings for farmers, could this be lowered or more flexible?

## 5.2 Nutrient, Agricultural Inputs and Waste Storage

b) Define ‘agricultural wastes’

e) Field stacking of manure on unimproved sites. Consider replacing ‘unimproved’ with ‘unapproved’. Many farms utilize ‘approved’ manure stacking sites approved by NRCS or certified soil scientists that are selected to reduce/prevent impacts on ground and surface waters, but are not necessarily improved. These are often limited in scope, as they meet specific requirements for setbacks, soil types and slopes, flooding and elevations.

Comments below both speak to this issue.

iii) If utilizing ‘approved’, but ‘unimproved’ stacking sites, they will likely need to be utilized more often than once every four years (see above)

iv) when stacking manure with high ‘bedding to manure’ ratios (ie. bedded pack manure), this manure is often composted/aged more than 180 days, moving it from an approved site merely to move it seems a burdensome regulation.

## 5.4 Soil Health Management Recommendations; Cover Crop Requirements

a) A lot of these regulations focus on the potential negative environmental impacts associated with manure, as they should. However, we would like to emphasize that there are also soil health benefits from manure applications. Well-managed manure applications can build organic matter, fertilize crops, reduce erosion, recycle nutrients, and enhance soil biology.

c) We support the agency on the required use of cover crops in floodplain fields. Some suggestions:

Define ‘or otherwise incorporated’ more clearly as related to planting cover crops.

Define ‘subject to flooding’ more clearly. (See Definitions section above).

Dates vs. Residue requirement. Dates can be difficult to mandate as the state has different climates, soils, plant hardiness zones etc. Perhaps a residue/soil coverage requirement (i.e. above 30%) would be better.

This would also encourage earlier planting than the proposed dates.

## 5.5 Manure and Waste Application Standards:

a) Could other ‘third parties’ be used to grant exemptions...ie. certified planners, NRCS, agency staff, etc.

b) We are concerned with a ‘flexible’ winter manure spreading ban. How are farmers expected to plan for a moving target?

Solutions: Define or clarify this more.

Site-specific extensions vs. whole state

Extending the spreading ban one week at a time

Require documentation of field conditions during spreading: weather, saturation, frozen, etc.

Could this also be dependent on type of spreading: injection, dragline, etc.

c) “Fields subject to flooding”

Solutions: Define this phrase (See Definitions above)

Should there be a distinction between injected vs. surface applied manure?

d) “expected weather”...who determines this?, how are people notified (alert)?, farmers decide, record?

Solutions: add more clarity, define as 24 yr. storm (already has a definition).

- e) This section specifically calling out field situations where manure cannot be spread seems to ignore some of the science we have available and is/will be required of farmers. As it is written, these rules seem to outweigh a Nutrient Management Plan. Why would you be requiring NMPs and then superseding them with these rules?
- i) > 20 ppm,
  - ii) 10% slope, etc: why are we not using the science we already have?

These two articles in particular seem to ignore the p-index science that may allow for situations where manure applications could be appropriate.

Solutions: add language that allows for NMP to supersede these rules. The intent would be that if you have an NMP, you would follow those recommendations formed with soil, manure testing, P-Index, RUSLE, etc. Farms without an NMP would then need to refrain from spreading in the cases described in this section.

### **5.7 Buffer Zones and Setbacks**

- a) CVFC is supportive of consistent buffers for all farms and believes adding buffers on ditches are necessary. However, we have the following suggestions..
- ii) Strike ‘swale’ and ‘water conveyences’. See recommended definition of 2.15 Intermittent Waters above. Also, could there be allowance for exceptions when injecting (not through, but up to) ditches?
  - iv) This article does not allow for organic growers to provide adequate fertility during buffer establishment, only the use of commercial fertilizers. Could there be language to include the agronomic application of manure to establish a buffer within the constraints of a nutrient management plan? Could compost or other amendments be used?
  - vii) Some variances might be outlined specifically here. One example that is utilized in the Champlain valley is the use of ‘bedded’ fields that are arranged such that parts of the field are higher than others to keep water from ponding on the surface, but low spots are still cropped (and not ‘ditches’). This is a limited/special situation, but could be accounted for here for clarity’s sake.
- b) see recommended definition of 2.15 Intermittent Waters above, specifically striking ‘swale’ as it relates to buffers.

### **Section 10.0 – Custom Manure Applicator Certification**

CVFC is fully supportive of providing training and education to all custom manure applicators. We do have the following suggestions to enhance and clarify this section.

- a) ‘farm generated organic wastes’ is not defined...does this include compost? See Definitions section above.
- f) Like the small farm operator training, CVFC feels a higher standard for continued training hours in the 5 year certification timeframe should be required to stay current. We would propose 20 hours of training in each 5 year period.

We appreciate the opportunity to have input in this process and appreciate your consideration. We look forward to staying actively engaged.

Sincerely,



Brian Kemp, President  
Champlain Valley Farmer Coalition, Inc.

December 18, 2015

To Secretary of Agriculture Chuck Ross,

On behalf of HJ & A Howrigan and Sons, Inc., we want to thank you for the time and effort you and your staff have put into the RAP's and public meetings to find support and hear criticism of said pending rules and regulations. As dairy farmers and stewards of the land we realize that farming in VT in the future will be done with many new environmental mandates while continuing many practices tested and proven over decades and generations of farming to protect our most important and valuable asset, our land and specifically our topsoil!

We have read the Champlain Valley Farmer Coalition's comments and while we are fairly supportive of them, we would like to take this opportunity to share a few of our concerns also.

Small farms: We feel that it is important Agency works to implement the RAP's in a positive and constructive way here with our small dairies. Requiring manure pits and bunk silos to be moved should only be mandated with proper funding in place, and only required when all other options have been exhausted. It is important not to force these valuable entities out of business with unrealistic expenses. Having said that, it should be recognized that all small livestock operations (, Horse, sheep, grass fed beef etc.) must be managed in the same environmentally positive way.

5.2 Section C—Requiring 1 foot of freeboard on the top a manure pit is counterproductive. This foot of space that would be taken away holds a large volume of manure. This is valuable storage in years when April is very wet and wintery.

5.2 Section E part III—Most farms have 1 or 2 good sites to stock manure. Requiring a new spot every year for this storage may actually damage the environment. Will this mandate also require composters to move with the same regularity?

5.4 Section C—Cover cropping as a practice in northern VT is in its infancy (5-6 years). However, a short ride in Franklin County will verify the thousands of acres of corn land are green this fall through a variety of responsible land stewardship practices. Let's not handcuff this positive program with dates that are not conducive to the growing season here in northern Vt. The dates stated will not allow some of our best land to be used in its most productive manner.

5.5 Section B—We would be supportive of some flexibility (lengthening and shortening depending upon the weather) in the spreading ban. The mild weather of December 2015 is a good example of where an extension would have been possible.

Section E 1—(20 parts per million?) This is an unacceptably low level of phosphorus to target. Many crops require higher quantities than this arbitrary level each year just to thrive.

Section E 2—We farm in Fairfield, Fletcher, Sheldon and Fairfax VT. Most of our land has a slope of 10% or greater. We object to this rule. Many fields in our area are small and to take away the 100 foot buffer would literally shut down production of that particular lot of land.

5.7 This stream/river buffer is a one size fits all rule that takes a lot of good land out of production. We should be focusing on the point of runoff (where the water exits the field). In most cases



the burm is a naturally built protector of the stream and a very necessary part of our land base.

9.0 We feel that local control and local zoning ordinances properly address the concerns around construction of farm buildings!

We hope that you find these comments helpful and will take them into consideration as we work together through this process.

In closing, we are very disappointed that with ACT 64 the state chose to fine each one of our 4 MFO operations \$1500.00 every year from here on out (just for being backbone of Vermont farmers). With this legislation, the State of Vermont is sending a signal to all residents/consumers that we are the environmental bad boys while CHOOSING to ignore all other businesses, camp owners, parking lots, municipalities, golf courses and residents of the watershed who have been and will continue to be contributors to the issues we are referring to.

Respectfully submitted,

Harold J. Howrigan Jr.

7<sup>th</sup> generation farmer from Fairfield, VT



## **Comments on the Draft Required Agricultural Practices Rule**

Respectfully submitted by the University of Vermont Extension, 12/15/2015

The following comments have been aggregated from a variety of University of Vermont Extension personnel with expertise in agriculture. We appreciate the opportunity to comment and would be pleased to provide additional information and feedback upon request as the draft Rule is revised.

### **General Feedback**

1. We urge that the nomenclature used to describe agricultural inputs and practices be more clearly defined and used consistently throughout the rule. We found considerable confusion in terminology as well as a lack of specificity for many important terms.
2. It would be helpful to more clearly define the categories of small farms and how they are covered by this Rule.
3. We suggest that animal unit equivalents be used rather than numeric counts of animal species on farms to set thresholds for animal populations triggering small farm certification.
4. We suggest including more specific descriptions of the conditions and procedures associated with certain case-by-case exceptions to the Rule.
5. We suggest that additional flexibility be built into the Rule wherever possible to address the diverse nature of Vermont's agriculture. For example, allowing farmers to protect floodplain soils from erosion using practices other than fall cover crops.
6. We suggest that alternatives be allowed in place of some rigorous requirements currently included in the draft RAPs. For example, requiring farmers to use the Universal Soil Loss Equation to calculate potential soil erosion, or requiring NRCS 590-compliant NMPs for all small farms that apply manure.
7. We suggest that several changes be made, including the addition of two new sections, to clarify and expand on the requirements of this Rule with regard to horticultural operations.

### **Feedback Provided by Section**

#### **INTRODUCTION**

The phrase: “...to assure practices on all farms eliminate adverse impacts to water,” seems idealistic; consider changing to “...to assure practices on all farm minimize adverse impacts to water.”

## APPLICABILITY

...“agricultural fairground (registered...)” should be moved to the end of the sentence to reduce confusion. Outside of this sentence, fairgrounds are not mentioned again. They are not described within the Small Farm context, nor nutrient management, waste storage, or operator training. If fairgrounds are subject to this Rule, the applicability to their situation should be clearly defined, either in a separate section or mentioned in the appropriate sections along with Small Farm descriptions.

## SECTION 1: GENERAL

1.3. The phrase: “...removal of parcels of land from current use for non-compliance...” suggests this is the only enforcement strategy. We suggest striking the phrase, or changing the sentence to: “Violations of these Rules are subject to enforcement by the Secretary and the Attorney General under the provisions of 6 V.S.A. §§ 4991-4996 (which includes issuing a corrective action order under 6 V.S.A. §§ 4992; issuing a cease and desist order under 6 V.S.A. §§ 4993; issuing an emergency order under 6 V.S.A. §§ 4993; revoking or conditioning coverage under a permit or certification under 6 V.S.A. §§ 4994; and bringing a civil enforcement action under 6 V.S.A. §§ 4995) as well as additional remedies available to the state under other applicable Vermont law including 32 V.S.A. §3756(I) (i.e. removal of parcels of land from current use for non-compliance.)”

## SECTION 2: DEFINITIONS

It would be helpful to the lay reader to avoid referring to other laws in these definitions, unless the text of the relevant portion of the law is also included or summarized.

We suggest revising/adding the definitions below and using them consistently throughout the Rule to clearly distinguish among “Manure” (2.17) “Wastes” (2.27), “On-Farm Waste” (used in section 2.28), “Agricultural Waste” (used in section 2.29), “Livestock Manures or Other Livestock Wastes” (used in section 4.10 c), “Other Farm Generated Wastes” (used in section 10.0) and “Fertilizers” (not defined but used in section 5.2.f.) and “Compost” (not defined):

- Animal mortalities: Any part of dead animals, including wastewater from processing livestock
- Manure: Animal excrement, i.e. urine and/or feces, with or without bedding.
- Compost: Well-decomposed organic (carbon-containing) materials that have been heated to at least 131° F for a minimum of 3 days, in a pile or windrow that has been mixed or managed to ensure that all materials heat to the minimum temperature. If made in a vessel or in a static pile then the minimum temperature must be maintained throughout the compost by using some form of agitation or forced aeration. (This is consistent with the National Organic Program’s standards.)
- Cover Crop: a temporary vegetative crop established for the purpose of reducing erosion, runoff and increasing soil health by providing organic matter and living roots in annual cropland between primary harvestable crops.

- Fertilizer: Plant nutrients other than those from compost or manure, including synthetic and organic sources of nutrients, and bulk soil amendments such as lime and wood ash. Some fertilizers may be made from, or contain, animal-based compost (e.g. heat-treated poultry manure, worm castings, etc.) or be made from or contain a form of an animal mortality (e.g. blood meal, bone meal, crab meal, feather meal, fish meal, etc.) For the purposes of this Rule, to be considered a fertilizer a product containing any manure and/or animal mortalities must have an overall C:N ratio of less than 10, otherwise it will be considered to be a manure, animal mortality or a combination of the two. (Add appendix with list of organic fertilizers and their C:N ratios.)
- Livestock Waste: Any combination of manure, animal-based compost, and/or animal mortalities.
- Other Farm Generated Wastes: Remove; this term should **not** be used in the Rule.
- Wastes: Remove; this term should **not** be used in the Rule. The current definition includes many non-waste items. Rename to: “Potential Pollutants” and change the definition to replace *waste oil*” with “*petroleum-based fuels and lubricants.*”
- Add: Wash water: Water that has been used to clean soil and other debris from agricultural products (e.g. fruits and vegetables) or from agricultural equipment and tools (e.g. containers, tanks, processing lines.)
- Add: Silage effluent: the wastewater that can be produced when ensiling crops that have a high moisture content (MC)

We urge that important terms defined elsewhere in the rule be moved to the Definitions section and then used consistently throughout this Rule. For example: *flood plain, intermittent waters, land application, and water diversion features.*

2.05. We suggest including perennial forage and/or pasture here, or on their own.

2.06. Change “*nutrients*” to “*soil amendments containing plant nutrients.*”

Re: “[person] ...who charges or collects other consideration for the service...” Is it necessary to address farmers who trade their work?

2.07. This defines the farm, but it is not clear who is the “farmer?” In other words, who is liable for a violation? Landowner? Livestock owner? Livestock manager? Employees?

Suggest changing “*owned or leased*” to “*owned, leased or managed*” to account for informal arrangements where a non-farming neighboring property is used for stockpiling manure or other farm materials or if there is residual manure storage when a non-farmer buys a previously active farm.

Suggest including cattle dealers who transport cattle and have facilities to move cattle from one mode of transport to another; these are not processing facilities just holding pens.

2.08. It is not clear why are equines (g) separated from other livestock (b) here, but not elsewhere in the document. Similarly, why are horses the only animal referred to here and in section 2.16, where a specific number is set for where the regulations begin to apply? Does it make sense to have this only apply to those with 4 or more equines? Sometimes the worst cases of land

treatment are those with only one or two equines. Suggest striking subsection (g) and amending (b) to read: the raising, feeding and/or management of livestock, equine, poultry, fish or bees; or.

We suggest directing the focus on impact by using animal weight per unit of land accessible to the livestock.

Should dog breeders that have several dozen animals be added to the list of animal operations included?

2.09 Farm Structure means: "...a building to house livestock, insert: or a greenhouse or high tunnel to raise plants..."

The last sentence is awkward. Suggested change: "To be considered under the definition of "farm structure," the structure must be used by a person who can demonstrate adherence to the minimum threshold criteria found in Section 3.1 of these rules."

2.10 Flood Plain, 2.11 Floodway, and 2.12 Fluvial Erosion Hazard are defined but then the different terms "fields subject to flooding" and "Flood Hazard Area" are used in Sections 5.5 c. and Section 9, respectively. There should be consistency in terminology to avoid confusion.

2.15. Defining "Intermittent Waters" as water that is "not continuous and may occur periodically and infrequently such as during and immediately following a rain or snowmelt event" could be construed to include much of the farmland in Vermont, and thus is too broad. We suggest providing more specificity about the length of time and/or volume of water so that relatively small and/or short-lived puddles and gullies do not require perennial buffers (per Section 5.7 (a) ii). Consider changing to: "Intermittent waters are temporary bodies of surface water that persist for at least 24 hours after a rainfall event at which time they cover at least 500 square feet or run contiguously for a distance of at least 500 feet." We suggest removing the reference to snowmelt because meltwater often collects on top of frozen ground but this by itself does not justify establishment of perennial buffers.

We suggest deleting "swale" and "channel" and refer instead to "water diversion features." This term should be defined clearly under Definitions.

We feel strongly that precise language is essential to help farmers and others determine what is and isn't an intermittent water, and what is and isn't a water diversion feature.

2.16. Livestock. Many of these terms are redundant with "cattle." The terms used within are inconsistent and varying in description (cattle, young stock, swine, other). This definition should be broadly consistent "all ages of cattle, swine, etc.", or biologically correct "all ages of bovine, ovine, cervids, camelids, etc." In order to maintain consistency across each time specific livestock animals are mentioned (Section 2.25, Section 3.1(c)), the same animals should be mentioned in each section. Trout, rabbits, ducks, cervids (deer), and camelids (llama/alpacas) are mentioned in some sections and not in others.

2.18. Nonpoint source pollution. Change "wastes" to "potential pollutants."

Add “Agricultural” to Nonpoint Source Pollution. It would be better to either describe the NPS as “agricultural”, or remove “as a result of farming...” Not all NPS comes from farming.

Missing from the list is “Application.” The term “application” is used broadly in this document as it relates to manure management and land treatment. This term should be described as “mechanical” application, or machine spreading, and whether it is surface-spread or subsurface injected. Alternatively, there is no mention of livestock direct application through grazing. Clarifying the use of the term “application” in the definitions section would be helpful.

2.20. Insecticides and anthelmintics are common in livestock production. Do they fall under this category? Anti-fungal and anti-viral agents are listed, but antibacterial agents are not? One could assume less environmental impact from a ringworm spray than from the emptying of a zinc or copper sulfate foot bath.

2.23. The definition of “*production area*” should clarify whether it includes vegetable wash and pack areas, and areas where fuel or other possible petroleum contaminants are stored.

2.24. Correct the typo: “*natural maintenance of natural restoration*” to “*natural maintenance or natural restoration.*”

2.25. We suggest making clear if subsections a) and b) are separated by “and” or “or.”

We suggest stating here that there are four types of small farms: certified small farms, uncertified small farms, very small farms, and farms with 4 acres or less.

We suggest that Animal Units rather than animal numbers of different species be used to describe thresholds for regulation. This is especially important with regard to diversified livestock farms, and would put the focus on potential discharge vs. size. For example, if one Animal Units (AU) = 1000 lbs. of animal weight, it allows for variability within breeds and ages even within dairy livestock farms. Cow weights can range from 1000 lb. for a Jersey cow to 2000 lb. for a Holstein bull – that’s a 1000lb difference. So potentially ten Jerseys (10,000 lb.) vs. 10 Holsteins (20,000 lb.) would have very different impact on the land and water quality. Using AU is more accurate as it focuses the measurement on the impact on the land being used for agricultural purposes.

Using AU could also help address regulation of those parcels with less than 10 acres that are used for farming – sometimes with severe impacts on the environment.

2.25 Small Farms means: *Add explanations of the three tiers of small farms here:*

#### 2.25 Small Farm

The three types of small farms should be described within this section. Consider using language such as: 1) Certified Small Farm Operations (CSFO), 2) Non-certified Small Farm Operations (NCSFO), and 3) Very Small Farm Operations (VSFO). CSFOs are subject to certification requirements and the RAPs, NCSFOs are subject to the RAPs only, and VSFOs are not subject to either.

The definition of small farm category by livestock type and number is inconsistent and may be confusing. Per the comment under “2.16 Livestock” above, the type and description of livestock animals should be the same across the three places in this document where livestock are mentioned. Even if some livestock are left under “other animal types as designated by the Secretary”, the livestock that ARE mentioned should be consistent.

Note that the use of livestock type and number may not accurately represent the situation on diversified farms. If these animal numbers are converted to Animal Units based on manure type (nutrient content), perhaps this should be more descriptive of the manure than the animal. For example, “Dry or milking dairy cows, 20 AU; beef cattle, non-lactating dairy, and veal, 30AU; all classes of goats or sheep, 30AU.” Based upon quick calculations, higher phosphorus and nitrogen-containing manures and manures distributed in a liquid form are allowed at lower animal units. Following this logic, the animal numbers proposed are somewhat consistent, with the exception of turkeys: at 1,650 turkeys and an average weight of 25 lbs. (conservatively), this totals 41+AU. Overall, there should be some sort of combined animal quantity that is suitable for diversified farms. This could be a total of no more than 30AU among all classes of livestock animals present, for example.

Possible language: For the purposes of this Rule there are three categories of Small Farms.

Certified Small Farm Operations contain more than 10 acres of actively farmed land, and they exceed the minimum number of animal units described in section 2.25b, and/or they will use more than 4 ton, or 12 cubic yards, of manure and/or animal-based compost on any single acre of their farmland in the current calendar year. Certified Small Farms must comply with this Rule and certify their compliance annually.

Non-Certified Small Farm Operations contain more than 10 acres of actively farmed land and on any single acre in the current calendar year they will not apply more than:

- a) 4 tons, or 10 cubic yards, of manure or manure-based compost, or
- b) 2000 gallons of liquid manure, or
- c) 40 lbs. of synthetic nitrogen, 20 lbs. of synthetic phosphate and/or 40 lbs. of synthetic potash fertilizer.

Non-Certified Small Farms must comply with this Rule but are not required to certify their compliance annually. The Secretary may require that they file certification of compliance if the evidence suggests, and a public hearing confirms, that they are engaged in practices that threaten surface or groundwater quality.

*Note: The allowance for small quantities of manure/compost/ potting soil application is important to accommodate use of vegetable transplants, containerized plants grown in potting soil made with manure-based ingredients and/or small amount of synthetic fertilizer, and to allow for highly focused application of these materials in planting holes or in rows when annual crops or when establishing perennials such as asparagus, blueberries, tree fruits, etc.*



Very Small Farm Operations contain more than 4 but less than 10 acres of actively farmed land, per section 2.25 a., and have generated an average gross income of \$2,000 or more over the previous three calendar years. Very Small Farms must comply with this Rule but do not have to file an annual certification of compliance. On a case-by-case basis the Secretary may require that such a farm file certification of compliance if the evidence suggests, and a public hearing confirms, that the farm is engaged in practices that threaten surface or groundwater quality.

For the purposes of this Rule there is no upper acreage limit on Small Farms, however there is an upper limit of animal units, above which a farm is categorized as either a Medium Farm Operation or a Large Farm Operation, per section 2.25 b.

2.25.a. Change to: “a parcel of land on which 10 or more acres are actively used for farming, including the production of crops, the grazing or feeding of animals, and/or the processing or storing of agricultural products, whether outdoors or in structures. Areas not actively used for farming include wetlands, woodlands (but not sugarbushes), abandoned fields, or the area used for retail marketing of agricultural products such as a farm stand and its associated parking lot.” *(This change is needed to avoid requiring a farm on large parcel to certify compliance even though less than 10 acres are actually in production.)*

2.25. b. *Change counts of individual adult animal species to equivalent animal units to address combinations of animal species present on a single farm.*

These numbers appear arbitrary and without a consistent impact basis. For example, a swine feeder that purchases and finishes feeder pigs can have 6 times more animal weight in pigs below 55 lb. than above 55 lb. There is a considerable spectrum of body weight per pig in swine over 55lbs; currently the implication is that a 60lb feeder pig makes as much manure as a 600lb brood sow. An animal unit (AU) equivalent basis could provide some standardization, but would be difficult to enforce given that weight of growing animals is changing and many VT producers do not own scales. The categories as currently defined also fall short of the reality that most livestock operations in the state involve some combination of more than one of these categories.

2.25. c. Remove “irrigation” *(so that the size of a farm pond is not a factor in the 10 acre calculation.)*

2.25. d. It is unclear what would trigger the action of the Secretary to designate a small farm comply with certification requirements. The description of the three separate classes of small farms might help clarify this somewhat. Perhaps change “that the Secretary has designated” to “that the Secretary has designated as a small farm required to comply with certification requirements due to a potential threat to water quality, based on criteria established by NRCS or other governmental agency with technical expertise in agricultural practices.”

Change “after an opportunity for a hearing” to “Such a farm will have the opportunity for a hearing in to present information that may mitigate the requirement to comply before the Secretary and a panel of at least 2 technical experts from outside the VAAF.”

2.25. c. It is unclear whether pasture land counts toward the 10 acres (it is not annually prepared but is part of the farm production system.)

2.26. Does this apply to drainage ditches/ seasonal streams? Does this apply to tile drainage? If so, it should say that specifically. Also, there should be clearer articulation about whether this flow is continuous or intermittent.

2.27. “Wastes” is far too broad of a category for all of the described pollutants--must be clarified (as already suggested in Definitions section). For example, “plant nutrients” are NOT necessarily wastes. It is unclear where certain fertilizers and soil amendments fit within this definition, such as biosolids, fish emulsion and wood ash.

2.28. “May include a combination of” ....but don’t all compliant farms need a NMP?

If the farm transfers the ownership of wastes to a party for management, can either the farmer or the contracted party write the NMP?

The Part 3 reference to a nutrient management plan does not specifically mention a USDA-NRCS 590 NMP. It should be made clear that this is not required, as many diversified farms need a simpler and more useful plan that clearly describes the most appropriate actions and facilities for their unique situation. Allowing flexibility while still requiring a NMP will likely be more effective at promoting behavior change that protects water quality and soil health than simply requiring a complex 590 NMP that some farmers may find difficult to interpret and act on.

### **SECTION 3: REQUIRED AGRICULTURAL PRACTICES ACTIVITIES**

3.1. This section is ideal to revisit the definition of the three classes of small farm, as suggested above.

In the final sentence in the paragraph, “Farms meeting these minimum thresholds...exempt from the requirement to obtain a municipal permit...” It is unclear whether the exemption applies to all farms who certify (CSFOs) or farms who have to adhere to the RAPs (CSFOs and NCSFOs).

This could be confusing language: “who meet the minimum threshold criteria...shall be presumed to be meeting RAP and presumed to not have a discharge to the waters of the state...” It could be construed to mean there is no oversight when the word “presumed” is used and could also be construed to mean there is an exemption. Consider alternative language here.

3.1. b. we suggest changing “average” to “as an average over the last 3 calendar years of tax returns.” Does it make sense to remove reference to Schedule F as \$2,000 gross income from farming activities can be claimed on other tax schedules?

3.1. c. In the animal types section, see earlier comments about creating consistency. Even if the numbers are different between a non-certified small farm (NCSFO) and a certified small farm (CSFO), as long as the categories are consistent, it will be easier to interpret. Also, it is unclear how a confined-feeding operation fits within this definition. “...at least the following number of

adult animals on a farm that is no less than 4.0 contiguous acres in size”. A 2-acre confinement operation could conceivably house 300 feeder hogs.

Does it make sense to remove reference to Schedule F?

Again, we suggest change counts of individual adult animal species to equivalent animal units per unit of land area in order to address combinations of animal species that may be present on a single farm. This addresses the differences found within species and breeds on individual farms, and focuses instead on the potential impact of animals on the land and water.

“...on a farm that is no less than 4.0 contiguous acres” is confusing, as it suggests that a farm smaller than that can have more animals than specified. See suggestion below:

Change “cattle, cows or American bison” to “bovine animals.”

We are not clear why there is the requirement that the land be contiguous. Is a rotational grazing system, on rented ground, with paddock sizes less than 4 acres, still a "farming operation?"

The clarification of "domestic" should be added prior to cervids, turkeys, and geese. Again, is the implication that 250 Coturnix quail produce as much manure/P/N as 5 cows? The minimum numbers of each species should either be standardized based on manure/nutrient production (which will be largely dependent on age, weight, and diet) or completely removed.

3.1. d. We suggest there should be more detail provide about what an “approved plan” would need to include. Is a standard business plan expected to be enough? What would be the process for submitting a request? Other request process is detailed in the final section; there should be some detail here as well.

3.2. a. Please clarify what is meant by “The confinement, feeding, fencing, and watering of livestock.” It is not clear if this is intended to mean “containment”? “Shelter”? “Exclusion”? Also, does this include “confined” winter feeding areas?

3.2. b. “...consistent with the provisions of Section 3.1(c)”. What provisions does this refer to? Animal numbers, amount of manure? Would it be more helpful to say, “consistent with the animal type and numbers identified under Section 3.1(c)”?

#### **SECTION 4: SMALL FARM CERTIFICATION**

In general, this section would be clearer if it used the three suggested small farm definitions, i.e. CSFO=certified small farm operation, NCSFOs=non-certified small farm operations, etc. For example, in 4.10.b. change to: “CSFOs and NCSFOs shall certify that the farm is in compliance with all Required Agricultural Practices.”

4.10. a. and 4.10.b. should be combined.

“CSFOs shall notify the Secretary of any changes in ownership...” A reporting requirement of 30 days is difficult, depending on the type of agricultural production and the season. A reporting period of 60 or 90 days would be more achievable.

4.10. c. Add to end of section “... *within 90 days, or within 6 months if a NMP compliant with the NRCS 590-standard is needed.*” It will be exceedingly difficult to certify compliance in 30 days.

Suggest: “CSFOs shall meet continuing education/professional development training requirements as established in Section 4.12.”

4.10. d. The concept of “... *annually notify but not certify*...” could be confusing. If a farm doesn’t need to certify it should be made clear why they need to notify.

4.10. e. we suggest: “CSFOs shall meet continuing education/professional development training requirements as established in Section 4.12.”

4.10. f. This section would benefit from additional specificity about the criteria used by the Secretary to determine inspection intervals. Also, an initial inspection within 10 years is unlikely to be taken seriously. Either a timeline should be established to shorten this goal, or a strict number should not be included.

4.11. This section is missing.

4.12. We suggest changing section title to, “Farm Operator Professional Development.”

4.12. a. Add “certified” to read: “Certified Small Farm Operators permitted Medium...”  
Add bullet: vii) Grazing and pasture practices that build soil, nutrient rich forages and resilience for the land.

4.12. b. It would be helpful to describe some minimum standard for initial training.

4.12. c. The phrase “other entities” is used; this implies that the Agency of Ag will do the training. Might there be a way for UVM Extension to be considered an approved entity (waiving the 60 day advanced approval process), similar to Pesticide Applicator Training?

## **SECTION 5: REQUIRED AGRICULTURAL PRACTICES; CONDITIONS, RESTRICTIONS, AND OPERATING STANDARDS**

5.1. a. Suggest changing to: *Farms subject to regulation under these Rules...shall not create any direct discharge of potential pollutants from a production area, processing area, or manure management system into surface waters through a direct conveyance such as, but not limited to, a pipe, ditch or conduit, without a permit from the Secretary of ANR. (Changed “wastes” to “potential pollutants” “added processing area, and removed “waters of the State” because the Connecticut River is in NH.)*

Section 5.2 Nutrient, Agricultural Inputs and Waste Storage

Comment: We feel that wording allowing flexibility will be needed in all categories here. Particularly under (e) Field stacking of manure on unimproved sites: Setback requirements for stacking or storage of manure – from property lines, domiciles and/or surface waters really need flexibility. All too often there are conflicts – due to historical siting of farmsteads in close proximity to roads and waterways – and other reasons. If the existing system is causing issues and the proposed changes cannot meet the setback requirements it is better to allow flexibility for the changes as best as possible rather than not make any changes for improvement.

5.2.a. This suggests that any direct discharge is what should be prevented, regardless of whether it is to “surface water, intermittent waters or indirect discharges to groundwater.” This wording is rather vague and could lead to confusion.

5.2. b. Change to: All potential pollutants shall be properly stored, handled and disposed of...

5.2. c. Change to: Manure storage facilities and management systems:

5.2. c. (i). Change to: Manure handling and storage systems shall be managed and maintained so as to prevent structural failures. Animal activity, mechanical systems and adjacent vegetation shall be managed to assure proper functioning of the system. Vegetation shall be managed such that storage facilities may be directly observed for structural integrity, leaks or overflows at any time.

5.2. c. ii. If “freeboard” is specifically referring to a liquid-manure system, we suggest it should be so stated. Consider saying: “Free board is the top area of a liquid manure storage structure that is reserved for emergencies, therefore, not to be occupied with manure.” It seems that requiring 1 foot of freeboard could create a lot of wasted manure storage capacity. Is there a research-based rationale for using 1 foot vs. a lesser amount of space? Should the freeboard space requirement be similar to that used in Michigan: “All liquid manure storage structures shall maintain a minimum freeboard to contain the precipitation and runoff from a 25-year, 24-hour storm event.”

5.2. c. (iii). If a professional engineer determines that a manure storage facility presents a threat to surface water or groundwater quality, the Secretary may require that improvements be made that allow the facility to meet, and certify, compliance with the USDA NRCS storage facilities standards and specifications, or an equivalent standard certified by a professional engineer licensed in the State of Vermont. (*This provides criteria for the Secretary’s decision and makes subsection iii consistent with subsection iv.*)

We suggest reconsidering the requirement for all farms adhering to the RAPs (CSFOs and NCSFOs) to meet NRCS-engineering standards for waste facilities, due to concerns about costs (farm viability) and ability to implement. We suggest a two-tiered system that would be more likely to achieve the goals of Act 64. For example, CSFOs might need to meet the NRCS standard for facilities, but a NCSFO could benefit from a results-based standard, rather than a practice-based standard. The results-based standard would require systems that “prevent direct discharges of wastes to surface water, intermittent waters or the indirect discharge of wastes to groundwater”, but do not fit a specific facility design. Examples such as bedded pack manure

management systems or wood chip wintering yards could achieve water and soil quality goals without heavy engineering or expense. Similarly, the manure storage requirements (and gross income) for farms with 100 dairy cattle or 50 sheep are radically different, despite the fact that both would likely fall under CSFO designation

5.2. e. Field stacking of manure. Similar to above, it seems that the quantity of manure under different farm scenarios (CSFO and NCSFO) could invite different requirements. Is it necessary to stack the manure from 50 sheep 200 feet from a property line? That said it is entirely appropriate to require a 200 foot setback for stacked manure from 100 dairy cows. Is the mere existence of manure sufficient to make it equal to all other manure, regardless of amount? These questions are based on the presumption that none of the manure is being discharged into waterways.

5.2. e. (i). Remove: “or other wastes.”

5.2. e. (v). Remove. This is redundant with sub-sub-section e, above.

5.2. e. (iii). It may be extremely challenging to avoid stacking manure in the same spot no more often than every four years, particularly in some of the steeper-sloped, narrow river valleys of the state. If a suitable stacking site is found, it may be the only site deemed acceptable. Is there a way to require that manure stacking sites be properly managed if used more often than once every 4 years?

5.2. e. (iv). Disallowing the ability of a field stack to remain longer than 180 days is contrary to the standard practice of allowing a compost windrow to be formed in the fall of one year, complete its process, and be spread in fall the following year. Requiring the spreading of stacked manure within the same year before the composting process has finished may increase the amount of nitrogen loss.

Add: 5.2.h. Bulk storage of fuels and other hazardous liquids shall be performed in a manner consistent with the U.S. Environmental Protection Agency’s Spill Prevention, Control and Countermeasure (SPCC) regulation. If a farm is not required to have an SPCC plan then all above-ground containers of fuel, oil or other hazardous liquids shall be visually inspected on a monthly basis to assure they are not leaking. *(An SPCC plan is required for farms that store oil diesel, gasoline, hydraulic oil, lube oil, crop oil or vegetable oil, etc. in aboveground quantities of more than 1,320 gallons or in completely buried tanks with more than 42,000 gallons of oil.)*

5.3. We suggest a tiered approach in which the NRCS 590 NMP is widely required only in highly impaired watersheds. Because there is a limited capacity with regard to enforcement, a tiered approach would likely be more efficient and viable strategy to reaching TMDL goals.

We strongly suggest that an alternative to a 590 NMP requirement, i.e. records of routine soil testing and a fertility management plan approved by a credible entity should be sufficient for most small farms. The 590 NMP is less adapted toward farms using primarily (or entirely) grass-based perennial pasture systems with minimal mechanical manure spreading and 0% soil loss. If a grass-based livestock farm regularly tests its soil and manure, and keeps records of forage

yields, manure application dates and amounts on a field by field basis it should be stated that such a plan is “consistent with the requirements.”

5.3. a. Please remove “agricultural” fertilizers; change “agricultural wastes” to “soil amendments.” Add to end of section: or equivalent standard developed by University of Vermont Extension and approved by the Secretary. *(This will allow flexibility for farms for which the 590 standard is excessive.)*

5.3. a. Re: “agricultural wastes.” Plant-nutrient containing wastes would also include biosolids, etc.

5.3. b. Change to: “All other farming operations subject to this Rule shall develop a nutrient management plan that accounts for all sources of plant nutrients applied to all fields. The plan shall be based on University of Vermont Agricultural and Environmental Testing Laboratory results and recommendations, or the results and recommendations from another soil testing laboratory approved by the Secretary. Each field shall be sampled according to laboratory instructions and tested at least once every 3 years. The soil recommendations may be adjusted based on information obtained through additional testing such as the Pre-Sidedress Nitrate Test (PSNT) and/or crop tissue analysis.

5.3. c. Change to: “All farming operations shall maintain their nutrient management plans on the farm for a period of 5 years and be prepared to provide them to the Secretary upon request.” *(Remove language requiring sampling of manure as it is required by the 590 standard and does not apply to Uncertified Small Farms or Very Small Farms.)*

5.3. c. Re: “Sources of nutrients including manure shall be sampled and analyzed at least every 3 years.” Does this apply to each type/source of manure? If so, should specify.

Section 5.4 – Change title to: “Erosion Control Requirements.” *(The current title is confusing since it includes recommendations in section a, but under the “practices that promote these goals” in subsequent sections b, c and d the words “shall” or “required” are used.)*

5.4. a. Delete *(This is a Rule; leave the recommendations to other documents.)*

5.4. b. Replace with: “Cropland shall be managed in a manner that uses all reasonable measures appropriate to the individual farm and field that will limit soil erosion, by providing soil surface cover and promoting aggregate stability. These include: no-till, reduced tillage or strip-tillage; inter-seeded cover crops, permanent sod alleys, and contour plowing; crop rotation with annual and perennial crops and use of green manures; and maintenance of crop residues on the soil surface.”

*(We are concerned about asking small farms to calculate the Universal Soil Loss Equation for their fields, and the expectation that all fields will have a soil loss less than T. This is especially concerning for annual vegetable crops requiring spring-tillage for which no effective reduced tillage system exists, e.g. carrots, or for agronomic row crops on organic farms where herbicides cannot be used so no-till is not appropriate.)*

5.4.c. Change to “Croplands in a floodway area as presented on the National Flood Insurance Maps on file with Town Clerks or within a flood hazard area are required to take steps to protect soil from erosion by flooding over the winter. This shall be accomplished by establishing a protective cover on at least 50% of the soil surface by December 1. The cover may be comprised of: the roots and residues of a crop remaining in place after harvest, a sod, other perennial crops, or mulch such as hay, straw or the stalks and leaves of other crops.” *(It is not feasible to establish cover crops by the dates in the draft rule in fields where long-season, high-value, cold-tolerant crops such as leafy greens are grown; or where long-season field corn or popcorn or other crops are grown that need to dry down before harvest.)*

5.4. d. Add: Pasture lands shall not be overgrazed to the extent that bare soil is exposed; at least 70% basal plant cover shall be maintained in order to avoid soil erosion.

Remove: “such as the establishment of grassed waterways, filter strips or other methods deemed appropriate by the Secretary.”

Section 5.5 – We suggest changing the section title to: “Manure and Compost Application Standards.”

Replace “and waste” with: “and compost” throughout section.

5.5. b. To better assist farmers with planning, it is important to keep dates firm. Recommend to change date from December 15 to December 1 and remove: Secretary may prohibit the application of manure to land in the State between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary determines that due to weather conditions, soil conditions, or other limitations, application of manure to land would pose a significant potential of runoff to State waters.

5.5. c. We suggest removing this section or else specifying that it only applies to critical source areas, otherwise this creates much stricter regulation in potential floodplain areas even if they are not located in critical source areas.

The dates suggested (after October 15 or before April 15) could be considered to be arbitrary dates given that some of the greatest flooding events in recent years have taken place in May, June and August. We suggest combining sections (c) and (d) into new language: “Manure shall not be spread on fields subject to flooding within 100 feet of the top of the bank...when actual or expected weather and/or field conditions are conducive to flooding...”

5.5. d. Remove “or expected.”

5.5.e.(i). The 20 ppm P threshold should be described as only being based results from Modified Morgan or Morgan extracts, not any other extracts.

We are very concerned that the 20 ppm threshold will create serious challenges for many livestock and crop farms, and we suggest you consider instead a tiered approach to limiting manure applications, such as: “No more than 10 tons of manure per acre shall be applied to fields



with soil test P levels between 15 and 24 ppm; no more than 5 tons of manure per acre shall be applied to fields with soil test P levels between 25 and 34 ppm; and no manure shall be applied to fields with soil test P levels of 35 ppm or above.”

We also suggest adding: “If a farmer that is not required to have an NRCS-590 NMP wants to spread manure on a field with soil test P above 35 ppm then the P-index must be used to determine if there is a combination of application rate and method that would minimize risk to the environment. Below the 35 ppm soil test P threshold the P-index would not be required unless the farm has developed and is implementing a NMP that meets the NRCS 590 Standard. In this case the P-Index has been used to identify management strategies that will limit the potential of P loss and accumulation in agricultural fields. The P-index is used as an indice to determine when, how much, and if manure and/or other P-containing materials can be applied to fields.

5.5.e.(ii). This section should be consistent with the above if a farm has a 590 NMP and they have already planned to minimize losses. We suggest making clear that this only applies to farms that will not develop a 590 NMP.

5.5. f. As referenced above in Definitions section we feel it is important to clarify whether “application” refers solely to mechanical application or all application including manure droppings of grazing animals in a properly managed rotational grazing system.

5.5. g. (d). Change to: “nutrient content of manure or compost applied.” (*It appears the “d” should be “iv” to be consistent with other sections?*)

5.6. a. Re: “The Secretary may approve an exemption to the seasonal winter spreading ban on a case by case basis upon written request.” This might overwhelm the Secretary in some years. It might be better to leave the Secretary even more latitude than this.

5.6. c. Winter Manure Spreading Exemptions. This section references the requirement for “manure to be applied according to a nutrient management plan”. It is unclear whether this means a 590 NMP, another guiding document/plan, or whether there are multi-tiered situations depending upon farm size and/or livestock type/quantity. There is also no discussion of out wintering livestock or bale grazing/stockpiling winter feed in a rotational system. In such cases, livestock should be managed in a way to distribute manure as evenly as possible so that concentrated manure does not discharge into waterways under spring melt, manage livestock to avoid soil compaction or hoof damage. This may mean using a “sacrifice” area or barnyard during periods of oversaturated soils, and maintaining a minimum percentage of vegetative soil cover.

5.7. It is not clear why “setback” is used in the section title but not in the section text. If there is a difference between the two terms that should be explained. Buffers for perennial plantings seem to be missing here; can one assume no buffer is required?

Suggest moving 5.7(b) up to the top of this section and adjusting the language to:

“Manure and other wastes shall not be applied in such a manner as to enter surface water or intermittent waters.”

5.7. a. (iii). Change “or wastes” to “or compost.”

It appears that fields with ‘swales’ will need to be managed so no manure or compost gets in the swale, but commercial fertilizer can be used in the swale. This does not make sense.

“Application of manure or wastes is prohibited within required vegetative buffers.” The addition of the “application” definition may serve to clarify this subsection, but again it is unclear whether it would be acceptable to graze in vegetative buffers since grazing livestock ‘apply’ manure. In a short-occupancy, long-rest system, grazing can also encourage strong plants roots and thus streambank stability.

It may make sense to allow livestock to flash graze (brief episode of grazing) in these areas to keep the vegetation – including invasive species – eaten down. This will keep the soil covered and promote deep root growth for holding the soil in high water events. Managed properly the manure dropped will break down quickly and be mostly absorbed by the vegetation.

5.7. a. (iv). Re: “Use of fertilizer.” We suggest adding “manure or compost” also consistent with an NMP.

5.7 a. (vi). Does it make sense to address harvesting for the propagation of native riparian species for restoration projects?

With regard to: “harvesting of the required vegetative buffer as a perennial crop is allowed” this does not specifically say whether or not grazing is an acceptable means of harvesting the vegetative buffer vs. mechanical harvesting (which may be prohibitive due to slope).

5.7. b. Change “and other wastes” to “or compost.”

5.8 Composting 5.8 c. should have a separate heading as it is not a standard for mortality disposal as stated at the top of the section. As currently written, this section states that even the smallest compost pile would have to request a variance from compliance with 5.2 (d). We suggest setting a lower volume threshold for a categorical exemption, consider: “All on farm, non-mortality containing composting facilities that import less than 1,000 cubic yards but more than 10 yards of food processing residuals annually shall...”

5.9. Change “standards and specifications” to “standards and/or specifications.”

5.9. b. It would help to clarify how this applies to artificial or constructed surface waters.

## **SECTION 6: LIVESTOCK EXCLUSION STANDARDS**

Add 6.1.: Livestock should be managed to promote soil and animal health, streambank stability, and water quality.

6.0. a. “Livestock shall not have access to surface water in production areas or immediately adjacent to production areas...” “Immediately adjacent” needs a definition.

6.0. a. (ii). It would help to include specific distances or widths here. We suggest specifying what is meant by “NRCS standards,” i.e. which NRCS standards. The way this section is worded, one could construe that the Secretary will be approving grazing plans; if this is not the intent, it should be reworded.

We suggest changing to: “in areas identified in a rotational grazing plan developed with a pasture management/natural resource professional and approved by the Secretary. Approved grazing plan areas shall maintain no less than 3 inches of vegetative growth and 70% basal plant cover.” (Note: basal plant cover is more difficult to measure, but is also a more accurate measurement of the ability of plants to filter sediment and nutrients. Some invasive species have high foliar cover, but low basal cover; they don’t hold soil well and are poor at filtering nutrients.)

6.0. b. (i). With regard to: “Unstable banks of surface water where erosion is present.” We suggest some flexibility here as there are some circumstances where livestock and their grazing can help to stabilize banks of surface waters if properly managed.

## **SECTION 7: GROUNDWATER QUALITY**

7 a. and b. Change “wastes” to “pollutants.”

## **SECTION 8: GROUNDWATER QUALITY INVESTIGATIONS**

8. e.(vii). It would be helpful to describe a mechanism for appeal, 3<sup>rd</sup> party intervention or review of the processes described above. Identifying causes of groundwater contamination can be challenging.

8. g. Re: “...shall pay for the initial costs to conduct groundwater monitoring.” Is it possible to clarify whether the landowner pays later, or is it better not to specify?

## **SECTION 9: CONSTRUCTION OF FARM STRUCTURES**

9. a. Add: “...fences *and high tunnels* through which floodwater may flow are not...”

9.0. c. “...new structures...shall be constructed so that a minimum distance of 50 feet is maintained between the top of the bank of the adjoining waters...” Question: is the intent of this to reduce runoff concerns? If so, wouldn’t it be acceptable to require “adequate measures to direct runoff into vegetated areas avoiding direct discharge into waterways”?

## **SECTION 10: CUSTOM MANURE APPLICATOR CERTIFICATION**

10. c. Re: “Knowledge and competency shall be demonstrated either through participation in required training or a written test.” Attending a class does not necessarily indicate knowledge – is a test required?

## **ADD- SECTION 11: AGRICULTURAL PRODUCT WASHING AND PACKING FACILITIES.**

11.1 Water used for washing agricultural products intended for direct human consumption, such as fresh fruits and vegetables, shall be potable at the point of use. All farms covered by this Rule shall sample their wash water at the point of use and have it tested once each calendar year to prove that it is potable. The test shall be conducted by the Vermont Department of Health Laboratory, or other laboratory approved by the Secretary.

11.2 After washing agricultural crops, used wash water containing soil, organic debris or plant residues must be discharged in a manner that does not contribute significantly to soil erosion or water pollution. Wash water that is essentially equivalent to the inlet water in chemical composition and pH, even if treated with additives, may be discharged into a manmade conveyance (i.e., ditch) as long as there is 50' of vegetation-covered channel before a waterway.

11.3 After washing agricultural crops with water treated with cleansers, sanitizers or other pesticides labeled for such post-harvest treatment, if more than 500 gallons of used wash water is generated in a single day, it must be disposed of by application to 1) areas of land maintained in a perennial sod, or 2) areas of land used for crop production that are currently in an annual cover crop, or 3) a holding tank or pond where the wash water is held for subsequent irrigation use, or 4) an alternative treatment system approved by the Secretary.

11.4 After washing agricultural containers, equipment or tools, used wash water containing soil, organic debris or plant residues may be discharged from wash lines or containers without restriction so long as the discharge does not contain any additives to the water, such as cleansers, sanitizers or other pesticides. The discharge may not be made directly into surface water and must be made in a manner that does not contribute significantly to soil erosion.

11.5 After washing agricultural containers, equipment or tools with water treated with cleansers, sanitizers or other pesticides labeled for such use, if more than 100 gallons of used wash water is generated in a single day, it must be disposed of by: 1) application to areas of land maintained in a permanent sod, or 2) areas of land used for crop production that are currently in a cover crop, or 3) an alternative treatment system approved by the Secretary.

## **ADD- SECTION 12: HIGH TUNNELS AND GREENHOUSES**

12.1 The land area under high tunnels, greenhouses, or similar structures that are covered by plastic, glass, or other light-transmitting materials and used for the purpose of growing plants is exempt from this Rule. The cover of these structures may be permanent, such as glass, or semi-permanent, such as greenhouse plastic. The structure may be permanent, such as a concrete foundation and steel frame, or temporary, such as metal or plastic hoops placed in the soil.

12.2 Soils under high tunnels and greenhouse must be protected from the impact of rainfall in order to prevent soil erosion.

12.3 The land area under high tunnels and greenhouses, whether these structures are the sole manner of crop production on a farm or whether they contribute to a portion of a farm's crop production, shall not be included in the land area considered to be "actively farmed."

12.4 The cover of a high tunnel or greenhouse may be removed to allow for replacement, exposure of pests to cold weather, or for repairs to infrastructure. If the cover is removed steps shall be taken to prevent soil erosion, such as the planting of cover crops, mulching, and/or covering soil with plastic, fabric or other material.



The University of Vermont

December 15, 2015

Secretary Chuck Ross  
Vermont Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05602

Dear Secretary Ross,

Thank you for this opportunity to comment on the draft Rule that will guide implementation of Required Agricultural Practices (RAPs). These practices will have a significant positive impact on water quality in our state, but it is critical that we “get them right” so we also avoid unnecessary and unintended negative impacts on farm viability.

To that end, more than a dozen faculty and program staff from the University of Vermont Extension have conducted a careful review of the draft RAPs. Their feedback has been compiled into the attached document, providing detailed comments and suggestions for each section of the draft rule.

In general, our collective suggested revisions to the draft Rule are intended to:

1. Clarify and consistently use the nomenclature describing agricultural inputs and practices.
2. Clarify the categories and definitions of small farms and how they are covered by this Rule.
3. Clarify the conditions and procedures associated with certain case-by-case exceptions to the Rule.
4. Allow for some flexible approaches for farmers in place of a “one size fits all” requirement that may be unduly burdensome and have unintended negative consequences for the viability of Vermont farms.
5. Clarify and expand on the requirements of this Rule with regard to horticultural operations.

We look forward to a productive dialogue with your staff as these revisions are considered.

Sincerely,

Douglas O. Lantagne  
Dean and Director



December 17, 2015

Secretary Chuck Ross  
Agency of Agriculture, Food & Markets  
116 State Street  
Montpelier, VT 05620-2901

Re: Rural Vermont Comments on Draft Required Agricultural Practices

Dear Secretary Ross,

On behalf of Rural Vermont, thank you for the opportunity to submit comments on the Agency's initial draft of the Required Agricultural Practices.

The enclosed comments reflect a compilation of feedback Rural Vermont has received from its Board of Directors and other member farmers. Our organization will continue to engage with farmers during this critical process to ensure that the final RAPs work for *all* Vermont farmers.

We look forward to seeing a second draft that reflects the feedback the Agency has received during its extensive outreach throughout the state.

Sincerely,

A handwritten signature in black ink that reads "Andrea Stander". The signature is written in a cursive, flowing style.

Andrea Stander  
Director

Vermont's lakes, rivers, and streams are treasures that provide benefits to each and every Vermonter, and must be protected now and for future generations. To do that, every type of human activity—big and small—should be held accountable for its impact on our state's water quality. The drafting of new Required Agricultural Practices (RAPs), as part of the implementation of *Act 64*, provides a significant opportunity to shape the future of Vermont's working landscapes and the role of agriculture in protecting and improving water quality. We must get it right.

Rural Vermont supports an outcome-based approach in the Required Agricultural Practices; an approach that recognizes that a well-managed farm can actually *improve* water quality rather than simply minimize pollution, and one that incentivizes regenerative agricultural practices that build healthy soils, minimize tillage and erosion, and keep nutrients on the farm where they belong. Many Vermonters and Rural Vermont members already farm this way, regardless of the size of their farm. The RAPs should recognize and reward these farmers—just as more and more of Vermont's consumers are with their purchases—and help all of our state's farmers move toward farming techniques proven to protect water quality.

We find the provisions in the current draft of the RAPs are not flexible enough for farmers who already deploy regenerative practices on their farms, and contain none of the necessary incentives or requirements to increase the number of farmers who manage their land in this way. Rather, the RAPs as written will force many sustainable farmers to undermine their own practices to certify compliance with the rules, even if their farms already produce little to no discharge into state waters. Even the most effective method of erosion control and nutrient retention—cover cropping—is hardly mentioned, and is required only in certified flood plains. If the goal of the RAPs is truly to reduce agricultural runoff in our lakes, rivers, and streams, proven methods like cover cropping should be a central component of any new regulations, and farmers already meeting this goal should be relieved of unnecessary requirements.

Vermont's farms are incredibly diverse, and the RAPs must reflect that diversity if they're going to be an effective tool for promoting water quality. In the November 20, 2015 issue of *AgriView*, Secretary Ross reiterated the Agency's desire to "ensure that we are implementing a realistic, workable framework for agricultural practices in our state that effectively protects our lakes and rivers." For many Rural Vermont members, and small-scale farmers around the state, the draft RAPs as written—particularly the requirements regarding field stacking, composting, nutrient management, and cover crop seeding dates—create considerable constraints and potentially expensive burdens, and for many farms, they are unnecessary given the stated aim of improving water quality. These farmers require flexibility, and *Act 64* empowers the Secretary of Agriculture, Food and Markets to exercise flexibility. In multiple provisions of the law, lawmakers have provided to the Agency the ability to waive requirements when it is clear that a farm is meeting the stated goals of the law itself: to eliminate discharges into state waters. The draft RAPs, however, seem to only interpret this discretion in negative terms—such as compelling non-SFOs to comply with certification requirements, or allowing the Secretary to designate any material as harmful to state waters. While this broad discretion to escalate regulation concerns many Rural Vermont members, and could lead to uncertainty in how the regulations are enforced (particularly in the likely event that successive Secretaries of Agriculture will interpret and administer the RAPs during their respective tenures), it could also be used to selectively exempt or waive certain requirements for farmers already demonstrating no impact. Rural





Vermont encourages the Agency to take full advantage of this approach by empowering farmers to make decisions that are best for their farms, and demonstrate that they are meeting the goals of *Act 64*.

In addition to being both workable and flexible, broad farming regulations such as these must be enforceable. Because the RAPs are not outcome-based, the Agency will exhaust its limited personnel and financial resources certifying, regulating, and visiting thousands of new small farms, many of which already pose little or no threat to state waterways. It's true that farms of any scale can negatively impact water quality. But with considerable budget constraints relative to the scope of the problem, the Agency would be more effective targeting the state's worst sources of agricultural pollution while allowing those farmers who do not pose a threat to be exempt from many of the RAPs provisions that are unnecessary, redundant or even harmful for water quality on their farms.

### **Small Farm Definition**

- The categories for small farms must be very clearly defined in a single section of the document. Farmers must be able to easily and accurately determine which definition they fall under. Because they're located in separate sections of the draft RAPs, these distinctions are confusing.
- The thresholds for these farm size designations are incredibly broad and do not adequately reflect reality for small, diversified farms.
  - The categories use numbers of specific animals to define farm size, but they do not account for different combinations of animals, as you'd expect to find on a small, diversified farm. This has led to significant confusion on the part of small-scale farmers, and would benefit from establishing an "Animal Unit" formula that would more accurately reflect each animal's relative impact on water quality.
  - The animal thresholds, particularly for SFOs, are far too broad, and do not account for animal stocking density. For example, the difference between a 10-acre farm with 20 cows and a 10-acre farm with 199 cows is *enormous* in terms of the potential negative impacts on water quality, particularly if the former farm is grass-based, and the latter is confinement-based. This underscores the importance of accounting for farming practices and animal stocking density, and not simply acreage and animal numbers.
  - The \$2,000 AGI distinction between NROs and UFOs is an incredibly low bar, and will result in many "micro-farms" and even homesteads being unnecessarily subject to VAAFMM regulation and the RAPs. How was this number chosen?
- Creating a category of NROs that will be wholly under the jurisdiction of local authorities could lead to significant frustration and confusion for very small farms as well as the municipalities that will be required to oversee them. In this case, Rural Vermont strongly recommends that VAAFMM issue strong guidance, education, and standards to the local authorities that will increase continuity between towns. There will likely also be a need for a case-by-case appeals process for affected farmers that does not require formal litigation.

## Small Farm Certification

- The “schedule and form” for small farms to certify compliance should be clearly defined and outlined *prior* to the formal rulemaking process. What will this form look like? And though VAAFMM has affirmed that there will be no certification fee, this should be stated in the RAPs.
- Without knowing how many small farms will be required to certify with the Agency, and given VAAFMM’s current budget and staffing constraints, the ten-year horizon for inspecting each SFO is highly unrealistic, particularly given that small farms are the most likely to change hands over a ten year period. This requirement will come at the expense of enforcement for larger polluters. It will also undermine and discourage participation in the self-certification requirement and overall compliance with the RAPs. Again, building in flexibility and focusing on an outcome-based approach rather than a blanket approach to all farms will relieve the Agency from having to inspect every farm, and instead allow it to focus on the most problematic farms.
- The requirements for water quality training outlined in Section 4.12 require more clarification, and could pose an undue financial and time commitment burden on small-scale farmers. How will the Agency track who has done the training? How often and what months will the trainings be offered? Who has the capacity to train thousands of farmers, and what criteria will the Agency use for allowing third-party entities to administer the training? How will farmers be informed of training opportunities? Most importantly, what types of assistance will be available to offset both the potential costs of attending the training, as well as the cost of lost labor time? While the intent of the required training is clear, in many cases it is unnecessary and redundant. Rural Vermont recommends that farmers be granted exemptions from this training if they can demonstrate an understanding of best practices and have adequate water quality outcomes on their farms.

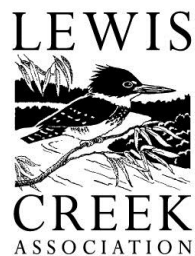
## Fertility Inputs and Management

- By failing to differentiate between raw manure and compost, and then tying them to the farm size definitions and requirements regardless of total volume and application methods, risks disincentivizing the critical and regenerative practice of aerobic composting. For many small farms, aerobic composting is integral to building healthy soils which can improve water quality and nutrient retention, as well as reduce the need for off-farm fertility inputs.
- The requirements for moving and location of field stacks on unimproved sites are unworkable. These will be extremely problematic for small farmers with limited acreage, and in many cases would force a farmer to move his or her stack from a good site to a worse one, just to comply with the RAPs. The net result could well *increase* the risk of runoff into state waters.
- Requiring every SFO to create a USDA/NRCS 509-compliant nutrient management plan will place a huge burden and expense on small-scale farmers, and will be unnecessary in many cases, particularly for farmers already deploying grass-based and regenerative agricultural techniques. What is the justification for this blanket requirement, rather than having the requirement be triggered by a set of negative water quality outcomes? Is a 509 necessary if a farmer can prove that he or she is already managing nutrients effectively? What resources will be available to help farmers create the plans, and offset the considerable loss of labor that such a time-intensive process would require?
- The manure application standards should be less tied to specific dates, and more dependent on the situational risks of potential runoff, to include soil and weather conditions. Again, this would reflect an outcome-based approach rather than a prescriptive one.



## Cover Crop Requirements and Soil Health Management Recommendations

- Promoting and incentivizing farming practices that build healthy, biologically-active soils, increase organic matter, reduce tillage and compaction, and reduce erosion is the most effective and holistic strategy for improving Vermont agriculture's impact on water quality. Yet, the RAPs mention these critical practices only as "recommendations" in a single subsection, and provide no incentives for farmers to use them.
- The requirements for cover crops are both inadequate and misguided. Annual croplands subject to flooding should, *of course*, be planted into cover crops. In the interest of improving water quality by building healthy soils and reducing erosion, so should *all annual croplands*. The requirements should focus on where to sow cover crop and how often, not simply the date by which it must be done.
  - The sowing dates specified in Section 5.4(c) are particularly problematic for annual vegetable growers, who often have crops still in the ground well past October 1<sup>st</sup>. This must be changed to reflect the seasonal needs of diversified farmers and fluctuating weather patterns.



December 18, 2015

Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, Vermont 05620

*Sent via electronic mail*

**Re: Comments on the Draft Required Agricultural Practices**

Dear Agency of Agriculture, Food and Markets:

Thank you for the opportunity to submit comments to the Vermont Agency of Agriculture, Food and Markets (AAFM) on the draft Required Agricultural Practices (draft RAPs).

The Vermont Chapter of the Sierra Club, Conservation Law Foundation, Connecticut River Watershed Council, Vermont Natural Resources Council, Vermont Conservation Voters, Lewis Creek Association, and Lake Champlain Committee are member-supported, non-profit organizations that use educational, legal, scientific, and policy tools to protect and enhance water

resources in Vermont. We have played a key role in advocating for strong protections for Vermont's surface and ground waters. However, despite decades of cleanup efforts, many lakes and rivers throughout the state continue to decline due, in part, to agricultural runoff. The draft RAPs are therefore critically important to addressing Vermont's water quality concerns.

We appreciate the time and effort that AAFM staff has committed to this process as well as the outreach, stakeholder meetings, and preliminary comment period that has encouraged widespread public input. While the draft RAPs are an improvement over the Accepted Agricultural Practices, more is required to safeguard Vermont's water resources and ensure consistency with Act 64 and the federal Clean Water Act.

If we are to comply with state and federal water quality laws, Vermont must implement widespread agricultural reform. Vermont's agricultural regulations are tasked with preventing and controlling activities on all farms that may be harmful to water; sustainably improving water quality; and improving water quality sufficiently to attain unprecedented phosphorus reductions within the Lake Champlain watershed – which accounts for half of Vermont's land area. The current draft RAPs are inadequate to fulfill these legal requirements. Embracing a statewide transition to sustainable agricultural systems and providing greater strength and specificity to the RAPs will help drive the necessary changes.

We encourage AAFM to incorporate flexibility into the draft RAPs to account for farms that engage in organic, biodynamic, regenerative, and/or restorative practices, as long as the farms can demonstrate that their practices are achieving the same level of water quality protection as the draft RAPs require. Additionally, we recognize that complying with regulations can be difficult for some farms. While we believe that all farms must be accountable for the pollution they create, just as other businesses or individuals are, we support outreach and incentive systems that will help farms be good stewards of the environment and provide comparable support mechanisms as those proposed for other land use sectors, such as stormwater, transportation, and developed lands.

We offer our comments in three main areas:

1. The draft RAPs must satisfy state and federal legal mandates.
2. The draft RAPs should foster a statewide transition to sustainable agricultural systems.
3. The draft RAPs must provide greater strength and specificity, including science-based justifications that the RAPs are sufficiently stringent to meet water quality goals (section-by-section comments).

### **1. The draft RAPs must satisfy state and federal legal mandates.**

Act 64 recognizes that “Vermont’s surface waters are vital assets that provide the citizens of the State with clean water, recreation, and economic opportunity.” Vermont Act No. 64 (2015) Sec. 1(a)(2). It also recognizes the importance of addressing “all activities harmful to water” and of “sufficiently addressing, improving, and forestalling degradation of water quality in the State in a sustainable and effective manner....” Vermont Act No. 64 (2015) Sec. 1(a)(4), (8). The purpose of Act 64 is to improve water quality; engage *all* agricultural operations to improve water

quality; and to provide the necessary mechanisms, staffing, and financing to improve water quality. Vermont Act No. 64 (2015) Sec. 1(b)(1), (5), (6) (emphasis added); *see also* 6 V.S.A. § 4810a(a).

We understand from the plain language of Act 64 that the draft RAPs must address all farming activities harmful to water quality as well as promote sustainable and effective farming. While costs and time are real considerations in regulating the agriculture sector, Act 64 envisions and sets up a process for ensuring that adequate staffing and financing will be provided. 10 V.S.A. §§ 1387, 1388, 1389. Therefore, financial considerations cannot justify regulations that do not ensure water quality goals are met. The draft RAPs must be revised to apply to all farms and to improve water quality sufficiently to meet the goals and requirements of Act 64.

Further, under the Clean Water Act (CWA), Vermont must ensure that Lake Champlain meets water quality standards. 33 U.S.C. §1313(d)(1)(C). The lake is currently impaired by the nutrient phosphorus, which regularly causes toxic algal blooms, impaired aquatic life, and reduced recreational use.<sup>1</sup> The current load of phosphorus discharged into Lake Champlain from Vermont sources is 630.6 metric tons per year, while the loading capacity, or amount of phosphorus Lake Champlain can receive and still meet its water quality standards, is 417.64 metric tons per year.<sup>2</sup> The amount of phosphorus discharging into Lake Champlain is therefore 33.7 percent above the legally compliant level.

Lake Champlain's largest source of phosphorus originates from farm fields, which contribute 41 percent of the phosphorus load.<sup>3</sup> To meet the loading capacity, the agriculture sector must reduce phosphorus discharges by 51.5 percent.<sup>4</sup> In some lake segments, these federally mandated reduction requirements reach nearly 60 and even 83 percent.<sup>5</sup> The draft RAPs therefore need to be sufficiently stringent to attain these reduction requirements.

Vermont's agricultural standards are critical to ensuring clean water and compliance with state and federal law. The targets set by Act 64 as well as the federal Clean Water Act, including cleanup requirements for Lake Champlain, are significant. The draft RAPs cannot simply support minor adjustments to the status quo farming system. Rather, applied RAPs must result in targeted watershed pollution reductions and reflect our commitment to preserve the uses, benefits, and values of our lakes, rivers, and streams. Vermont Act No. 64 (2015) Sec. 1(a)(4).

## **2. The draft RAPs should embrace a statewide transition to sustainable agricultural systems.**

Sustainability rests on the principle of meeting the world's current needs without compromising the ability of future generations to meet their own needs. Congress defines sustainable agriculture as "an integrated system of plant and animal production practices having a site-specific application that will, over the long term: satisfy human food and fiber needs; enhance

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<sup>1</sup> Phosphorus TMDLs for Vermont Segments of Lake Champlain ("Draft 2015 TMDL") (Aug. 14, 2015), p.12.

<sup>2</sup> Draft 2015 TMDL, p. 18 tbl. 3, p. 43 tbl. 7.

<sup>3</sup> Draft 2015 TMDL p. 47 fig. 7.

<sup>4</sup> Draft 2015 TMDL p. 44, tbl. 8.

<sup>5</sup> Draft 2015 TMDL p. 44 tbl. 8.

environmental quality and the natural resource base upon which the agricultural economy depends; make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls; sustain the economic viability of farm operations; and enhance the quality of life for farmers and society as a whole.” 7 U.S.C. § 3101(19).

Sustainable agriculture integrates environmental health, economic profitability, and social justice.<sup>6</sup> We recognize the range of innovative practices farmers use to improve sustainable farming and encourage AAFM to incorporate flexibility into the RAPs to account for variance across farm fields. However, the fundamental principles of sustainability should be applied consistently to Vermont’s agricultural sector. Appendix A is a list of practices that we believe provide a baseline of options for supporting land and water stewardship as well as satisfying Vermont’s legal commitments. We believe these practices should inform Vermont’s agricultural regulations.

### **3. The draft RAPs must provide greater strength and specificity, including science-based justifications that the RAPs are sufficiently stringent to meet water quality goals.**

The draft RAPs must provide greater strength and specificity as to some requirements, and contain more provisions for education, oversight, and transparency. Please find our detailed comments below:

#### ***Introduction and Applicability***

- The RAPs should apply to “all farms,” as required by Act 64 and as stated in the Introduction to the Draft RAPs. 6 V.S.A. § 4810a(a) (“the Secretary shall amend by rule the required agricultural practices in order to improve water quality in the State [and] assure practices *on all farms* eliminate adverse impacts to water quality”) (emphasis added); Draft RAPs at 1, Introduction (“In accordance with 6 V.S.A. §§ 4810a and 4810, these regulations are intended to establish statewide requirements designed to improve water quality in the State and to assure practices *on all farms* eliminate adverse impacts to water.”) (emphasis added).
- Similarly, the language in the “Applicability” Section should be revised to reflect Act 64. Act 64 does not limit the applicability of the RAPs to “agricultural activities” (which is not defined in the Act), or to only “animal waste management and disposal, soil amendment applications, and crop production and management.” Draft RAPs at 1, Applicability. Rather, as stated above, the Act applies to “practices on all farms.” 6 V.S.A. § 4810a(a). The list of RAP requirements in Act 64 is not an exclusive list, but a “minimum” set of requirements that must be addressed. 6 V.S.A. § 4810a(a).
- There should not be a presumption that compliance with the RAPs equals no discharge. The proposed presumption is problematic for several reasons. First, Act 64 does not authorize this presumption. Instead, it states that RAPs must assure that farm practices “eliminate” adverse impacts to water quality. 6 V.S.A. § 4810a(a). Second, as a practical matter,

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<sup>6</sup> See Sustainable Agriculture Research & Education (SARE), What Is Sustainable Agriculture?, <http://goo.gl/frcZ7Y>; National Sustainable Agriculture Coalition, What Is Sustainable Ag?, <http://goo.gl/USo7Gu>.

allowing a presumption of “no discharge” does not encourage either farms or AAFM to identify and address discharges that *are* actually occurring. Third, AAFM has not provided any data or assurances that compliance with the RAPs actually *will* mean “no discharge.” Finally, this presumption is inconsistent with Vermont’s Water Pollution Control Law and the federal Clean Water Act because it seeks to apply to “discharge[s] of agricultural pollutants to waters of the State.” Draft RAPs at 1, Introduction. However, any unpermitted discharge of agricultural pollutants from a point source is an enforceable violation of the Clean Water Act, and Vermont’s Water Pollution Control Law likewise prohibits discharges. 33 U.S.C. § 1311(a); 10 V.S.A. § 1259(a). The presumption could give false assurances to farms regarding their compliance with other water quality laws.

We understand that this provision may be an effort to provide some assurances to farmers regarding compliance with the RAPs and enforcement of Vermont’s agricultural water quality law. A better approach would be for AAFM to use its enforcement discretion when addressing discharges that occur despite a farm’s compliance with the RAPs.

### ***Section 1: General***

- The wording of the final sentence under Section 1.3, in particular the word “verifiable,” reads as an effort to limit the enforcement authority of the Vermont Agency of Natural Resources and the Attorney General’s Office, which AAFM cannot do. Draft RAPs at 1, § 1.3. The water pollution control enforcement authorities of ANR and the Attorney General are already laid out in statute (10 V.S.A. §§ 1274, 8001-8221) and include, among other things, the authority to “issue a written warning” when ANR “determines that a violation will or is likely to occur.” 10 V.S.A. § 8006. We recommend revising the sentence as follows: “These rules do not in any way prevent the ANR or Attorney General from enforcing the state’s Water Pollution Control statutes and regulations.”

### ***Section 2: Definitions***

- In the definition of “small farm,” the language in subsection (d) that limits the rationales the Secretary may use in designating a small farm should be deleted (“based on the [farm’s] management, agricultural inputs used by the farm, tillage practices used by the farm”). Draft RAPs at 5, § 2.25(d). Act 64 provides that the Secretary’s determination regarding whether to designate a small farm must be based on whether “the farm poses a threat of discharge to a water of the State or presents a threat of contamination to groundwater.” 6 V.S.A. § 4871(b).

### ***Section 3: Required Agricultural Practices Activities***

- In Section 3.1, there should not be a presumption that compliance with the RAPs equals no “discharge to waters of the state and groundwater.” Draft RAPs at 6, § 3.1. (See above.)
- Most of Section 3 is unnecessary because, as explained above, Act 64 is clear that the Required Agricultural Practices apply to “all farms.” 6 V.S.A. § 4810a(a) (“the Secretary shall amend by rule the required agricultural practices in order to improve water quality in the State [and] assure practices *on all farms* eliminate adverse impacts to water quality”)



(emphasis added). The Act does not authorize AAFM to exempt categories of farms from the RAPs, whether for concerns about agency implementation resources or for other reasons. Rather, AAFM should distinguish between those farms that are subject to Small Farm certification, and those that are only subject to the RAPs (which are all remaining farms). 6 V.S.A. § 4810a(a)(1). This would not bring every backyard chicken coop under the realm of the RAPs, because a parcel of land is not a “farm” unless it is “devoted primarily to farming.” Draft RAPs at 2, § 2.07; *see also* 6 V.S.A. § 4802(2) (designating multiple activities that qualify as farming).

- Our understanding is that there may be large numbers of farms in Vermont that would not be covered by the RAPs under the exemption in this Section. We have also heard concerns that some RAPs could not be implemented on the smallest farms because, e.g., there would not be enough space for a required buffer. Rather than exempt large numbers of farms that may be significantly contributing to Vermont’s agricultural water pollution problems, a better approach—and one that would be consistent with Act 64—would be to establish a different set of standards for farms that fall under a certain size. *See* 6 V.S.A. § 4810a(11) (authorizing AAFM to allow for “alternative techniques or practices” where site-specific conditions prevent compliance with the RAPs).

#### ***Section 4: Small Farm Certification***

- The RAPs should specify the requirements for the annual certification form, so that the public can provide comments and input. Draft RAPs at 7, § 4.10.
- The language of § 4.10(f) must make clear the Secretary has the authority to inspect small farms, “at any time for the purpose of assessing compliance by the small farm with the required agricultural practices and determining consistency with a certification of compliance submitted by the person who owns or operates the small farm.” 6 V.S.A. §4871(e).
- Small farms should be inspected more than once. Under the current draft, a small farm must only be inspected once, ever, and only sometime within the first ten years of certification. Draft RAPs at 8, § 4.10(f). Inspections are key to identifying problems, sharing information, and finding solutions. This is especially true where lack of information and education about water quality requirements has been identified as a primary cause of pollution problems on farms. Additionally, without regular, meaningful inspections, the small farm certification program becomes little more than voluntary. Small farms should be inspected, at the very least, once every five years on an ongoing basis. Relevant inspection results, such as land use changes, should be included in a database management tool that monitors land use change and phosphorus reduction progress by subwatershed.
- Required Farm Operator Training should be required on an annual, or at the most, semi-annual basis. Draft RAPs at 8, § 4.12. As mentioned, education and outreach are key to helping to prevent pollution problems, and often it is the small farms that have the most difficulty obtaining helpful guidance.

## ***Section 5: Required Agricultural Practices; conditions, restrictions, and operating standards***

We firmly believe the practices of section 5 should incorporate the activities and perspective of sustainable agriculture outlined in this letter. In addition, we encourage AAFM to adjust the draft RAPs accordingly:

- We recommend adjusting the language of Section 5.1 to help inform farmers that point source discharges from *any* part of the farm (not just the production area or waste management system) require a permit from ANR. Draft RAPs at 9, § 5.1.
- Field stacking of manure should be prohibited in floodplains as well as “lands in a floodway or otherwise subject to flooding.” Draft RAPs at 9, § 5.2(e).
- Nutrient Management Plans should be renewed at least once every five years, and more often as needed to ensure appropriate agricultural utilization of nutrients. Draft RAPs at 10, § 5.3. The current draft of the RAPs appears to require one-time development only.
- The final sentence of Section 5.3(c) should be moved to create a new subsection (d) to specify that NMPs and records of soil analyses, manure application, and waste analyses must be maintained by all farms subject to Section 5.3 (not just those farms in subsection (c)). Further, these records should be provided to the Secretary on an annual basis, not just provided to the Secretary “upon request.” Draft RAPs at 10, § 5.3(c).
- We recommend adding to Section 5.4 that cover crops may not be sprayed with harsh pesticides, such as glyphosate, in order to remove them each year. Rather, cover crops should be killed through non-chemical practices such as mow-down and rolling/slicing/crimping techniques.
- The provision regarding gully erosion should be more specific. Draft RAPs at 11, § 5.4(d). Though it is mandatory (“shall be managed”), the actual requirements are too vague to provide adequate guidance to farmers or adequate requirements to protect water quality. We recommend adding language specifying that gully erosion shall be managed to “*prevent discharges to waters* through the use of appropriate management strategies, etc.”
- The “Waste Application Standards” section of the RAPs should require all persons who land apply wastes to comply with the same requirements with which custom manure applicators must comply (see Section 10). This will help to ensure that applicators at all farms are fully knowledgeable and aware of best practices for preventing water pollution. Draft RAPs at 11, § 5.5.
- We recommend adding language to Section 5.5 to make it clear that the prohibition on applying wastes when the weather and/or field conditions can be reasonably anticipated to result in flooding, etc., applies regardless of whether a Nutrient Management Plan would otherwise allow waste application. We also recommend adding an example of what “reasonable anticipation” would mean, e.g., the responsibility to check a given weather tracker site. Draft RAPs at 11, § 5.5(d).

- All buffer zones and waste application setbacks should, at a minimum, be doubled and be justified by best available science. Draft RAPs at 11, 13, §§ 5.5(e), 5.7. River corridors must be allowed to regain and maintain equilibrium with 50 ft buffers. VTDEC river corridor procedures must inform working lands land use guidance, similar to all other land use sectors in Vermont. The guidelines provided in Act 64 are *mimumum* distances with the further requirement that buffers must adequately address water quality needs on a site-specific basis. 6 V.S.A. § 4810a(a)(6). We are not aware of any data or studies showing that the proposed buffers in the draft RAPs are sufficient to protect water quality and to reduce sediment mobilization and nutrient runoff in accordance with specified watershed pollution reduction targets. Additionally, stream buffers should be comprised of woody vegetation with deep roots first, wherever possible, and then grasses or other perennial vegetation demonstrated to aid in the filtering of sediment and reduction of erosion.
- We recommend adding a requirement that all farms practice integrated pest management rather than starting with the application of chemical pesticides, through the use of techniques such as crop rotation, the planting of crops that are natural pesticides, identification and removal of pests before they become harmful, and weeding. This will not only help to reduce the use of chemical pesticides and associated pollution of waterways and groundwater, but will encourage ecological health of farms more generally.
- This Section should be revised to require that livestock actually be excluded from surface waters. Draft RAPs at 14, § 6; 6 V.S.A. 4810a(9) (AAFM must “[e]stablish standards *for the exclusion of livestock* from water of the State to *prevent erosion and adverse water quality impacts*”) (emphasis added). In particular, allowing livestock outside production areas to have access to surface waters unless there are already unstable banks with erosion neither excludes livestock, nor prevents erosion and adverse water quality impacts. Relying on AAFM to go farm-by-farm to designate all areas where water quality may be impacted by livestock stream access is insufficient; it could encompass every stream in the State. Draft RAPs at 14, § 6(b).
- The “and” in subsection (a)(iv) should be changed to an “or” to make it clear that the Secretary may conduct groundwater sampling under any of the listed conditions. Draft RAPs at 15, § 8(a).

## **Conclusion**

We believe that adopting Vermont’s new Required Agricultural Practices provides an important opportunity for taking much-needed, innovative steps that will not only protect Vermont’s water quality, but can also support transitioning to sustainable systems that will ensure the vitality of Vermont’s farms and environment for the long term. Therefore, we urge you to revise the draft RAPs consistent with these recommendations.

Thank you for your consideration.

Sincerely,



Mark Nelson  
Chair  
Vermont Chapter of the Sierra Club



Rebekah Weber  
Lake Champlain Lakekeeper  
Conservation Law Foundation



David Deen  
Upper Valley River Steward  
Connecticut River Watershed Council



Brian Shupe, AICP  
Executive Director  
Vermont Natural Resources Council



Lauren Hierl  
Political Director  
Vermont Conservation Voters



Marty Illick  
Executive Director  
Lewis Creek Association



Lori Fisher  
Executive Director  
Lake Champlain Committee

## **Appendix A**

### ***Plant Production Practices***<sup>7</sup>

Selection of site, species, and variety: Preventative strategies, adopted early, can reduce inputs and enable sufficient planning to lessen water quality impacts. When possible, pest-resistant crops should be selected which are tolerant of existing soil or site conditions. When site selection is an option, factors such as soil type and depth, previous crop history, and location (e.g. climate, topography, including proximity to surface waters, floodplains, inundation areas, and wetlands) should be taken into account before planting.

Diversity: Diversified farms are typically economically and ecologically resilient. While monoculture farming has advantages in terms of efficiency and ease of management, the loss of the crop in any one year can put a farm out of business and seriously disrupt the stability of the community dependent on that crop. By growing a variety of crops, farmers spread economic risk and are less susceptible to the radical price fluctuations associated with changes in supply and demand. Properly managed, diversity can also buffer a farm from pest infestations, which can result in fewer synthetic chemicals entering waterways.

Soil management: Activities that increase organic matter, reduce compaction, promote biological activity, reduce erosion and maintain nutrient levels are necessary to provide long-term sustainability of agricultural soils and protection of surface water areas and continuous riparian buffers. Practices that promote these goals include reduced tillage, avoiding tillage and traffic on wet soils, addition of organic matter using manure, green manures and compost, sod and legume rotations and the use of cover crops.

Efficient use of inputs: The application of any synthetic, petroleum-based fertilizers and/or pesticides and/or herbicides should be prohibited. The active ingredients of these chemicals degrade many of Vermont's water bodies. Soil fertility and crop nutrients should be managed through mechanical tillage and cultivation practices, crop rotations and cover crops, supplemented with animal and crop waste materials and, under specified conditions, certain permitted synthetic materials. The use of sewage sludge should also be prohibited.

Consideration of farmer goals and lifestyle choices: Management decisions should reflect not only environmental and broad social considerations, but also individual goals and lifestyle choices. For example, adoption of some technologies or practices that promise profitability may also require such intensive management that one's lifestyle actually deteriorates. Management decisions should promote water quality improvement, sediment and nutrient reduction targets, as well as nourish the community and individual.

### ***Animal Production Practices***<sup>8</sup>

Management planning: Including livestock in the farming system increases the complexity of biological and economic relationships. The mobility of the stock, daily feeding, health concerns,

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<sup>7</sup> Adapted from: SARE, Plant Production Practices, <http://goo.gl/O9egFX>.

<sup>8</sup> Adapted from: SARE, Animal Production Practices, <http://goo.gl/3YGgTb>.

breeding operations, seasonal feed and forage sources, and complex marketing are sources of this complexity. Therefore, a successful operation plan should include enterprise calendars of operations, stock flows, forage flows, labor needs, herd production records, and land use plans to give the manager control and a means of monitoring progress and mitigating water quality infractions.

Animal selection: The animal enterprise should be appropriate for the farm and natural resources. Farm capabilities, potential impacts on water bodies and aquatic features, and constraints such as feed and forage sources, landscape, climate, and skill of the manager should be considered in selecting which animals to produce.

Animal nutrition: Feed costs are the largest single variable cost in any livestock operation. While most of the feed may come from other enterprises on the farm, some purchased feed is usually imported from off the farm. Feed costs can be kept to a minimum by monitoring animal condition and performance and understanding seasonal variation in feed and forage quality on the farm. Producers should feed livestock feed products that are 100 percent organic, but may also feed permitted vitamin and mineral supplements. All animals should have ready access to pasture and, for the entire length of the grazing season, should get 30 percent of their feed on a dry-matter basis from pasture. Minimizing the use of feed supplements can reduce excess nutrients discharging into waterways.

Reproduction: Using quality germplasm to improve herd performance is another key to sustainability. In combination with good genetic stock, adapting the reproduction season to fit the climate and sources of feed and forage reduces health problems and feed costs. The benefits also extend to minimizing synthetic inputs.

Herd health: Animal health greatly influences reproductive success and weight gains, two key aspects of successful livestock production. Unhealthy stock waste feed and require additional labor and inputs that may negatively impact water quality. To maintain health, animals should be raised in clean environments with adequate space to reduce animal-stress and the likelihood of infections. The use of antibiotics should be prohibited except in the case of acute infections in sick animals.

Grazing management: The stocking rate must be correct for the landscape and the forage sources. Prolonged concentration of stock that results in permanent loss of vegetative cover on uplands or in riparian zones should be avoided. Livestock should be excluded from surface waters, river corridors, and inundation areas. Livestock may have temporary access to surface waters at defined livestock crossings.

Confined livestock production: Animal health and waste management are key issues in confined livestock operations. Confined livestock production is increasingly a source of surface and ground water pollutants, and should be avoided. All livestock must have ready access to pasture and, for the entire length of the grazing season, should get 30 percent of their feed on a dry-matter basis from pasture. Livestock production systems that disperse stock in pastures so the wastes are not concentrated and do not overwhelm natural nutrient cycling processes are strongly

encouraged. Animals should only be temporarily confined, and only for reasons of health, safety, to protect soil or water quality, and/or the animal's state of production.

### *Economics and Social Context*<sup>9</sup>

**Profitability:** Farms are businesses that rely on turning a profit. Transitioning to an agricultural system that internalizes the costs of production can affect the farmer's bottom line. Therefore, farmers should adhere to business models that increase their price point, including but not limited to organic, value-added, and diversified farming operations that supply local and regional markets. Economic stability is an important driver that enables environmental protection. Oftentimes producers do not feel they have the option of conserving water quality and stewarding their land because of financial constraints.

- ***Organic:*** American consumer demand for organic products has grown by double-digits every year since the 1990s. Organic sales have increased from \$3.6 billion in 1997 to over \$39 billion in 2014. The vast majority of Americans purchase some organic products with a recent *Consumer Reports* survey demonstrating that 84 percent of American consumers purchase organic food.<sup>10</sup> With restrictions on synthetic chemical use under the new RAPs, transitioning to organic would be fairly straightforward. Vermont farmers could also take advantage of large organic consumer hubs in Boston, New York, and Philadelphia.
- ***Value Added:*** Value-added production changes the state of a product or alters the production process to enhance the value of the end product.<sup>11</sup> Providing value can be in the form of marketing a unique product, filling a market niche, simplifying the supply chain, providing a service, and many other ways. Examples of value added products include organic milk or yogurt.<sup>12</sup>
- ***Diversified:*** Diversified farming systems are a set of methods and tools developed to produce food sustainably by leveraging ecological diversity at plot, field, and landscape scales. While there is no single template, an example of diversified farming includes multiple crops and/or varieties and integration with livestock.<sup>13</sup> If adequate management and labor resources exist, diversification reduces financial risk. Diversification hedges against drought and economic pressures from increased input costs, commodity price declines, and regulations that affect the supply of certain commodities.<sup>14</sup>
- ***Local and Regional:*** In 2012, 163,675 farms in the U.S. were marketing foods locally, defined as either direct-to-consumer or intermediated sales of foods. The number of farms with direct-to-consumer sales increased by 17 percent and sales increased by 32 percent between 2002 and 2007. Overall, sales of local foods were estimated to have

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<sup>9</sup> Adapted from: SARE, The Economic, Social, & Political Context, <http://goo.gl/5110Ap>.

<sup>10</sup> Organic Trade Association, State of the Industry, <http://goo.gl/iMf2c2>.

<sup>11</sup> USDA, Value-Added Producer Grant, <http://goo.gl/7h96GJ>.

<sup>12</sup> Agricultural Marketing Resource Center, What Is Value-Added Agriculture?, <http://goo.gl/ieeWbz>.

<sup>13</sup> Berkeley Food Institute, Center for Diversified Farming Systems, <http://goo.gl/lyMsbi>.

<sup>14</sup> UW-Madison, Center for Integrated Agricultural Systems, <http://goo.gl/OsBzOJ>.

grown from \$4 billion in 2002 to \$6.1 billion in 2012.<sup>15</sup> Vermont, in particular, has a rich farm to plate culture with potential for significant increase in direct-to-consumer sales.<sup>16</sup>

Land use: Conversion of agricultural land to urban uses is a particular concern in Vermont as rapid growth and escalating land values threaten farming on prime soils. Existing farmland conversion patterns often discourage farmers from adopting sustainable practices and long-term perspective on the value of land. Adopting sustainable farming practices can play a key role in building public support for agricultural land preservation.

Conservation and preservation of productive agricultural land and water resources for long-term stewardship should be a priority over development. Those seeking to convert needed agricultural land to other uses bear the burden of proving that the proposed new use is more important to current and future public welfare than agriculture and that there is no other feasible location for the proposed use. Comprehensive statewide land use planning is necessary to ensure a balance of lands for all purposes. It is important that there be wide public and professional participation in the land use planning process.

Labor: In Vermont, the conditions of agricultural labor are generally far below accepted social standards and legal protections in other forms of employment. On-the-farm policies should provide adequate wages, safe working conditions, health benefits, and changes for economic stability. The needs of migrant labor for year-round employment and adequate housing are a particularly critical issue. Labor exploitation, like environmental degradation, is often an economic issue. Social and environmental considerations are overlooked because of the upfront costs. It is critical to encourage fair working conditions at the same time as demanding water quality protection – as both are proxies for farm stability.

Rural community development: Locally based sustainable agriculture encourages strong, rural communities by creating jobs, developing a community ethos, protecting water resources, providing food security, and connecting rural and urban areas.<sup>17</sup>

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<sup>15</sup> USDA, *Trends in U.S. Local & Regional Foods Systems* (Jan. 2015), <http://goo.gl/bRxHMk>; John Ikerd, *The Economics of Sustainable Farming*, <http://goo.gl/i7hBxY>.

<sup>16</sup> Farm to Plate, 3.7: Nutrient Management, <http://goo.gl/b4pRMt>.

<sup>17</sup> Duke Law Community Enterprise Clinic, *Developing Whole Communities: Community Economic Development & Locally Based Sustainable Agriculture*, <https://goo.gl/sYf5jK>.



Vermont Agency of Agriculture, Food and Markets  
Required Agricultural Practices Regulations  
For  
The Agricultural Non-point Source Pollution Control Program

**Introduction:**

In accordance with 6 V.S.A. §§ 4810a and 4810, these regulations are intended to establish statewide requirements designed to improve water quality in the State and to assure practices on all farms eliminate adverse impacts to water. The *Required Agricultural Practices Regulations* are farm management techniques that will conserve and protect natural resources, maintain the health and productivity of soils and protect the State's waters from nutrient loading associated with farming activities. Persons engaged in farming who are in compliance with these practices shall be presumed to not have a discharge of agricultural pollutants to waters of the State.

**Applicability:**

*Required Agricultural Practices Regulations* (RAPs) are standards to be followed in conducting agricultural activities in this state. These standards shall address activities which have a potential for causing pollutants to enter the groundwater and surface waters of the state, including dairy and other livestock operations plus all forms of crop and nursery operations and on-farm or agricultural fairground (registered pursuant to 20 V.S.A. § 3902), livestock and poultry slaughter and processing activities. The RAPs are practices for farmers to implement in order to control pollutants from entering groundwater and surface waters of the state when engaged in animal waste management and disposal, soil amendment applications, and crop production and management.

**Section I: General**

**1.1 Purpose:** The *Required Agricultural Practices Regulations* are farm and land management practices that will control and reduce agricultural non-point source pollution and subsequent nutrient losses from farm fields and production areas to surface and ground waters of the State.

**1.2 Authority:** 6 V.S.A. §1(a)(10), 6 V.S.A. Chapter 215 (Agricultural Water Quality), including 6 V.S.A. §§4810 and 4810(a), and Act 64 of the Vermont General Assembly (2015 session).

**1.3 Enforcement:**

Violations of these Rules are subject to enforcement by the Secretary and the Attorney General under the provisions of 6 V.S.A. §§ 4991-4996, and additional remedies available to the state under other applicable Vermont law including 32 V.S.A. §3756(i) (removal of parcels of land from current use for non-compliance). These rules do not in any way prevent the ANR or Attorney General from taking appropriate enforcement action for verifiable violations of the state's Water Pollution Control statutes and regulations.

## Summary of Comments on Required Agricultural Practices Regulations For The Agricultural Non-point Source Pollution Control Program

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## **Section 2: Definitions:**

2.00 Agency means the Vermont Agency of Agriculture, Food and Markets the Secretary of the Vermont Agency of Agriculture, Food and Markets and his or her designees.

2.01 Agricultural Product means any raw agricultural commodity, as defined in 6 V.S.A. Chapter 1 §21(6), that is produced on the farm and includes products prepared from the raw agricultural commodities principally produced on the farm.

2.02 ANR means the Vermont Agency of Natural Resources, the Secretary of the Vermont Agency of Natural Resources and his or her designees.

2.03 Buffer zone means an area of perennial vegetation between the edge of row or annual cropland and the top of the bank of the adjoining surface water or intermittent waters.

2.04 Cover crop means a temporary vegetative crop established for the purpose of reducing erosion, runoff and providing organic matter in annual cropland.

2.05 Cropland means, for the purposes of these rules, land devoted to the production, cultivation, harvesting and management of row crops and annual crops.

2.06 Custom manure applicator means a person who is engaged in the business of applying manure or other nutrients to land, except commercial fertilizer, and who charges or collects other consideration for the service including full time employees of a person engaged in the business of applying manure or nutrients to land.

2.07 Farm means a parcel or parcels of land owned or leased by a person and devoted primarily to farming as defined in section 2.08 if the lessee controls the leased lands to the extent they would be considered as part of the lessee's own farm. Indicators of control include whether the lessee makes day to day decisions concerning the cultivation or other farming related use of the leased lands and whether the lessee works the land for farming during the leased period.

2.08 Farming means:

- (a) the cultivation or other use of land for growing food, fiber, Christmas trees, maple sap, or horticultural and orchard crops; or
- (b) the raising, feeding or management of livestock, poultry, fish or bees; or
- (c) the operation of greenhouses; or
- (d) the production of maple syrup; or
- (e) the on-site storage, preparation and sale of agricultural products principally produced on the farm; or
- (f) the on-site storage, preparation, production, and sale of fuel or power from agricultural products or wastes principally produced on the farm; or
- (g) the raising, feeding, or management of four or more equines owned or boarded by the farmer, including training, showing, and providing instruction and lessons in riding, training, and the management of equines.

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2.09 Farm Structure means: a structure that is used by a person for farming including a silo, a building to house livestock or raise horticultural or agronomic plants, or customarily used to carry out the agricultural practices defined in Section 3.2 of these rules. It includes a barnyard or waste management system, either of which is created from an assembly of materials including the supporting fill necessary for structural integrity, but excludes a dwelling for human habitation. A farm structure also must be used by a person who can demonstrate the minimum threshold criteria as found in Section 3.1 of these rules.

2.10 Floodplain means the land in the community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the National Flood Insurance Program maps.

2.11 Floodway means the channel of a watercourse and adjacent land areas which are required to carry and discharge a one-hundred year flood within a regulated flood hazard area without substantially increasing flood heights. Floodways are depicted on the National Flood Insurance Maps on file with the Town Clerk.

2.12 Fluvial Erosion Hazard (FEH) Zone means a corridor within which structures and investments are most likely to be at a high to extreme risk of loss due to the erosion associated with channel slope adjustments. FEH Zones are delineated by the Agency of Natural Resources through stream geomorphic assessments, mapped as part of the FEMA flood hazard program, and adopted through municipal plans and zoning ordinances pursuant to 24 V.S.A. §4424.

2.13 Groundwater means water below the land surface in a zone of saturation but does not include surface waters.

2.14 Groundwater Quality Standards means the primary and secondary groundwater quality standards listed in Appendix One of the Groundwater Protection Rule and Strategy in accordance with 10 V.S.A. Chapter 48.

2.15 Intermittent Waters means waters in conveyances where the presence of water is not continuous and may occur periodically and infrequently such as during and immediately following a rain or snowmelt event. Intermittent waters include, but are not limited to, ditches, swales, channels or other water diversion features.

2.16 Livestock means: Cattle, cow/calf pairs, youngstock, heifers, bulls, swine, sheep, goats, at least 4 horses or any other number and type of domestic animal as designated by the secretary including domestic fowl such as laying hens, broilers, ducks, turkeys or any other type of fowl as designated by the Secretary.

2.17 Manure means livestock waste in solid or liquid form that may also contain bedding, spilled feed, water, milkhouse waste or soil.

2.18 Nonpoint Source Pollution means wastes that reach surface water or groundwater indirectly or in a diffuse manner as a result of farming or agricultural practices.

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2.19 Person means:

(a) an individual, partnership, corporation, association, unincorporated organization, trust or other legal or commercial entity, including a joint venture or affiliated ownership; or

(b) a municipality or state agency; or

(c) individuals and entities affiliated with each other for profit, consideration or any other beneficial interest derived from agricultural land management, including lessors and lessees.

2.20 Pesticides are any substance produced, distributed or used for preventing, destroying, or repelling any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living humans or other animals, which the Secretary shall declare to be a pest or any substance produced, distributed or used as a plant regulator, defoliant or desiccant.

2.22 Principally Produced means that more than 50% (either by volume or weight) of raw agricultural products grown or produced as a result of farming that are stored, prepared or sold at the farm, are grown or produced on the farm.

2.23 Production Area means those areas of a farm where animals, agricultural inputs or raw agricultural products are confined, housed, stored, or prepared whether within or without structures including barnyards, raw materials storage areas, heavy use areas, fertilizer and pesticide storage areas, and waste storage and containment areas. Production areas include egg washing or egg processing facilities, milkhouses, raw agricultural commodity preparation or storage or any area used in the storage, handling, treatment, or disposal of mortalities.

2.24 River Corridor means the land area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel and that is necessary for the natural maintenance of natural restoration of a dynamic equilibrium condition and for minimization of fluvial erosion hazards, as delineated by the Agency of Natural resources in accordance with river corridor protection procedures.

2.25 Small Farm means:

(a) a parcel or parcels of land on which 10 or more acres are used for farming;

(b) that house no more than the number of animals specified under section 4857 of Title 6 and at least the following numbers and types of livestock:

20 dairy cows milked or dry; or

30 youngstock or heifers; or

30 veal calves; or

30 cattle or cow/calf pairs; or

75 swine weighing over 55 pounds; or

300 swine weighing less than 55 pounds; or

15 horses; or

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300 sheep, lamb, goats or small ruminants; or  
1,650 turkeys; or  
900 laying hens or broilers with a liquid manure handling system; or  
2,500 laying hens or broilers without a liquid manure handling system; or  
150 ducks with a liquid manure handling system; or  
1,000 ducks without a liquid manure handling system; or  
Any other animal type or number as designated by the secretary or,

(c) that are used for the preparation, tilling, fertilization, planting, protection, irrigation, and harvesting of crops for sale; or

(d) that the Secretary has designated, on a case by case basis after an opportunity for a hearing, as a small farm required to comply with certification requirements pursuant to section 4871 of Title 6 regardless of livestock type or number based on the farms' management, agricultural inputs used by the farm, tillage practices used by the farm and the associated actual or potential water quality impacts.

2.26 Surface water means all rivers, streams, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border the state or any portion of it.

2.27 Wastes include sediments, minerals (including heavy metals), plant nutrients, pesticides, organic wastes (including livestock manure, mortalities, compost, feed and crop debris), waste oils, pathogenic bacteria and viruses, thermal pollution, silage runoff, untreated milkhouse waste, wash water, production area runoff, and any other waste compound or material which is determined by the Secretary or the Secretary of ANR to be harmful to the waters of the State, or other wastes as defined in 10 V.S.A. Section 1251 (12).

2.28 Waste Management System means an on-farm waste management program and conservation practices which may include a combination of:

1. An adequately sized waste storage structure or facility, field stacking, composting, leachate control system, and milkhouse waste or other raw commodity waste system;
2. contracts which transfer the ownership of wastes generated at a production area to another party for management consistent with law, as determined by the Secretary; and/or,
3. a nutrient management plan (NMP) for all wastes generated or managed by the farm that is in compliance with these Rules.

2.29 Waste Storage Facility means an impoundment made for the purpose of storing agricultural waste by constructing an embankment, excavating a pit or dugout, fabricating an in-ground or above-ground structure, or any combination thereof.

2.30 Waters of the State, for the purposes of this rule, include surface waters and groundwater as applied.

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2.31 Water supply means a drinking water source that intersects the water table and provides water through pipes or other conveyances and includes drilled wells, dug wells, driven point wells and natural springs.

**Section 3 Required Agricultural Practices Activities:**

3.1 Persons engaged in farming and the agricultural practices as defined in Section 3.2 of these rules, and who meet the minimum threshold criteria for applicability of these rules as found in Section 3.1(a) – (d), shall be presumed to be meeting *Required Agricultural Practices* and presumed to not have a discharge to waters of the state and groundwater as long as the farm also complies with the conditions and restrictions contained in Sections 4,5,6,7 and 9 of these rules. Farms meeting these minimum thresholds may construct farm structures, consistent with these rules, and are considered by the Secretary as being exempt from the requirement to obtain a municipal permit as set forth in 24 V.S.A. § 4413(d):

- (a) farms that are required to be permitted or certified by the Secretary, consistent with the requirements of 6 V.S.A. Chapter 215 and these rules; or
- (b) farms that have produced an annual gross income from the sale of agricultural products of \$2,000 or more in an average year and are managed, owned or leased by a person who has filed a Form 1040 Schedule F income tax statement in at least one of the past two years; or
- (c) any farming operation, whether the \$2000 annual gross income or 1040 F filing threshold is met, that is used for the raising, feeding, and management of at least the following number of adult animals on a farm that is no less than 4.0 contiguous acres in size:
  - four equines;
  - five cattle, cows or American bison;
  - fifteen swine;
  - fifteen goats;
  - fifteen sheep;
  - fifteen cervids;
  - fifty turkeys;
  - fifty geese;
  - one-hundred laying hens;
  - two-hundred and fifty broilers, pheasant, Chukar partridge, or Coturnix quail;
  - three camelids;
  - four ratites (ostriches, rheas, and emus);
  - thirty rabbits;
  - one hundred ducks;
  - one-thousand pounds of cultured trout;
  - or other livestock types, ages, and numbers as may be designated by the Secretary based on the farm’s potential to generate nutrients or other associated livestock wastes; or
- (d) any farm with a prospective business or farm management plan, approved by the Secretary, describing how the farm will meet the threshold requirements of this section.

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3.2 The agricultural practices on farms that meet the minimum thresholds set forth in section 3.1 that are governed by these regulations include:

- (a) The confinement, feeding, fencing, and watering of livestock;
- (b) The storage and handling of livestock wastes and by-products principally produced on the farm consistent with the provisions of Section 3.1(c);
- (c) The collection of maple sap principally produced from trees on the farm and/or production of maple syrup from sap principally produced on the farm;
- (d) The preparation, tilling, fertilization, planting, protection, irrigation and harvesting of crops on the farm;
- (e) The ditching and subsurface drainage of farm fields and the construction of farm ponds;
- (f) The stabilization of farm fields adjacent to banks of surface water;
- (g) The construction and maintenance of farm structures, farm roads and associated infrastructure;
- (h) The on-site storage, preparation, production and sale of fuel or power from agricultural products or wastes principally produced on the farm;
- (i) The on-site storage, preparation and sale of agricultural products principally produced on the farm from raw agricultural commodities principally produced on the farm;
- (j) The on-site storage of agricultural inputs for use on the farm including, but not limited to, lime, fertilizer, pesticides, compost and other soil amendments and the equipment necessary for operation of the farm;
- (k) The management of livestock mortalities produced on the farm.

#### **Section 4 Small Farm Certification**

4.10 Small farms, as defined in Section 2.25, shall certify compliance with these Rules and shall do so in a manner prescribed by the Secretary.

- (a) Small farms shall annually certify compliance according to a schedule and form established by the Secretary.
- (b) Small farms shall certify that the farm is in compliance with all *Required Agricultural Practices Regulations*.

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(c) Small farms required to certify shall notify the Secretary of any changes in ownership or land base, including changes in leased land of the farm within 30 days. Each notification of change in ownership or land base shall include certification of compliance with these Rules.

(d) Small farms that meet the acreage threshold but do not manage livestock, generate or use livestock manures or other livestock wastes shall annually notify the Secretary of the same but shall not be required to certify compliance according to these Rules unless specifically required by the Secretary due to actual or potential water quality impacts of the small farm.

(e) Small farms certified under this section shall meet training requirements as established in Section 4.12.

(f) Small farms certified under this section shall be inspected within 10 years of initial certification and at intervals thereafter deemed appropriate by the Secretary based on potential impacts to water quality from the small farm.

#### 4.12 Required Farm Operator Training

(a) Small farms required to certify under Section 4.10, permitted Medium Farm Operations, and permitted Large Farm Operations shall obtain water quality training as approved by the Secretary. Training shall provide information regarding:

- i) The prevention of discharges;
- ii) The mitigation and management of stormwater runoff;
- iii) Statutory and regulatory requirements of the operation of a large, medium or small farm and financial resources available to assist in compliance;
- iv) Land application of manure or nutrients and methods or techniques used to minimize the runoff of land applied manure to waters of the state;
- v) Weather and soil conditions that increase the risk of runoff of manure or nutrients to waters of the state;
- vi) Standards for nutrient management and requirements for nutrient management planning.

(b) Large Farm Operations, Medium Farm Operations and certified Small Farm Operations shall obtain 4 hours of training approved by the Secretary at least every 5 years.

(c) The Secretary may approve training offered by other entities upon request of the entity providing the training. All requests for approved training shall be provided to the Secretary at least 60 days prior to the scheduled training dates.

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## **Section 5 Required Agricultural Practices; conditions, restrictions, and operating standards**

### **5.1 Direct Discharges:**

(a) Farms subject to regulation under these Rules shall not create any direct discharge of wastes from a production area or waste management system into the surface waters of the State through a discrete conveyance such as, but not limited to, a pipe, ditch, or conduit without a permit from the Secretary of ANR.

### **5.2 Nutrient, Agricultural Inputs and Waste Storage**

(a) Production areas, barnyards, animal holding areas, manure storage areas and feed storage areas shall utilize runoff and leachate collection systems, diversion, or other management strategies in order to prevent the direct discharge of wastes to surface water, intermittent waters or indirect discharges to groundwater.

(b) All agricultural wastes including chemicals, petroleum products, containers, and carcasses shall be properly stored, handled and disposed of, so as to prevent adverse surface and groundwater quality impacts.

(c) Waste storage facilities and waste management systems:

- i) Waste management systems shall be managed and maintained so as to prevent structural failures including the management of vegetation, animal activity, drainage systems and all mechanical systems associated with the proper function of the waste management system. Vegetation shall be managed such that the waste storage facility may be observed for structural integrity, leaks or overflows at all times.
- ii) At least 1.0 feet of freeboard shall be maintained in waste storage facilities at all times.
- iii) The Secretary may require a waste storage facility to meet, and certify, standards for waste storage facilities established by the USDA Natural Resource Conservation Service in order to prevent direct discharges of wastes to surface water, intermittent waters or the indirect discharge of wastes to groundwater.

(d) All waste storage facilities constructed, expanded or modified after July 1, 2006 shall be designed and constructed according to USDA Natural Resource Conservation Service standards and specifications or an equivalent standard certified by a professional engineer licensed in the State of Vermont.

(e) Field stacking of manure on unimproved sites:

- i) Stacking or storage of manure or other wastes is prohibited on lands in a floodway or otherwise subject to flooding.
- ii) Manure stacking sites shall meet the following minimum setback distances:
  - a) 200 feet from property lines or domiciles;
  - b) 200 feet from surface waters;

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- c) 200 feet from private water supplies;
  - d) 200 feet from any public water supply well;
  - e) 100 feet from ditches, swales, diversions or other conveyances to surface waters;
  - iii) Field stacks shall not be placed in the same location more than once every 4 years;
  - iv) Field stacks cannot remain in one location for more than 180 days;
  - v) Field stacks shall not be located in areas of concentrated runoff such as water diversions or swales;
  - vi) Other site specific standards may be approved upon petition to the Secretary but in no case shall unimproved manure stacking sites be located less than 100 feet from a private water supplies or surface water:
- (f) Fertilizer shall be stored consistent with the Vermont Fertilizer and Lime regulations Section XIII.
- i) Fertigation and chemigation equipment shall be operated only with an adequate anti-siphon device between the system and the water source.
- (g) Pesticides shall be used in accordance with Title 6 V.S.A. Chapter 87 Control of Pesticides and all regulations promulgated thereunder.

### **5.3 Nutrient Management Planning**

- (a) All Certified Small Farm Operations as defined in Section 2.25, and all permitted Medium and Large Farm operations managing agricultural fertilizers, manure or other agricultural wastes for use as nutrient or soil amendment purposes pursuant to these Rules shall implement a field by field nutrient management plan consistent with the requirements of the USDA/NRCS Nutrient Management Practice Code 590.
- (b) For all other farming operations subject to these rules all sources of nutrients shall be accounted for when determining recommended application rates of manure or other nutrients for all crops. Recommendations and applications may be adjusted based on manure testing and/or leaf analysis. Nutrient applications shall be consistent with current university recommendations and standard agricultural practices.
- (c) For all other farming operations subject to these rules all fields receiving mechanical application of manure or other wastes shall be soil sampled at least once in every 3 years. Sources of nutrients including manure shall be sampled and analyzed annually. Plans and the records of soil analyses, manure application, manure or other waste analyses shall be maintained on the farm for a period of 5 years and be provided to the Secretary upon request.

### **5.4 Soil Health Management Recommendations; Cover Crop Requirements**

- (a) Soil management activities that increase organic matter, reduce compaction, promote biological activity, reduce erosion and maintain nutrient levels are recommended in order to provide long term sustainability of agricultural soils. Practices that promote these goals include

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reduced tillage, avoiding tillage and traffic on wet soils, addition of organic matter using manure, green manures and compost, sod and legume rotations and the use of cover crops.

(b) Cropland shall be cultivated in such a manner that results in an average soil loss less than or equal to the soil loss tolerance (T) for the prevalent soil type as calculated through application of the Revised Universal Soil Loss Equation 2, or through the application of similarly accepted models.

(c) Annual croplands subject to flooding from adjacent surface waters are required to be planted to cover crops. Broadcast seeding must be completed by September 15<sup>th</sup> of each year. Seed established with drill seeders or otherwise incorporated shall be completed by October 1<sup>st</sup> of each year.

(d) Field borne gully erosion shall be managed using appropriate management strategies such as the establishment of grassed waterways, filter strips or other methods deemed appropriate by the Secretary.

### **5.5 Manure and Waste Application Standards**

(a) Manure and other wastes shall be land applied consistent with the requirements of this section unless the Secretary grants an emergency exemption because of an emergency situation such as the structural failure of a manure storage system or has granted a seasonal exemption consistent with Section 5.6. In granting an exemption, the Secretary shall determine that the manure will be spread on fields with the least likelihood of generating runoff to surface waters.

(b) Manure and other wastes shall not be spread between December 15 and April 1. The Secretary may prohibit the application of manure to land in the State between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary determines that due to weather conditions, soil conditions, or other limitations, application of manure to land would pose a significant potential of runoff to State waters.

(c) Manure shall not be spread on fields subject to flooding within 100 feet of the top of the bank of adjacent surface waters after October 15<sup>th</sup> or before April 15<sup>th</sup>.

(d) Manure and other wastes shall not be applied when actual or expected weather and/or field conditions are conducive to flooding, runoff, ponding or other off site movement or can be reasonably anticipated to result in flooding, runoff, ponding or other off site movement.

(e) Manure shall not be applied to fields that are:

- i) Excessive in soil test phosphorus (> 20 parts per million ) as determined by soil analysis; or
- ii) Exceed 10% slope without permanently vegetated buffers to surface waters of at least 100 feet. Manure shall not be applied within the buffer; or
- iii) Are saturated with water; or
- iv) Frozen and/or snow covered

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(f) Application of manure shall not occur within 100 feet of a private water supply or 200 feet of a public water supply. The prohibition shall not apply to private water supplies that have been established inconsistent with the Department of Environmental Conservation Water Supply Rules.

(g) The following records of application shall be maintained for a period of five years and provided to the Secretary upon request:

- a) date of application
- b) field location
- c) application rate
- d) source of nutrients applied
- e) weather and field conditions at the time of application

#### **5.6 Winter Manure Spreading Exemptions:**

(a) The Secretary may approve an exemption to the seasonal winter spreading ban on a case by case basis upon written request. Requests for an exemption to the seasonal winter spreading ban shall provide:

- i) Identification and location of specific fields to be used for winter spreading
- ii) Proposed rates of application
- iii) Location of nearest surface water, wells, property boundaries and ditches
- iv) Identification of soil types, depth to groundwater and slopes
- v) Current soil test results
- vi) Phosphorus Index results
- vii) RUSLE 2 results

(b) All approvals for an exemption to the seasonal winter spreading ban shall be in writing and shall prohibit the application of manure:

- i) in areas with established channels of concentrated stormwater runoff to surface waters;
- ii) in nonharvested permanent vegetative buffers;
- iii) in a nonfarmed wetland, as that term is defined in 10 V.S.A. § 902(5);
- iv) within 200 feet of a potable water supply, as that term is defined in 10 V.S.A. § 1972(6);
- v) to fields exceeding tolerable soil loss (T); and
- vi) to saturated soils.

(c) Approvals for exemptions to the seasonal winter spreading ban shall establish requirements and conditions for the application of manure when frozen or snow-covered soils prevent effective incorporation at the time of application, require manure to be applied according to a nutrient management plan, establish the maximum amounts of manure that may be applied per acre during any one application, and establish required buffer and no application zones from surface water, wells and other water conveyances.

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## **5.7 Buffer Zones and Setbacks:**


(a) A vegetative buffer zone of perennial vegetation shall be maintained between annual croplands and the top of the bank of adjoining surface waters consistent with all criteria in (i) through (vii) below.


i) adjacent surface waters shall be buffered from annual crop lands by at least 25 feet of perennial vegetation.  <sup>1</sup>


ii) Intermittent waters, ditches, swales, diversions and other water conveyances shall be buffered from annual crop land by at least 10 feet of perennial vegetation.


iii) application of manure or wastes is prohibited within required vegetative buffers.

iv) use of fertilizer to establish and maintain a required vegetative buffer is  <sup>2</sup> allowed consistent with nutrient management plan requirements and agronomic recommendations.

v) tillage shall not occur in a vegetative buffer except for the establishment or maintenance of the vegetative buffer.  <sup>3</sup>

vi) harvesting of the required vegetative buffer as a perennial crop is allowed.  <sup>4</sup>

(vii) Variances to required buffers may be considered by the Secretary on a site specific basis according to standards approved by the Secretary. Site specific buffers may be approved based on field characteristics such as field contours, soil types, slopes, proximity to water, nutrient management plan requirements and other relevant characteristics when the Secretary determines that the site specific buffers are adequately protective of surface waters.  <sup>5</sup>

(b) Manure and other wastes shall not be applied within 25 feet of surface water or within 10 feet of intermittent waters or applied in such a manner as to enter surface water or intermittent waters.  <sup>6</sup>

(c) Livestock shall not be pastured within 50 feet of a private water supply without the permission of the water supply owner

## **5.8 Animal Mortality Management and Composting:**

Animal mortalities being disposed of on the farm shall be buried or composted within 48 hours according to the following standards:

(a) Animal mortalities buried on farm property shall be sited so as to be:

(i) minimum of 150 feet from property lines and surface waters.

(ii) minimum of 3 feet above the seasonal high water table.

(iii) covered with a minimum of 24 inches of soil

(iv) 200 feet from public or private drinking water supplies

(b) Animal mortalities composted on farm property shall be sited so as to be:

(i) minimum of 150 feet from all property lines and surface waters.

(ii) not on land subject to annual overflow from adjoining surface waters.

(iii) minimum of 300 feet from neighboring residences and public buildings

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Number: 1 Author: danielleo Subject: Sticky Note Date: 12/18/2015 10:39:47 AM

It's good to see the grass needs to be perennial, but I don't believe this is the most effective practice to protect water quality. Since perennial grasses do not affect water quality concerns in terms of temperature regulation, flood water dispersion, and woody debris structure in streams, this only serves as an intercept of sheet flow and nutrient uptake during the growing season. A more effective buffer in terms of water quality protection and wildlife and aquatic habitat protection would include a mix of grasses, low growing shrubs and trees.

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Number: 2 Author: danielleo Subject: Sticky Note Date: 12/18/2015 10:34:24 AM

This should not be allowed without a variance request and approval of some sort. If the point of the buffer is to protect water quality and prevent nutrient loading, allowing the addition of fertilizer in this critical zone seems to contradict one of the purposes of the buffer strip.

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Number: 3 Author: danielleo Subject: Sticky Note Date: 12/18/2015 10:41:29 AM

Why is this necessary? No-till equipment should be used if available and how often is this required? If perennial, I would expect it to be for the initial establishment of the perennial vegetation only.

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Number: 4 Author: danielleo Subject: Sticky Note Date: 12/18/2015 10:42:24 AM

Again, why aren't these buffers permanent and woody? If the issue is shading, they should be required to use certain types of perennial rooted plants that provide more stability and protection from erosion.

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Number: 5 Author: danielleo Subject: Sticky Note Date: 11/13/2015 7:59:08 AM

What could a variance allow? What might be a case for the variance?

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Number: 6 Author: danielleo Subject: Sticky Note Date: 12/18/2015 10:43:26 AM

Fertilizers that can also runoff should be included in this.

(iv) minimum of 200 feet from the nearest private or public water supply not owned by the farm.

(c) All on farm, non-mortality containing composting facilities that import less than 1,000 cubic yards of food processing residuals shall meet the requirements of 5.2(d) unless, upon written request to the Secretary for a variance, other standards have been approved that reasonably protect surface water and groundwater. Importation of greater than 1,000 yards of food processing residuals or food residuals for the purposes of composting requires registration or permitting by the Vermont Department of Environmental Conservation.

### **5.9 Stabilization of Banks of Surface Waters:**

(a) The areas from the top of a bank of surface water to the edge of the surface water shall be left in their natural state except as permitted by State statute including but not limited to 10 V.S.A. Chapter 41 §1021; and for the standards applicable to the pasturing of livestock consistent with section 6.0 of these rules.

(b) Stabilization of farm field banks of surface waters, when permitted under Section 5.9(a) shall be constructed in accordance with the United States Department of Agriculture Natural Resources Conservation Service standards and specifications or other standards approved by the ANR and Agency. Wherever feasible, stabilization of farm field banks of surface waters shall recognize the need to reduce fluvial erosion hazards as defined by the ANR.

### **6.0 Livestock Exclusion Standards**

(a) Livestock shall not have access to surface water in production areas or immediately adjacent to production areas except under the following conditions:

- i) at defined livestock crossings or defined watering areas
- ii) in areas prescribed by a rotational grazing plan consistent with NRCS standards and approved by the Secretary. Approved grazing plan areas shall maintain no less than 3 inches of vegetative growth.
- iii) in areas approved by the Secretary based on site specific characteristics and management requirements.
- iv) Adequate vegetative cover shall be maintained (except at defined crossings and defined watering areas) on banks of surface waters by limiting livestock trampling and equipment damage to protect banks of surface waters from excessive erosion.

(b) Livestock shall not have access to surface water in areas outside of production areas that meet the following criteria:

- i) Unstable banks of surface waters where erosion is present.
- ii) Areas designated by the Secretary as having actual or potential threat to water quality.

### **7.0 Ground Water Quality:**

(a) Farm operations shall be conducted so that the concentration of wastes in groundwater caused by agricultural operations do not reach or exceed the primary or secondary groundwater quality

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enforcement standards identified by Appendix One of the Groundwater Protection Rule and Strategy in accordance with 10 V.S.A. Chapter 48.

(b) Farm operations shall be conducted with the goal to reduce the concentration of wastes in groundwater to the preventive action levels (PALs) of the primary or secondary groundwater quality standards identified by Appendix One of the Groundwater Protection Rule and Strategy when monitoring indicates the presence of these wastes in groundwater that exceed the enforcement standard.

### **8.0 Groundwater Quality Investigations:**

The Secretary may conduct groundwater quality monitoring to assess the impact of agricultural practices and farm operations on the quality of drinking water and groundwater.

- (a) The Secretary may conduct groundwater sampling at sites:
  - i) selected by the Secretary where well owners or tenants have volunteered or agreed to participate in the sampling program;
  - ii) upon the request of a water supply owner or tenant;
  - iii) selected by the Secretary based on the results of other sampling data or the existence of vulnerable site characteristics;
  - iv) with activities or operations permitted, certified or regulated by the Secretary; and
  - v) where the Secretary has received a complaint from a water supply owner or tenant in the vicinity of a farm alleging that the farm has contaminated the drinking water or groundwater of the water supply.
  
- (b) The Secretary shall conduct a groundwater investigation where the Secretary has received a complaint from a water supply owner in the vicinity of an agricultural operation that the operation or its agricultural practices has contaminated the drinking water or groundwater of the water supply owner.
  
- (c) The Secretary shall conduct a groundwater investigation where sampling indicates that drinking water or groundwater contains detectable concentrations of agricultural contaminants.
  
- (d) The Secretary shall provide written notification of testing results to each individual water supply owner and tenant, if known, that participates in the sampling program.
  - i) Property owners in the vicinity of farm operations and agricultural lands shall receive the test results for each water supply owned by them that is sampled by the Secretary.
  - ii) Farm operations shall receive the test results for water supplies owned by the farm operation and, upon request, for water supplies adjacent to or impacted by the crop land or facilities managed by the farm operation.
  
- (e) The Secretary may use, without limitation, the following approaches to identify and remediate sources of drinking water and groundwater contamination:

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- i) Conducting site visits to interview property owners and farm operators, gain an understanding of the physical characteristics of the landscape and locate additional sites for water quality sampling;
- ii) Communicating with farm operators and adjacent property owners to identify practices and activities that are potential sources of contamination;
- iii) Conducting additional sampling to confirm the detection of contaminants and to determine the extent and scope of contamination at the site;
- iv) Require corrective actions such as changes in activities, management practices, cropping patterns or structural revisions designed to reduce the contamination from current activities and prevent contamination from future activities;
- v) Conducting follow up water quality sampling to determine the effectiveness of changes made or corrective actions taken;
- vi) Seeking additional investigative or consultation resources to evaluate and characterize sites to determine vulnerability to drinking water and groundwater contamination; and
- vii) Reviewing testing results and site evaluations to determine if changes in water quality data are the result of changes in activities or natural site conditions.

(f) The Secretary may require the owner or operator of a waste storage facility to modify the facility to meet the NRCS or an equivalent standard for the facility or to implement additional management measures if the facility poses a threat to human health or the environment as established by an exceedance of the state's Groundwater Quality Standards.

(g) For the purpose of assessing whether a waste storage facility is violating the state's Groundwater Quality Standards the Secretary shall pay for the initial costs to conduct groundwater monitoring. When the Secretary has made a determination that a waste storage facility is violating the state's Groundwater Quality Standards, the Secretary shall provide notification to the Department of Health and the Agency of Natural Resources. This notification shall occur within twenty one (21) days and include the location of the facility and the name of the owner or operator. When the Secretary makes a determination that a waste storage facility no longer poses a threat to human health or the environment, the Secretary shall provide notification of the revised determination to the Department of Health and the ANR.

### **9.0 Construction of Farm Structures:**

(a) Farm structures shall not be constructed within a floodway area as presented on National Flood Insurance Maps on file with Town Clerks or within a Flood Hazard Area. Such structures may be constructed outside this area yet within the 100-year floodplain when constructed according to National Flood Insurance Program (NFIP) standards. Fences through which floodwater may flow are not structures which represent an encroachment in a floodway area.

(b) Local setbacks or no build areas within Flood Hazard Areas shall be observed unless upon written petition of the farmer the Secretary has approved other reasonable setbacks for the specific farm structure being constructed or maintained.

(c) In addition to the provisions of 9.0 (a) and (b); new structures with the exception of replacement structures built to occupy existing structural footprints shall be constructed so that a

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minimum distance of 50 feet is maintained between the top of the bank of the adjoining waters and the farm structure. Such structures do not include those for irrigation, drainage, fencing, or livestock watering.

(d) Prior to construction of farm structures, the farmer must notify the zoning administrator or the town clerk in writing of the proposed construction activity. The notification must contain a sketch of the proposed structure including the setbacks from adjoining property lines and road rights-of-way.

(e) Construction of Farm Structures –Variances to municipal or local Setbacks approved by the Secretary.

i) Local setbacks or no build areas for wetlands, River Corridors and other setbacks applicable to all development in a local zoning bylaw established by the municipality shall be maintained, unless upon written request of the person, consistent with the procedures found in Appendix C, the Secretary has approved other reasonable setbacks for the specific farm structure being constructed. The secretary may consider the following in rendering a decision regarding alternative setbacks:

a) There are unique existing physical conditions or exceptional topographical or other physical constraints peculiar to the particular property that would create a hardship for the farming operation.

b) That because of such physical conditions or constraints, there is no possibility that the property can be developed in strict conformity with the provisions of these Regulations and that the authorization of an alternative setback is therefore necessary to enable the reasonable operation of the farm.

c) That the hardship has not been created by the applicant.

d) That the alternative setback, if authorized by the Secretary, will not substantially or permanently impair the appropriate use or development of adjoining property, nor be detrimental to the public health, safety and welfare.

e) That the variance, if authorized by the Secretary, will represent the minimum alternative that will afford relief and will represent the least deviation possible from these Regulations.

#### **10.0 Custom Manure Applicator Certification:**

(a) Custom applicators of manure or other farm generated organic wastes shall be certified by the Secretary.

(b) Custom manure applicators shall demonstrate knowledge of *Required Agricultural Practices Regulations* standards and the USDA/NRCS Nutrient Management Practice Code 590, including manure or other wastes application restrictions, buffer and setback requirements.

(c) Custom applicators shall demonstrate competency in methods and techniques used to minimize runoff from application sites, identification of weather or soil conditions that may

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increase risk of field runoff, recordkeeping, and other information deemed pertinent by the Secretary. Knowledge and competency shall be demonstrated either through participation in required training or a written test.

(d) Certified custom manure applicators shall train all employees and seasonal workers in methods or techniques to minimize runoff to surface water, identification of weather or soil conditions that may increase the risk of runoff, and the *Required Agricultural Practices Regulations* standards and restrictions for the application of manure or other agricultural wastes.

(e) Certification shall be valid for 5 years from the date of issuance.

(f) Certified custom manure applicators shall complete 8 hours of training in each 5 year period of certification. Completion of 5 year training requirements will serve as meeting the renewal requirements for certification.

## **Appendices:**

### **A) Roles of Other State Agencies: Information**

**Public Drinking Water Supplies and Wastewater Management:** Nutrients, sediment, organic matter and microorganisms may also impact drinking water supplies derived from surface waters. Farming operations should be aware of the locations of surface drinking water source intakes and appropriately manage agricultural activities to reduce potential negative impacts. Information regarding public water supplies as well as information pertaining to wastewater systems requirements may be obtained at 802-828-1535.

**Wetlands:** Farming operations should be aware of existing rules pertaining to wetlands under state and federal jurisdiction. The Natural Resources Conservation Service, U.S. Army Corps of Engineers, and the Vermont Department of Environmental Conservation coordinate all agriculture/wetland issues in Vermont. It is strongly suggested that landowners contact the U.S. Army Corps of Engineers at 802-872-2893 and the Vermont Department of Environmental Conservation at 802-828-1535 before initiating farm related projects in or near wetlands.

**Construction of New Farm Structures:** Construction of new farm structures, specifically buildings and other farm related structures that disturb one or more acres of land must obtain authorization from the ANR before commencing with land disturbance or construction activities. Approval will be issued by ANR upon receipt of a Notice of Intent (NOI) which certifies that adequate measures for the control of erosion and sedimentation will be used during land disturbance and construction efforts. Persons needing additional information about the Construction General Permit/NOI concerning one or more acres of land disturbance are advised to contact the Water Quality Division of the Department of Environmental Conservation at 802-241-3770. Authorization by ANR is not needed for construction or land disturbance related to cultivation, irrigation, drainage and fencing.

**Flood Hazard Area and River Corridor General Permit:** An ANR General Permit for activities exempt from municipal regulation in Flood Hazard Areas and River Corridors may be required. The primary purpose for the General Permit is to fully implement the Vermont Flood

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Hazard Area & River Corridor Rule (effective 3/1/2015) which requires the Agency to regulate activities exempt from municipal regulation in flood hazard areas and river corridors. These activities include state-owned and operated institutions and facilities, accepted agricultural and silvicultural practices, and power generating and transmission facilities regulated under 30 V.S.A. §§ 248 and 248a. More information can be obtained by calling 802-828-1535.

**Solid and Hazardous Waste Management:** Farming operations are advised to manage all wastes generated on the farm consistent with all applicable solid waste rules and hazardous waste rules. Information regarding the proper storage and disposal of waste oil, petroleum products and empty containers can be obtained from the Vermont Waste Management Division. On farm composting of food residuals and food processing residuals may require registration or permitting by the Vermont Department of Environmental Conservation. More information can be obtained by calling 802-828-1138.

### **C) Process for obtaining variances and exemptions**

#### **1) Farm structures/municipal setbacks: Variances**

- (a) A complete petition for an alternative setback shall include the following:
- i) The location of the parcel, and contact information where you can be reached for additional information or clarification.
  - ii) A detailed description of the farming operation and description of how you are engaged in required agricultural practices as defined in Section 2.05 Section 3.2 of the RAPs, respectively.
  - iii) An explanation of how the proposed building meets the definition of a “farm structure” as defined in Section 2.06 of the RAPs.
  - iv) A statement of the reason why less restrictive setbacks are necessary and the setback is the least deviation possible to provide relief. Please see standards below.
  - v) A copy of the zoning ordinance governing the tract on which the structure will be built outlining the setback requirements or a letter from the municipality with the required setback information.
  - vi) The name and contact information for your Town’s Zoning Administrator or Town Clerk, including an affirmative statement that the town has been notified of the Intent to Construct a Farm Structure.
  - vii) A plan of the existing structures and proposed structure(s) showing the distance to all property lines from the furthest projection of the building, including overhangs. For property lines along highway rights of way, please measure the setback appropriately as outlined in the municipal regulations.
  - viii) Name and address of the closest affected adjoining property owner and a description of each adjoining land use.
  - ix) You may also include letter(s) from adjoining landowners where applicable.
  - x) Certification that the farm is in compliance with all Required Agricultural Practices regulations.

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The Secretary bases his or her decision on facts provided by the petitioner. Failure to provide information to the Secretary could result in denial of request.

(a) Public Notice and issuance requirements:

The Secretary will notify the municipality in writing by certified mail, and copy the closest affected adjoining property owner of his or her intent to consider a petition for an alternative setback. The notification shall include a description of the proposed project, submitted plan, and shall be accompanied by information that clearly states where additional information may be obtained. The Secretary will request that the notice be posted in a public place in the municipal office.

Any comments resulting from this posting or from the municipality must be received in writing at the Agency by 4:30 p.m. on the seventh (7th) business day following receipt of the notice.

(b) Standards

The Secretary may grant a petition for an alternate setback or grant a petition for an alternate setback with conditions, except as otherwise outlined in these regulations or statutorily required, when all the following standards are met:

- i) That there are unique existing physical conditions or exceptional topographical or other physical constraints peculiar to the particular property that would create a hardship for the “farming” operation.
- ii) That because of such physical conditions or constraints, there is no possibility that the property can be developed in strict conformity with the provisions of these Regulations and that the authorization of an alternative setback is therefore necessary to enable the reasonable operation of the farm.
- iii) That the hardship has not been created by the applicant.
- iv) That the alternative setback, if authorized by the Secretary, will not substantially or permanently impair the appropriate use or development of adjoining property, nor be detrimental to the public health, safety and welfare.
- v) That the variance, if authorized by the Secretary, will represent the minimum alternative that will afford relief and will represent the least deviation possible from these Regulations.

\* The Agency cannot approve alternate setbacks from state wetland regulations, nor approve construction within Highway rights of way.

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Vermont Council

December 18, 2015

Agency of Agriculture, Food and Markets  
116 State Street  
Montpelier, VT 05620

*Via email to [AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov)*

**Re: Comments on Pre-Draft Required Agricultural Practices**

The Vermont Council of Trout Unlimited (“VTTU”) writes in comment of the Pre-Draft Required Agricultural Practices Regulations for the Agricultural Non-point Source Pollution Control Program (“Draft RAPs”) as required in Act 64 ‘An act relating to improving the quality of State waters.’ We commend the Vermont Agency of Agriculture, Food and Markets (“AAFM”) for updating the regulations and practices to eliminate nonpoint discharge and erosion from agricultural sources. This is one of the most important steps towards protection and restoration all surface waters of the state. Overall, VTTU found the Draft RAPs to be far-reaching and incorporated a number of agricultural nonpoint pollution sources into the regulations. However, VTTU also found the Draft RAPs to be deficient in some areas. Most significantly was the applicability of the RAPs to most, but not all, farms. There is also need for more robust education, inspection and enforcement criteria, and some of the specific regulations need to be strengthened.

VTTU consists of five chapters touching all parts of the state with a total of over 1,200 members. Our mission is to conserve, protect and restore Vermont’s fisheries and their watersheds. While much of the public focus of Act 64 is on the health of Lake Champlain, VTTU is focused on the rivers, streams, and headwaters that also benefit from Act 64. Moreover, the interconnectivity of groundwater, surface runoff and the connection to our waterways is of particular concern, as nonpoint pollution and indirect discharge from agricultural activity and livestock waste has a significant impact on surface water and adjacent water bodies, particularly smaller waterbodies and headwaters.

## General Comments

The Draft RAPs are a solid step towards curbing agricultural runoff and its impacts on surface waters. The Draft RAPs provide concrete direction on farming practices and procedures that will reduce runoff and lead to the restoration of the state's lakes and rivers. This is the beginning of a process that will include education, assistance and, if need be, enforcement to bring Vermont's agricultural community into compliance. But, there is one important shortcoming that pervades the entire regulation – the Draft RAPs must apply to all properties that raise crops or livestock, regardless of acreage or number.

VTTU is concerned about the limited applicability of the RAPs in the overall farming community. Rather than the RAPs applying to all agricultural operations, regardless of size, AAFM has created an artificial floor with a regulatory definition of what constitutes a farm, effectively exempting any agricultural activity below this threshold. While AAFM has taken steps forward in many areas, it also takes a step back with the 'floor' placed regarding the size of farms that have to follow the RAPs.

VTTU acknowledges that much of reasoning for this floor is financial in nature. However, the Draft RAPs includes increased targeted funding through Act 64 and the Clean Water Fund Board to implement the Act. Further, at no point in Act 64 is there an outlet for financial constraints to allow for only partially implementation of the Act. VTTU will continue to advocate for greater financial resources for AAFM both in the general budgetary process and that a greater percentage of the Clean Water Fund Board funding be allocated for agriculture over other areas. But, lack of funds cannot be a reason to not fully implement, educate and enforce the RAPs.

From a legal standpoint, it is the intent of both Act 64 and the Vermont legislature that all farms follow the RAPs. 6 V.S.A. §4810a(a) plainly states the Secretary "shall" "assure practices on all farms eliminate adverse impacts to water quality." The regulation must be applied to all farms, regardless of size or number of livestock. One cannot use the regulatory definition of a "farm" to deflect the issue, arguing it is only a "farm" if the regulation defines it as a "farm." This twists the intent and purpose of the law. Raising crops or livestock is an agricultural practice that can cause nonpoint pollution. All agricultural practices regardless of size can pollute waterways, therefore, the RAPs must apply to all farm practices.

As a practical matter, AAFM has stated in the past that some farmers did not follow the current AAFMs due to a lack of education and awareness of the regulation. Now with the Draft RAPs, rather than increase the scope of education, AAFM has instead limited who must comply. AAFM is circumventing this education problem by exempting, in their words, "thousands" of smaller farms from following the RAPs. But these "thousands" will still add to water pollution.

The issue cannot be a lack of funds to educate or enforce. VTTU will continue to vigorously advocate for more funds for AAFM programs to educate, assist and enforce the RAPs. But, the RAPs must be applicable to all agricultural practices, regardless of size.

## **Specific Comments**

VTTU agrees with many of the specific provisions that have been put forward, but there are some areas where the Draft could be strengthened or, in some cases, more clearly stated.

### Designation of Small Farms §§ 2.25, 3.1(a)-(d)

If the RAPs were to be followed by all farms, then this small farm designation would likely be unnecessary. That aside, if the definition is retained, it is too complex and should be simplified. In the Draft RAPs, the definition of a “Small Farm” entails the number of acres the farm encompasses, the amount of livestock it possesses, or a specific income level. But, in their current form, the Draft RAPs allow for a farm to fluctuate in and out of the definition, and therefore in and out of the requirement to comply.

To illustrate, what if a property owner has 80 pigs, which would put the owner into the small farm designation, but then sells all but ten of the pigs, thereby removing the farm from the criteria. Does it first comply with RAPs, then not? Or if a farm decides to raise livestock or plant crops one year, but does not the next? Is the manure stored from previous years exempt? Is the farmer expected to waiver in and out of compliance, following the guidelines one year but not the next? The goal needs to be protecting surface and ground water from nonpoint pollution. The simpler solution is to have all farms follow the RAP guidelines.

### §3.1 Presumption of Compliance without Verification

Similar to the issue of applicability of the RAPs noted above, presumption of compliance seems to be borne out of fiscal concerns, rather than sound environmental policy. The Draft RAPs state in §3.1 that a person engaged in farming as defined in §3.2 and who meet these “minimum threshold criteria” in the regulation “shall be presumed” to be in compliance with the RAPs. In this, it will be “presumed” the discharge to waters of the state is not occurring.

Compliance cannot simply be presumed. It must be verified. AAFM is making a leap of faith to presume that a small farm is in compliance and not discharging until it can be shown otherwise. VTTU contends that it must be assumed discharge is occurring until it can be verified that a farm is in compliance. If the issue is once again a lack of staff, AAFM should consider third-party, independent assistance or some other avenue. While VTTU reiterates its support for increased funding for education, assistance, and additional staff, there cannot be a presumption of compliance without some type of verification.

### §4.10 Inspection of Certified Small Farm Operations (SFOs):

AAFM states small farms “shall be inspected within 10 years of initial certification” and then subsequently inspected “based on potential impacts to water quality from the small farm.” §4.10(f). Here, a farm will self-certify and could be inspected once in ten years, then never again. This is simply inadequate. This inspection and verification must occur more promptly and repeatedly than once in ten years. VTTU would suggest that every three to five years is

necessary, as conditions can change, and would again suggest third-party, independent assistance if needed.

AAFM estimates that this new Small Farm Operations (SFOs) certification program would apply to approximately 2,500 farms. This places much-needed focus on the many farms below Medium Farms Operations and Large Farm Operations that contribute to water pollution. Farm certification, even self-certification, is a positive step towards better farm practices in preventing pollution, but self-certification without inspection and verification from the agency or an independent third-party amounts to little more than a voluntary program. This is similar to the current AAP program and is outside the legislative intent. AAFM should eliminate self-certification and instead verify that the process is being followed with inspection every three to five years. With no enforcement threat and no danger of being inspected, this becomes a voluntary program, not the mandatory program that was envisioned to protect surface waters.

### §5 Required Agricultural Practices

Overall, this is a solid regulation to prevent indirect discharge and protect surface and ground waters. In particular, we are pleased it includes surface waters, intermittent waters, and groundwater. It is important to acknowledge the interconnectivity of surface and ground water in curbing pollution.

#### §5.2 Nutrient, Agricultural Inputs and Waste Storage

Overall, this section seems solid. Section 5.2(e) regarding field stacking of manure is one of the more important provisions and VTTU fully supports the regulations on setbacks and rotation of manure stacking. A flood, human-error or other event that washes this stored manure into a waterway would have a devastating impact on water quality and undo what might have been years of successful preventative measures.

Some commentators have asked for exemptions from these rules for small farms that may have difficulty in compliance. VTTU opposes exemptions to the setback and stacking rules, and argues that rather an exemption, that manure could be disposed of in an alternate manner rather than reducing setback distances or rotation requirements. We understand that smaller farms can be a variety of sizes and these stacking provisions may be difficult for a specific farm to comply. However, exemptions should not be entertained as pollution could still occur. The size of a farm does not lessen the chance that an event could result in a massive amount of manure entering a waterway. Therefore, if the farm cannot follow the setback regulations, then alternative disposal, even off-site, should be required, but flat exemptions should not be allowed.

#### §5.3 Nutrient Management Planning

VTTU supports the inclusion of all farms in requiring Nutrient Management Plans (NMPs). The Draft RAPs state that “[a]ll Certified Small Farm Operations ... shall implement a field by field nutrient management plan.” §5.3(a) Again, this gets to the definition of a small farm, but does not include all agricultural practices. The statute clearly does not differentiate: the Secretary

shall establish standards for nutrient management on farms, including “required nutrient management planning on all farms that manage agricultural wastes.” 6 V.S.A. §4810a(a)(4)(A). It is understandable that there is an expense associated with these plans, but some consideration must be made for this.

#### §5.5 Waste Application Standards and §5.6 Winter Manure Spreading Exemptions

VTTU commends the agency on efforts to strengthen the regulation to eliminate winter spreading of manure and other nutrients. The accumulation of nutrients on frozen ground and the possibility of a cumulative effect of phosphorus loading during the spring runoff must be eliminated. There is always concern about exemptions, but we hope they will be granted sparingly and as a last resort. We also hope the Secretary will not hesitate to expand the December 15 to April 1 ban as needed, articulated in §5.5(b). With this process, education will be key, particularly in regards to anticipated weather events, but so will enforcement.

However, indirect discharge from dairy waste, such as whey, as a source of phosphorous in waste application standards is conspicuously absent here, as well as in the NMPs. AAFM must address the issue of indirect discharge from dairy waste as a source of phosphorous and acknowledge its relation to other phosphorous loading practices, including the application of manure and industrial fertilizer. The major assumption with indirect discharge by regulating agencies is that no harmful products are contained in indirect discharge effluent, and therefore there is no damage or risk to the environment. But, manure, fertilizer and indirect dairy discharge are all sources of phosphorous and other pollutants, so the cumulative effects of the application to farm fields must be taken into account when AAFM considers runoff from agricultural fields into groundwater as well as adjacent surface waters. It is important to prevent future impacts of indirect discharge on our surface waters, particularly headwaters and spring sources of rivers.

Finally, VTTU understands that an exemption from the winter spreading ban in §5.6(a) is more a practical matter of emptying waste lagoons filled to capacity than it is spreading nutrients for the upcoming growing season, but this is the manifestation of the problem. Logically, this practice could be curbed or eliminated by requiring the construction of larger waste lagoons when a new lagoon is constructed. But for current farms, this may not be practical. That said, winter spreading exemptions must be rarely granted, and used in a true emergency rather than to compensate for poor planning.

Overall, VTTU supports the efforts of AAFM to prevent excessive nutrient loading from manure spreading, especially during weather events and the winter season. We ask that the cumulative impacts of spreading of all nutrient sources must be taken into account, not just manure. Further, we ask the Secretary to limit winter spreading exemptions and pay close attention to enforcement, particularly for violations of the winter spreading ban.

#### §5.7 Buffers Zones

The buffer setback is an important aspect of the Draft RAPs to reduce phosphorus runoff and sedimentation due to erosion. There is concern that the buffer width will be inadequate, but it is

understood that this distance is a result of legislative compromise and is established by statute. VTTU would ask that more specificity in the Draft RAPs for types of vegetation and practices for maintaining the buffers, such as exclusion of livestock and not allowing harvest of the buffer.

#### §6.0 Livestock Exclusion

The section of the statute concerning the exclusion of livestock from rivers, streams and headwaters has been a prime concern for VTTU since the legislative session. For small streams that make up the headwaters of watersheds, livestock exclusion is key. Excess sedimentation in a small stream can have larger downstream impacts on water quality, potentially impacting broad portions of the watershed. The Draft RAPs should more clearly define the purpose of this section and more clearly explain the methods to reach this goal.

The language in Act 64 is plain; the language in the Draft RAPs is not. The statute states the Secretary shall “[e]stablish standards for the exclusion of livestock from waters of the State to prevent erosion and adverse water quality impacts.” 6 V.S.A. §4810a(a)(9). In the Draft RAPs, no stream access for livestock is allowed except at crossings and defined watering areas. Further, adequate cover must be maintained and a 3 inch minimum of growth on all pastures. We would ask that the regulation be more specific so as to eliminate any confusion.

Exclusion of livestock from surface waters will reduce erosion and manure in the waterway. This purpose should be adequately explained, either here or in future education practices. The exceptions to the rules have a good basis, but, with the understanding that some of this will be case-by-case, the exceptions could be better defined to avoid confusion, as well. First, how crossings are established and what is acceptable must be better explained. Second, the phrase “defined watering areas” is vague and implies that sections of streams could be excluded from the regulation, rather than a watering area that is adjacent to or diverted from the river or stream. Finally, we ask that exceptions “based on site specific characteristics,” be variations on such practices, rather than outright exceptions that undermine the purpose of the rule.

Overall, all farmers with livestock should be required to follow the RAPs. But as an organization that strives to protect rivers, streams and headwaters, VTTU is particularly concerned that all livestock owners follow §6.0. Just three equines, four cows, fourteen swine, or another number of livestock that would exempt a farmer from the RAPs can cause significant erosion and pollution to small surface waters and feeder streams. The cumulative impact of several such exempt farms could severely undermine other efforts to restore state waters.

#### §7.0 Ground Water Quality and §8.0 Investigations

VTTU is pleased that AAFM has included an extensive section on protection of groundwater. As Vermont is one of the few states that holds groundwater in public trust for use by all citizens, not just surface land owners, it is important that all water regulations protect groundwater quality and quantity. It is important to prevent future impacts to protect groundwater not only as a source of drinking water, but also as vital feeders for surface waters, particularly headwaters and spring sources of rivers.

The well-established nexus between groundwater and surface waters is not mentioned in the Draft RAPs. Nevertheless, the impacts that excessive surface nutrient application can have on groundwater and the efforts that can be taken to prevent this are detailed. Excessive nutrient application may not directly impact surface waters, but pollution to groundwater will eventually contaminate nearby surface waters. Pollution that affects groundwater could leach into surface waters, and the converse is also true. Both of these factors could have broad impacts on downstream waters and the overall watershed.

The investigative practices established in §8.0 are welcome, particularly that the agency “shall” investigate if a complaint is received by water supply owner or tenant in the vicinity of the farm alleged to contaminate the area groundwater. This recognizes that groundwater flows and is connected beneath the surface of adjoining property. Further, it empowers neighbors to protect their health and safety, and that of the environment.

However, VTTU would ask that the “approaches to identify and remediate sources” of contamination outlined in §8.0(e) be separated into two sections. It is appropriate that the Secretary “may use” the approaches established in (i), (ii), (iii), (v), (vi) and (vii) to investigate, as some may be more appropriate investigative avenues in case-by-case situations.

But, the corrective actions buried in §8.0(e)(iv) should be mandatory and a separate section. It is more appropriate that, upon finding contamination from an agricultural practice, the Secretary “shall” “[r]equire corrective actions.” That the Secretary “may” “[r]equire corrective actions” is entirely inadequate and undermines the purpose of the section. Corrective actions cannot be optional. Within (iv), there are several options that could be employed as the situation dictates, and therefore designated and differentiated by “or,” but overall action to prevent further contamination should be immediate. Moreover, this should also be a trigger for enforcement and possible penalties if warranted.

### A Note on Enforcement

While not specified in this section of Act 64, the RAPs are only as successful as its implementation. Without the threat of enforcement, implementation may very well fail. If once again lack of staff is the issue, AAFM should call on the expertise of the Vermont Department of Environmental Conservation to assist in compliance and enforcement. VTTU applauds that the Attorney General’s Office has been given more civil and criminal means to enforce violations, but it is AAFM who must report these violations to the Attorney General. The gaps caused by inadequate inspections and verification means that discovery of these violations may be too few and far between to be effective.

### Conclusion

VTTU again thanks AAFM for the opportunity to comment on these pre-draft regulations and we will continue to monitor and comment on the regulations as they move towards finality. VTTU commends AAFM on drafting a solid basis for the new Required Agricultural Practices. But, these RAPs needed to be fine-tuned. Foremost, to be effective, they must apply to any property

owners that plants crops or owns livestock. A lack of funding and staff cannot be a basis to implement a partial regulation. The cumulative impact of these exempt farms, even unknown in number, will undermine the overall purpose of Act 64.

Sincerely,



Clark Amadon, Chair  
Vermont Council of Trout Unlimited

*The Vermont Council comprises of the:*

Central Vermont Chapter, representing members in Chittenden, Addison, Orleans, and Franklin Counties.

Connecticut River Valley Chapter, representing members in Windham and Windsor Counties.

Greater Upper Valley Chapter, representing members in Windsor, Orange, and Caledonia Counties.

MadDog Chapter, representing members in Washington, Lamoille, Caledonia, and Essex Counties.

Southwest Chapter, representing members in Bennington and Rutland Counties.



Larson Farm  
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Wells, Vermont 05774  
Phone/FAX 802-645-0865

December 2, 2015

Vermont Agency of Agriculture, Food and Markets

**RE: Comments of RAP draft regulations**

Dear Agency Staff,

I am a farmer, and attended two of your recent informational meetings. We all agree that agriculture is a part of the water quality problem in Vermont's lakes and rivers, but I strongly urge you to re-evaluate the proposed solutions.

Let me make an analogy: Last summer my cows kept knocking down the polywire fence around the barnyard and getting into the garden, which did not make my wife happy. To solve the problem, I could build high tensile fence around the entire farm or just around the animal concentration area which was the source of my 'animal pollution'. I see a strong analogy here with our current water quality debate. I think that the Agency should determine through research and logic where the 'cows are getting out', and concentrate on building strong fences on that part of the agricultural landscape.

At the meetings, it has become painfully clear that the proposed rules disproportionately affect the very small mostly part time farms in Vermont. ANR needs to re-think how small and organic farms will be affected. Especially troublesome are sections regulating manure stacking sites, composting, cover crop timing, etc.

I've been on committees, and cannot imagine how tedious it is to be developing these rules. I also know that it is easy to get so focused on details that one loses the big picture. These proposed RAP rules make me think of the proverb 'choking on the gnat but swallowing the camel'.

I am not saying that just because a farm is small it is not part of the problem. I am not saying that LFOs are the problem. Rather, **I would like to re-frame the discussion.** Yes, we need to make sure manure pits don't overflow, and that manure is not stacked in a flood way. But we all know that the bulk of the nutrient run-off is from liquid manure application on bare ground.

**If we really want to reduce agricultural pollution of our waters, we need to address how we Vermont farmers use our land.**

According to the USDA web site, Vermont farmers plant about 185,000 acres every year to silage corn, and most of it is planted in the three watersheds that have the highest water quality problem, which should not be a surprise. So what is happening every fall? Manure is spread,

usually in full compliance with the farmers' nutrient management plan, onto bare corn ground in order to empty the manure pit. In other parts of the state, manure is applied in April/May, after which the field is plowed or disked with the same effect.

To my surprise, according to the k-factor in the RUSEL index, the silt loams of Franklin County are much more susceptible to erosion than the Addison county clays. Nevertheless, in both counties, soil leaves the farm and with it attached cations.

My admittedly limited research indicates that with every ton of lost soil there is 4 pounds of phosphorus. On Vermont's 185,000 acres of silage corn, at even an annual loss of only one ton of top soil per acre, we are putting 740 tons of pure P<sub>2</sub>O<sub>5</sub> into our waterways, or the equivalent of 1,600 tons of DAP every year. We know that the actual soil loss per acre on continuous corn ground is much higher than this, so we see that the biggest source of water pollution from agriculture is from our currently acceptable manure application and tillage practices. This is what has to change.

This brings me to my final point. I make two requests of the Agency:

- a. One. Yes, establish RAPs, but carefully consider the financial impact on our small farms, organic farms, vegetable and grain farms. I recommend at least double the MAU threshold for 'small farms'.
- b. Two. As part of the overall water quality solution, I urge you to expand your thinking to include a re-evaluation of the entire nutrient management program. Instead of focusing on manure storage, **let's turn our attention to reducing soil loss on our farms.** This would include requiring Vermont farmers to adopt strip farming practices such as we see in Pennsylvania, and greatly expanding the width of permanent sod buffers along all water ways of all sizes. **I know that will be a very hard pill to swallow from a political perspective, but it is medicine we all have to take if we are serious about cleaning up our waterways.**

Sincerely,  
Rich Larson



December 18, 2015

Mr. Chuck Ross, Secretary  
Vermont Agency of Agriculture, Food, and Markets  
Attn: RAPs  
116 State Street  
Montpelier, VT 05620-2901

RE: Comments on the draft Required Agricultural Practices

Dear Secretary Ross:

The Natural Resources Committee of the Windham Regional Commission (WRC) appreciates the opportunity to submit comments on the draft Required Agricultural Practices (RAP). The WRC's Natural Resources Committee members discussed the RAP during its November 18 meeting and have reviewed the proposed requirements. We applaud the Vermont Agency of Agriculture, Food, and Markets' (AAFM) efforts to reduce erosion, sedimentation, and nutrient loading as it seeks to improve the State's overall water quality. We support the AAFM's proposed measures that protect water resources by requiring increased perennial buffers, nutrient management planning, and sound manure management practices. These required practices, in combination with Vermont's other Clean Water Act initiatives, will make a significant difference in the health of our surface and ground water resources.

We do have a few concerns and questions about the draft RAP that we wish to highlight. First, the applicability of the law is ambiguous as written. In Paragraph 2.07, for instance, the definition of a "Farm" includes the phrase "devoted primarily to farming as defined in Paragraph 2.08". The definition of "Farming" in Paragraph 2.08 includes "the use of land for growing ... fiber... maple sap ... production of maple syrup..." [etc.]. Then Paragraph 2.25 defines "Small Farm" in a way that requires a determination of whether "10 or more acres are used for farming" [among other things]. While we believe that these RAP are not intended to apply to silviculture, the RAP's definition of a Farm includes the growing of "fiber", which is exactly what is done on a woodlot. We recommend that the draft RAP

and the definitions within it make explicitly clear whether a person owning or leasing/controlling a woodlot for growing cordwood and sawlogs (not for Christmas trees, for maple sap, or for horticultural or orchard crops), but who does not otherwise engage in "farming" [e.g., either falls below the thresholds given in Section 3.1 (a) through (d) or does not conduct any of the agricultural practices given in Section 3.2] is required to comply with the requirements in Sections 4 through 10 of the RAP.

The "Small Farm" designation is intended to allow self-certification of adherence to the RAP, but still imposes some requirements that, depending on how small farms are defined, may not be needed (e.g., certification form, required farm operator training). That training (see Paragraph 4.12) is appropriate for most farmers, but it may not be appropriate for everyone who falls under the "Small Farm" designation.

While the proposed RAP address waste management from livestock and carcasses, the guidelines concerning the proper disposal of fertilizers or chemicals as expressed in Paragraph 5.2(b) are vague. We recommend that clearer guidelines be included specifying how commercial chemicals are to be managed in order to prevent adverse impacts on water quality.

In Paragraph 5.5(f), manure application requires a 100-foot buffer for private wells while public wells require a 200-foot buffer. This paragraph goes on to say that restrictions do not apply to private water supplies that have not been created according to regulation, which may be interpreted to mean that manure can be spread right up to a water supply that is non-conforming. This discrepancy between private, public and non-conforming water supplies is concerning. We suggest setting a standard 200-foot buffer around all wells to ensure that ground and surface waters are adequately protected.

On behalf of the Natural Resources Committee of the WRC, thank you very much for providing this opportunity to comment on the draft Required Agricultural Practices. We support your efforts to ensure that the State's water resources are protected and restored (as needed), while responding to the needs of our local farming community. These comments are offered in the spirit of a shared responsibility for our region and the future of Vermont. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Kimbully S." followed by a horizontal line.

Kim Smith  
Assistant Planner