



## Act 64 Implementation: Required Agricultural Practices (RAPs)



# What are the RAPs?

## Act 64

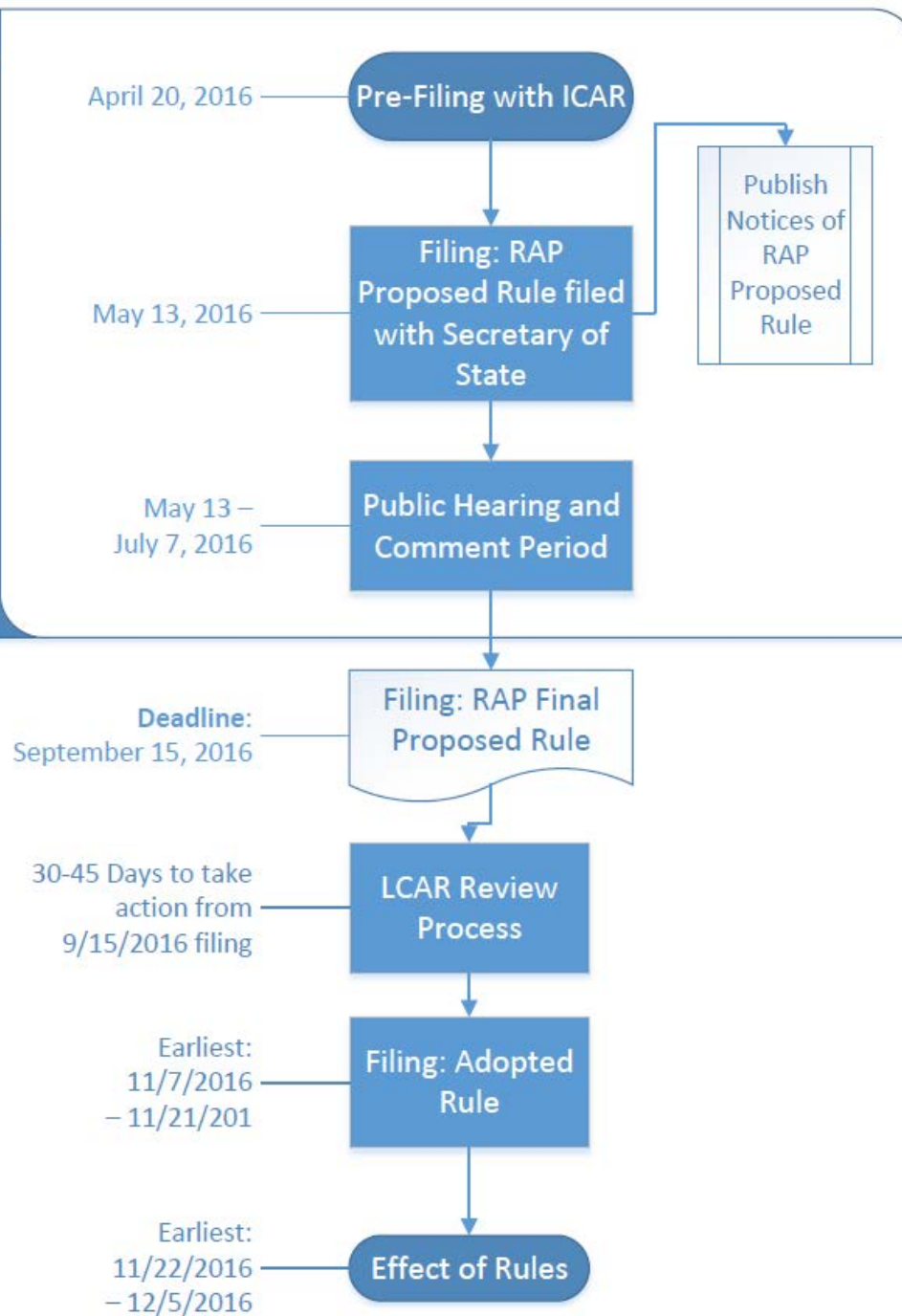
- VAAFM was directed by the Legislature to draft the RAPs pursuant to Act 64, signed into law on June 16, 2015.
- VAAFM has been charged with filing a Final Proposed Rule on or before **September 15, 2016**



## RAPs

- AAPs Since 1995
- Act 64 requires that the revised RAPs include requirements for:
  - small farm certification,
  - nutrient storage,
  - soil health,
  - buffer zones,
  - livestock exclusion, and
  - nutrient management.
- *Tile Drainage Rules for Jan 15, 2018*

VAAFM  
Actions  
Taken to  
Date



# Vermont Clean Water Initiative: All-In



- WWTF
- Forest Lands
- Developed Lands Including Paved Roads
- Unpaved Roads
- River Corridors & Floodplains
- Wetlands
- Ag Lands



# VERMONT AGENCY OF AGRICULTURE

## CURRENT WATER QUALITY INITIATIVES



With all that is happening around water quality in the state of Vermont, it may be hard to figure out how things relate or what it means for you. Outlined below are current initiatives headed or partnered by the Vermont Agency of Agriculture, Food & Markets (VAAFM). While each initiative is separate, they are joined by a common goal; to further protect water quality in the state, and enhance the good work being done by farmers by increasing outreach and assistance to farms of all sizes.

**For more detail, including links to each initiative, please visit [go.usa.gov/cdGew](http://go.usa.gov/cdGew)**

### Act 64 - Vermont's Clean Water Act

Also known as the Vermont Clean Water Act, a legislative law passed during the 2015 session and signed by Governor Shumlin on June 16, 2015. Addresses all sectors impacting our waters – roads, wastewater treatment facilities, developed lands, forests and farms. It mandates new performance standards and programs to protect and improve water quality statewide

### Lake Champlain Revised TMDL

In response to a federal lawsuit filed by the Conservation Law Foundation, the EPA reconsidered its previous approval of the 2002 Lake Champlain TMDL and disapproved the Vermont portion of the TMDL in January 2011. Under federal law, upon such disapproval, the EPA is responsible for establishing a new TMDL to implement the applicable water quality standards. The EPA initiated the process of developing a new TMDL for Lake Champlain in 2011, in cooperation with the State of Vermont, which is anticipated to be signed late spring 2016.

#### Required Agricultural Practices (RAPs)

New water quality rules revised from the formerly known Accepted Agricultural Practices (AAPs) required to be drafted by VAAFM. Revisions include:

- Small farm certification
- Nutrient storage
- Soil health
- Buffer zones
- Livestock exclusion
- Nutrient management

#### Clean Water Vermont

An exciting and growing collaboration among municipalities, state agencies, local and regional partners, farmers, businesses and the public to take action that will safeguard the public's access to clean and safe water.

#### Tile Drainage Interim Report

A requirement of Act 64, and submitted to the legislature February 16, 2016. This report provides an assessment of known facts and current findings about the benefits and impacts of subsurface drainage on Vermont's farms.

#### Secretary's Final Decision North Lake Assessment & BMP Initiative

Issued February 3 2016, requires mandatory Best Management Practices for farms in the Missisquoi Bay Basin where the RAPs alone are not sufficiently effective. VAAFM will lead an assessment and BMP implementation initiative beginning in 2017.

#### Enforcement Report & Tool

Enhanced reporting techniques are being used to communicate with the public about the work that is done to inspect, monitor and regulate to ensure compliance, with water quality requirements. The tool also outlines the enforcement process and procedures VAAFM follows to resolve compliance issues.

#### VT Regional Conservation Partnership Program

Provides framework for the State of Vermont, in partnership with 25 organizations, agencies, businesses and non-profits to provide financial and technical assistance to agricultural and forest landowners over the next five years. It will help with development and implementation of site-specific farm and forest projects that will directly improve water quality in streams and rivers that flow towards Lake Champlain.

#### Partner Database

A unique tool that will facilitate and improve coordination with agricultural partners statewide on conservation projects. The database will track on-farm conservation practice implementation, increase the ease with which staff can communicate with each other on projects, and allow for customizable reporting while maintaining farmer confidentiality.

#### Vermont Environmental Stewardship Program

A pilot program currently in development, VESP will encourage and recognize agricultural producers to achieve environmental excellence. Farmers will work with conservation planners and technical service providers to go above and beyond what is required by regulation.



**Formal rulemaking**  
Spring 2016, final rule - September 15, 2016



**Clean Water Fund**  
proposed increased Ag implementation \$ and expanded efforts for FY2016



Next steps include a final report, due in January 2017 and the revision of the RAPs in 2018 to include requirements for tile drainage.



**Educational outreach,**  
assessments and implementation of BMPs on farms



Increased regulatory staff as well as presence on small farms, along with additional technical assistance and engineering support



**\$16 million in financial and technical assistance**



Will allow for easy accounting of the hard work being done by farmers toward meeting the State's water quality goals



**Expected to begin accepting applications in Summer 2016.**





**USDA NRCS: \$45 million over 5 years**



**AGENCY OF AGRICULTURE, FOOD & MARKETS**

<p>VT Agency of Agriculture, Food &amp; Markets</p> <p>BEST MANAGEMENT PRACTICE</p> <p>&amp;</p> <p>ALTERNATIVE MANURE MANAGEMENT PROGRAMS</p>	<p><u>Return Application to:</u></p> <p>116 State Street Montpelier, VT 05620-2901 (802) 828-1410 fax</p> <p><u>Engineering Contact:</u> Rob Achilles, P.E. (802) 917-1397 cell  Allyson Allen, E.I (802) 522-0857 cell  <u>Payment Contact:</u> Jeff Cook (802) 828-3474 office</p>
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## Technical and Financial Assistance Available for all Farms in Vermont

**Vermont Clean Water Fund:**  
\$1.75 Million Proposed for Farms



**State of Vermont RCPP: \$16 million**  
**Long Island Sound RCPP: \$10 million**  
**VACD RCPP: \$800,000**  
**Memphremagog RCPP: \$600K**



This document, developed pursuant to Act 64 (2015 session), is the clean draft of the Required Agricultural Practices (RAPs) that was submitted to the Secretary of State's Office. This rule will be subject to public hearing and comment prior to rule finalization. For more information, please visit <http://agriculture.vermont.gov/rap> or contact the Vermont Agency of Agriculture, Food and Markets at (802) 828-3478. Public comment on this RAPs draft should be submitted to [AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov).

## REQUIRED AGRICULTURAL PRACTICES RULE FOR THE AGRICULTURAL NONPOINT SOURCE POLLUTION CONTROL PROGRAM

### Section 1. General

#### 1.1

# RAP Final Rule Effective: 12/6/2016

#### 1.2

#### 1.3

#### 1.4

provisions of 6 V.S.A. §§ 4991 - 4996 and additional remedies available to the State under other applicable Vermont law.

- 1.5 Further considerations under the RAPs: 6 V.S.A. § 4810a(b) requires that on or before January 15, 2018, the Secretary of Agriculture, Food and Markets shall amend by rule the Required Agricultural Practices in order to include requirements for reducing nutrient contribution to waters of the State from subsurface tile drainage. As part of the rule amendment process, the Secretary may also evaluate the current status of effectiveness of the Required Agricultural Practices, the implementation of additional best management practices, and the current water quality condition of waters of the State. The Secretary may consider additional changes to the Required Agricultural Practices, as appropriate, to meet the water quality goals of the State.



Agency of Agriculture, Food & Markets  
116 State Street  
Montpelier, VT 05620-2901  
[www.Agriculture.Vermont.gov](http://www.Agriculture.Vermont.gov)

### Highlighted Changes Summary

#### Agency Discussion of Changes Included in RAP Proposed Rule Filed May 13, 2016

The Vermont Agency of Agriculture, Food and Markets (VAAFM) is providing the following highlighted changes summary outlining changes made between the second draft of the Required Agricultural Practices (RAPs) Rule for the agricultural nonpoint source pollution control program and the RAP Proposed Rule filed with the Secretary of State on May 13, 2016.

As a result of Act 64—the Vermont Clean Water Act—signed into law in July 2015, the Agency of Agriculture was tasked with updating the Accepted Agricultural Practices (AAPs) to further reduce the impact of agriculture on water quality across the state. The RAPs are an updated version of the Accepted Agricultural Practices (AAPs), the rules which regulate farms in order to protect water quality, re-written to a higher level of performance. The Agency sought public input on the second draft of the new regulations, to ensure the draft RAPs reflected the realities of farming and the legislative intent of Act 64.

The second draft of the RAPs was released on February 23, 2016 and public review was considered up to April 11, 2016. During this period, 36 small focus group meetings were held throughout the state with various stakeholders. The first meeting was held on February 24, 2016 with the Southern Windsor Regional Planning Commission in Cavendish and the final meeting was held by the Lamoille County NRCD in Morrisville on 4/12/2016. Over 600 stakeholders participated in these meetings.

All written comments received are part of the Administrative Record and are on the Agency website.

This highlighted changes summary, the public comment period, and the stakeholder meetings which were held are not required by law and are an informal process undertaken by VAAFM to ensure the development of a rule which will be workable for farmers as well as able to meet the intent of Act 64. This summary responds to aggregated comments, criticisms, and new data submitted in written or oral presentation to VAAFM regarding the Second Draft of the RAPs.

This highlighted changes summary covers some of the major comment areas and major revisions from the second draft of the RAPs. There are additional changes included in the Proposed RAP Rule which are not covered in this highlighted changes summary. Please read the Proposed Rule to ensure all new provisions are understood.

VAAFM wishes to thank all members of the community who took the time to provide comments or otherwise participate in this public process. All comments received have been thoroughly reviewed and considered by VAAFM in its decision-making process. Copies of the comments have been summarized and attached to assist readers in following the responses.

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. Public comment on this RAPs draft should be submitted to [AGR.RAP@vermont.gov](mailto:AGR.RAP@vermont.gov).



# What Farm Size are You?



## Regulatory Authority

## Size of Farm

## Requirements Needed to Meet Farm Type

Municipal zoning may apply authority to Non-RAP Operations (NROs).

Can be required to follow the RAPs if adverse water quality impact exists

### Non-RAP Operations (NRO)



Operates LESS THAN 4 acres used for farming AND has animal numbers below RAP Farm Threshold (Example: 1-4 cows; 1-3 horses; 1-99 layers)

- OR -

Makes LESS THAN \$2,000 Annual Gross Income AND did NOT file a 1040F once in the last 2 years.

Agency of Agriculture, Food & Market (VAAFM) regulates RAP Small Farm Operations (SFOs).

MUST follow RAPs.

### RAP Small Farm Operations (SFO)



Operates 4+ acres used for farming

- OR -

Regardless of acreage, any farming operation that makes more than \$2,000 Annual Gross Income or has filed a 1040F once in the last 2 years.

- OR -

Has an Approved Business Management Plan

VAAFM regulates Certified SFOs.

Farm needs to ANNUALLY Self-Certify

-AND -

MUST follow RAPs.

### Certified Small Farm Operations (CSFO)



Operates 10+ acres used for farming

- AND one of the following categories: -

Livestock Farm: Example: 50 - 199 Dairy Cows or 75 - 300 Beef Cows or 40 - 150 Horses or 90,000# Liveweight

- OR -

Annual Crop Farm: 50+ acres used for growing Annual Crops (Ex: Feed Corn; Sweet Corn; Pumpkins; Soybeans)

- OR -

Vegetable Farm: 50+ acres used for growing Vegetables

VAAFM regulates MFOs.

Farm needs a MFO General Permit with Annual Report

- AND -

MUST follow permit and RAPs.

### Permitted Medium Farm Operations (MFO)



Meets Animal Numbers for MFO

Example: 200-699 Dairy Cows or 300-999 Beef Cows or 150-499 Horses or 3,000 to 9,999 Sheep

VAAFM regulates LFOs.

Farm needs a LFO Individual Permit with Annual Reporting

- AND -

MUST follow permit and RAPs.

### Permitted Large Farm Operations (LFO)



Meets Animal Numbers for LFO

Example: 700+ Dairy Cows or 1000+ Beef Cows or 500+ Horses or 10,000+ Sheep

Estimated # Farms

6000

700

140

27



### Activities to be managed by local town / municipality

- Parcels smaller than **4 acres** in size and manages
  - four equines; five cattle, cows, or American bison; 15 swine; 15 goats; 15 sheep; 15 cervids; 50 turkeys; 50 geese; 100 laying hens; 250 broilers, pheasant, Chukar partridge, or Coturnix quail; three camelids; four ratites; 30 rabbits; 100 ducks; 1,000 pounds of cultured trout; or
  - other livestock types, combinations, and numbers as designated by the Secretary
- Parcels smaller than **4 acres** that
  - Gross less than \$2,000 from Ag Sales
  - Have not filed a 1040(F) once in last two years
- A farm can demonstrate they are a farm that should be regulated under the RAPs by income or a prospective business plan.
- Secretary can designate that a Non-RAP Operation must follow the RAPs if causing an adverse water quality impact

# Small Farms Requiring Certification

### Livestock Farm

- 10+ acres AND at least 25% of Medium CAFO numbers
  - 50-199 Dairy Cows
  - 75-300 Beef Cows
  - 40-150 Horses
  - 90,000# + Liveweight

### Annual Cropland Farm

- 50+ acres used for 'annual cropland' production
  - Where nutrients are applied

### Vegetable/Produce Farm

- 50+ Acres used for 'vegetable' production
  - Where nutrients are applied

% Under Permit /  
Certification

76.4% of All  
Liveweight

94% Of All  
Dairy Cows

93% of All  
Corn for  
Silage

68% of All  
Vegetable  
Acreage

# Section 4.3

## Proposed Requirements Only For: Certified Small Farm Operations

Annual Compliance  
Reporting

Minimum inspection  
within 7 years

590 Nutrient  
Management Plan  
Required

Required Education for  
Farmers

- A person who owns or leases a Certified Small Farm shall notify the Secretary of a change in ownership or lease of the whole farm ownership or land base within 30 days.



### Annual Compliance Report

Farm/Business Name: _____		Owner/Operator Name: _____	
Reporting Period (mm/dd/yyyy): ____/____/____ to ____/____/____			
<b>I. TYPE AND NUMBER OF ANIMALS</b>			
Report the maximum number of each type of animal confined at all of the facilities covered under the MFO GP at any one time.			
Type	Number of Animals		
Mature Dairy Cows (lactating and dry)			
Youngstock and Heifers			
Veal Calves			
Cow/Calf pairs			
Swine (55 lb. or more)			
Swine (under 55 lb.)			
Horses			
Sheep or Lambs			
Turkeys			
Chickens (w/liquid system)			
Chickens (w/out liquid system)			
Ducks (w/liquid system)			
Ducks (w/out liquid system)			
<b>II. MANURE AND WASTE PRODUCTION</b>			
Report the estimated amount of manure and waste generated from or imported to the facilities under this permit during the 12-month period covered by this report. Waste includes: spoiled feed, manure, milkhouse waste, washwater, leachate, used bedding, rainfall into waste storage structures, barnyard runoff, anaerobic digester substrates, and other dirty water.			
A. Amount of liquid manure and waste generated or imported during the 12-month period covered by this report.		_____ gallons	
B. Amount of solid or semi solid manure and waste generated or imported during the 12-month period covered by this report.		_____ tons	
<b>III. MANURE AND WASTE TRANSFERRED TO OTHER PERSONS</b>			
Report the estimated amount of waste transferred to other persons from the facilities under this permit during the 12-month period covered by this report.			
A. Amount of liquid manure and waste transferred during the 12-month period covered by this report.		_____ gallons	
B. Amount of solid or semi solid manure or waste transferred during the 12-month period covered by this report.		_____ tons	



### Discharges:



(a) Farms subject to regulation under these Rules **shall not create any 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.

### Nutrient, Agricultural Inputs & Waste Storage Production Areas

- Production areas shall utilize runoff or leachate **collection, diversion or other management strategy** to prevent discharge of waste or indirect discharge to groundwater.
- All Ag Wastes shall be properly stored
- Waste Storage Facilities:
  - Must be properly maintained
  - Adequate Volume to prevent overflow
  - May be required to meet and certify compliance with NRCS Standard



# Nutrient, Agricultural Inputs & Waste Storage

## Field Stacking of Manure

Proposed Changes:

Increased stacking setbacks  
from water and wells plus 3  
year storage maximum



- **Prohibited to be stacked in a floodway or in an area subject to annual flooding**
- **If not approved consistent with NRCS Standards or Approved by Secretary:**
- Manure stacks must meet the following setbacks:
  - 100' from property lines
  - 200' from top of bank of surface waters
  - 200' from public or private water supplies
  - 200' from any public water supply
  - 100' from ditches, or conveyance to surface water
  - As authorized by Secretary—no less than 100' top of bank surface water or well
- Field Stacks shall be land applied or exported within two years



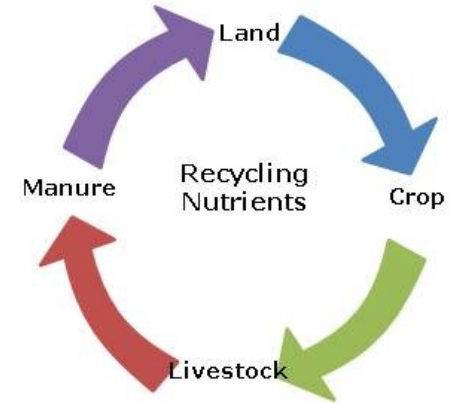
# Nutrient Management Planning



Proposed Changes:

590 Nutrient management plan required for certified SFOs

Record keeping requirements



All MFO, LFO, and Certified SFOs shall develop and implement a Nutrient Management Plan (NMP) which meets USDA NRCS Nutrient Management Plan Practice Code 590

### **All other farming operations**

All sources of nutrient shall be accounted for when determining recommended application rates of manure.

All fields which receive mechanical application of manure and other wastes shall be soil sampled once ever 5 years.

Plans and records of application rates shall be maintained for 5 years.

# Soil Health Management Recommendations: Cover Crop Requirements



Manage gully erosion  
and reduce overall  
erosion to T

- Cropland shall be cultivated so that average soil loss will be less than or equal to the tolerable soil loss (T) for a particular soil. RUSLE<sub>2</sub>
- Field born gully erosion will be managed through appropriate BMP.

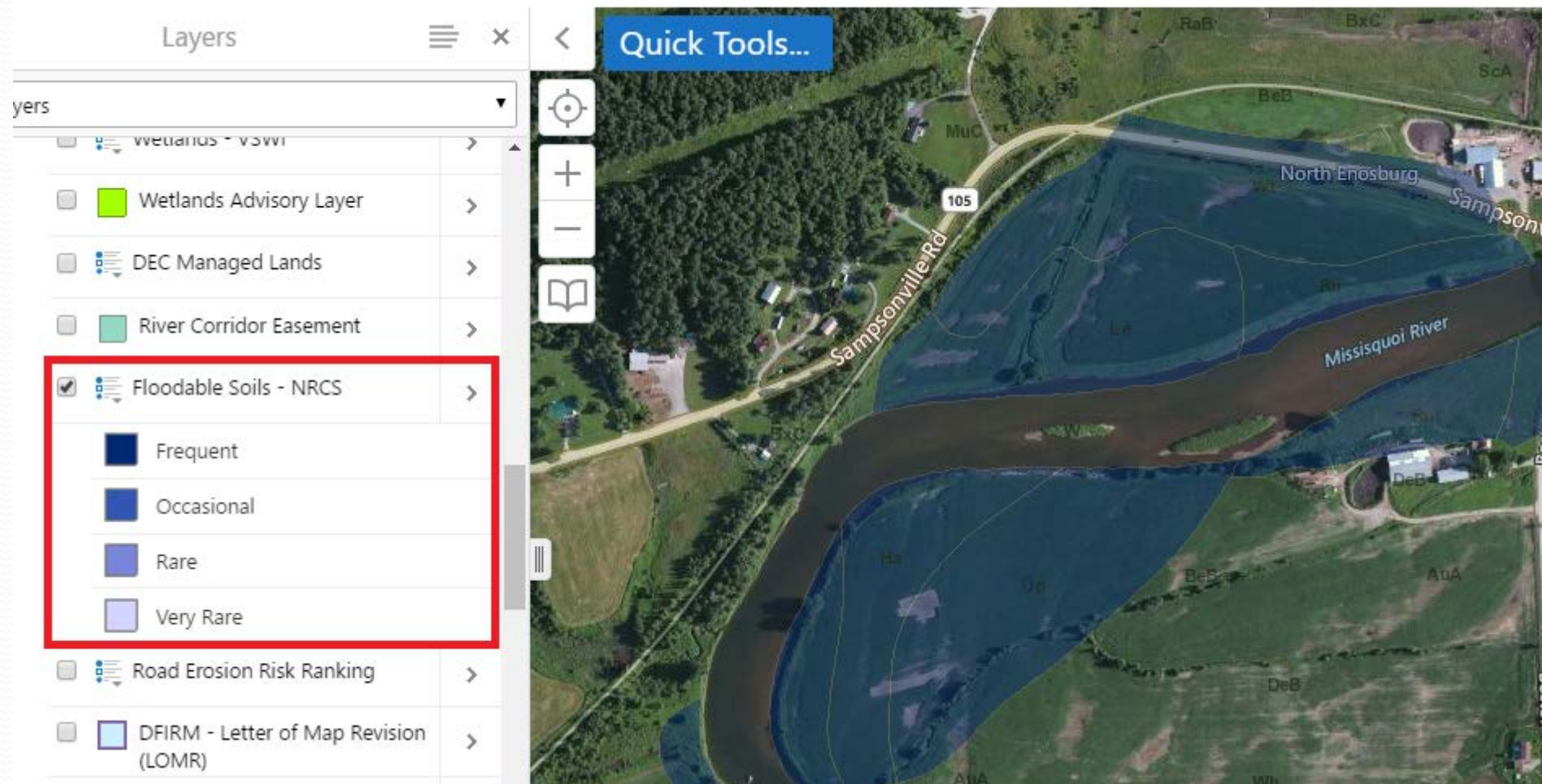
Proposed Changes:



Cover Crop Floodplains  
(broadcast by 10/1 or  
drilled by 10/15)

- Annual croplands subject to flooding are required to plant cover crops.
  - Broadcast by October 1
  - Drilled by October 15
- USDA Soil Survey Flooding Frequency Class:
  - “Frequently Flooded”
- 30% Residue after Oct 15

Shortened url: [go.usa.gov/cddEz](https://go.usa.gov/cddEz)



"Frequent" means that flooding is likely to occur often under normal weather conditions. The chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year.



# Proposed Winter and Floodplain Manure & Ag Waste Application Standards



Winter Spreading Restrictions

- No Manure or Waste application spread on all fields between December 15 and April 1

### Winter Spreading Ban

- Secretary may prohibit between **12/1-12/15 and 4/1-4/30** of any calendar year
- Emergency exemptions

Floodplain Restrictions

- Manure may not be spread within frequently floodable soils as defined by NRCS soils layer:
  - After October 16 or Before April 14
  - **Must injected or incorporate within 48 hrs**
    - Does not apply to no-till

# Winter Manure Spreading Restrictions & Exemptions



Seasonal winter  
spreading exemptions  
including frequently  
flooded floodplain fields

- RAPs revise and set new standards for winter manure and wastes spreading ban.
  - Requirements for requests
  - Standards for approvals
  - Guidelines for manure application
  - Includes options for exemptions from restrictions on frequently flooded fields

# Manure & Waste Application Standards

Proposed Changes:

When Weather  
conditions conducive  
to runoff

No Manure Application on  
bedrock, frozen, saturated or  
snow covered ground (unless  
approved in advance)



Manure and other wastes shall not be spread when 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



## Proposed Manure & Waste Application Standards

For 590 NMPs:  
Required P Reduction Strategy  
when annual cropland, grass,  
hayland STP reaches > 20 ppm  
Modified Morgan

No Manure Application on  
annual, vegetable small grain  
**cropland** w/ slopes > 10% w/o  
100' grass buffer & manure  
setback



# Vegetated Buffer Zones & Setbacks

Proposed Changes:

Increased buffers and  
manure setbacks  
(25' surface water and  
10' ditches)



### **Buffer Zone Requirements**

- Surface Water shall be buffered 25'
- Ditches shall be buffered 10'
- Surface inlets or open drains shall be buffered from croplands by 25 feet of perennial vegetation
- Harvesting of Vegetated Buffer is Allowed
- No spreading manure or wastes in the vegetated buffers
- Fertilizer and compost may be used per NMP to establish or maintain buffer
- No Tillage Allowed in Buffer except for establishment or Maintenance

### **Site Specific Variances**

- Variances for vegetated buffers may be considered based on a site specific characteristics

# Animal Mortality Management & Composting

Proposed Changes:

**Mortalities must be  
disposed in 48 hours**



Animal mortalities being disposed of on the farm within 48 hours according to the following standards:

- Compost
- Burial
- Render

**On-Farm Composting of Imported Food Processing Residuals**



# Proposed Livestock Exclusion Standards

Establish standards for livestock exclusion from waters.  
Production & Pasture Areas  
(3" minimum growth in buffer zones—25'/10')



### **Production Area & Immediately Adjacent areas**

- No Access to Surface Water except:
  - At defined crossing
  - Where prescribed rotational grazing plan exists (3" residual)
  - In areas approved by Secretary
  - Adequate vegetative cover shall be maintained to protect banks of surface water

### **Outside Production Area (Pasture)**

Livestock shall not have access to surface water outside of production area that:

- Have unstable banks of surface water
- Areas designated by Secretary where actual or potential threat exists

## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

This presentation provides one example of where fencing to keep livestock out of surface water would be required on a farm.

First, it is important to define where is the “Production Area”





## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

This farm has a barnyard which allows livestock access to a stream which flows adjacent to the main barn. This is one major component of a Production Area

### Legend

- Stream
- Barnyard

VCGI



## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

Also included in the production area are the farm roadways.

### Legend

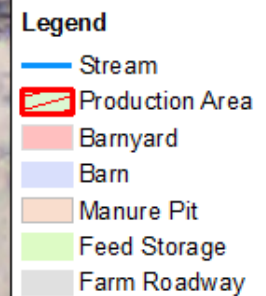
- Stream
- Barnyard
- Barn
- Manure Pit
- Feed Storage
- Farm Roadway

VCGI



## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

All these areas together make up the “Production Area” which is highlighted below.



VCGI



## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

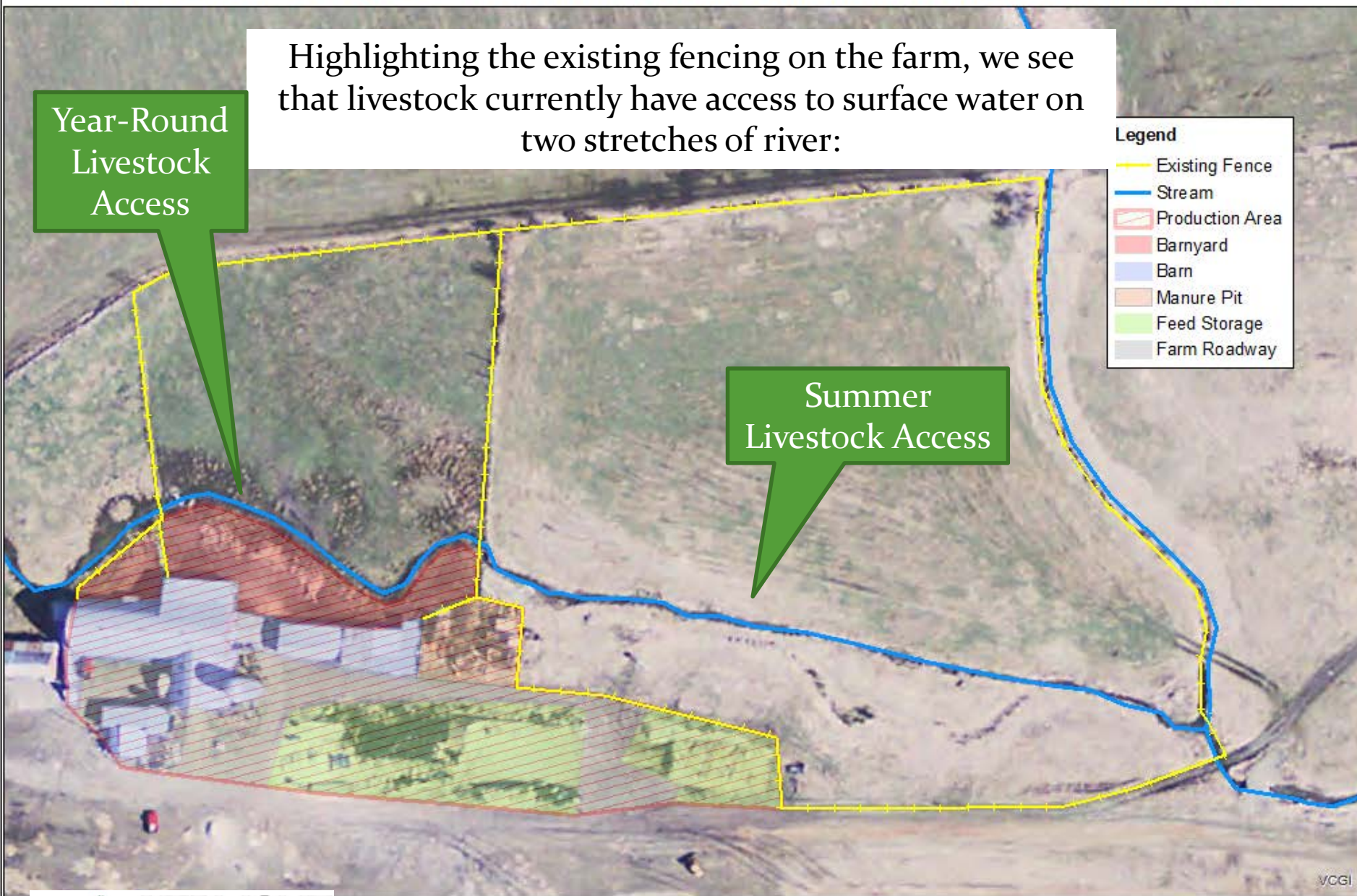
Highlighting the existing fencing on the farm, we see that livestock currently have access to surface water on two stretches of river:

Year-Round  
Livestock  
Access

Summer  
Livestock Access

### Legend

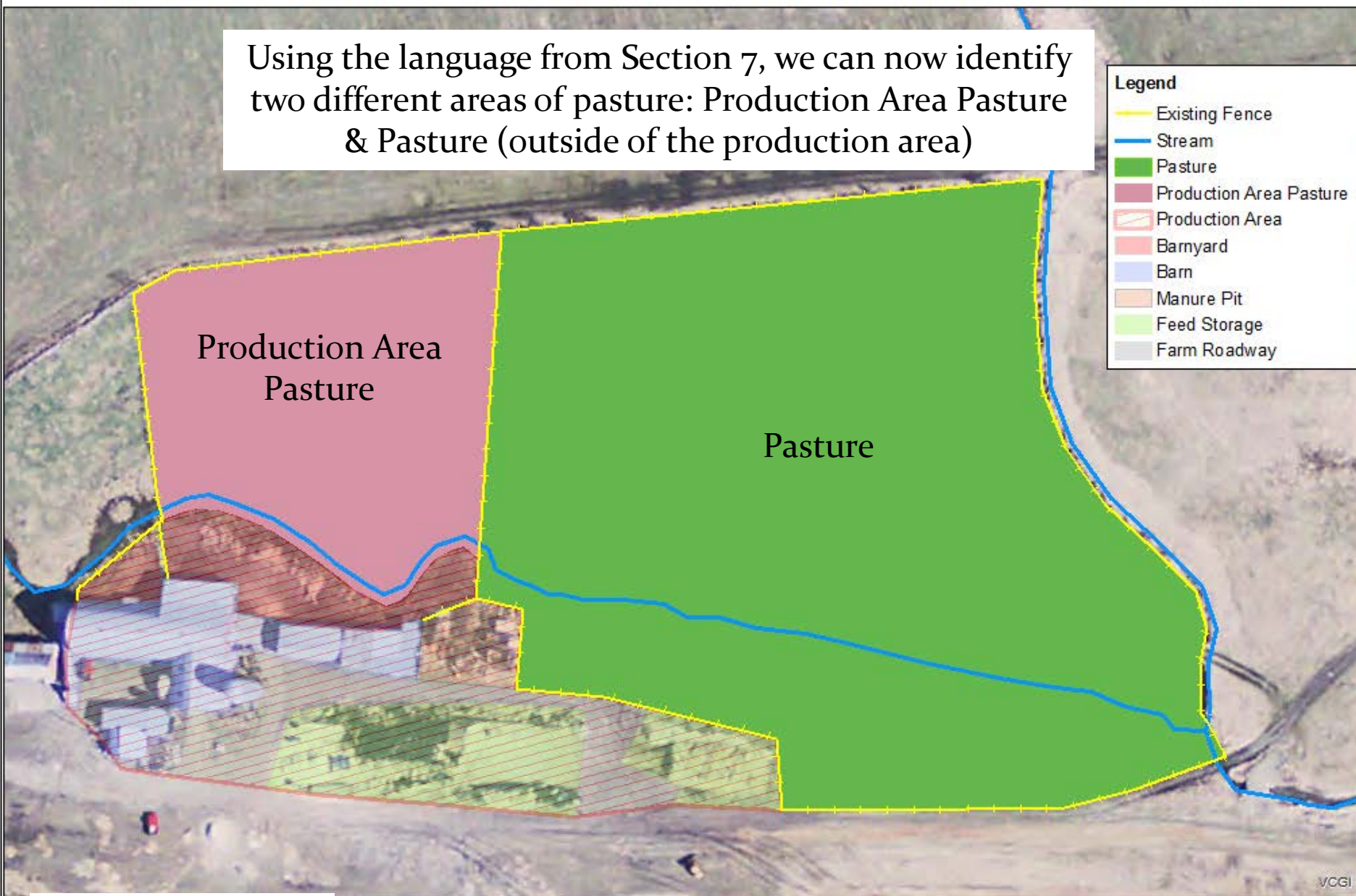
- Existing Fence
- Stream
- Production Area
- Barnyard
- Barn
- Manure Pit
- Feed Storage
- Farm Roadway





## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

Using the language from Section 7, we can now identify two different areas of pasture: Production Area Pasture & Pasture (outside of the production area)





## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

The section of stream which runs through the Production Area and Production Area Pasture would be required to be fenced off from livestock access.

### Legend

- Existing Fence
- Required Fence
- Stream
- Pasture
- Production Area Pasture
- Production Area
- Barnyard
- Barn
- Manure Pit
- Feed Storage
- Farm Roadway

Required Fencing

No Fencing Required  
Unless Erosion Present

WCGI



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## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

A discrete point on the stream could be used as a stream crossing or watering area in the production area.

Can Cross & Water at  
Defined Areas

### Legend

- Existing Fence
- Stream Crossing
- Required Fence
- Stream
- Pasture
- Production Area Pasture
- Production Area
- Barnyard
- Barn
- Manure Pit
- Feed Storage
- Farm Roadway

VCGL



## RAP Section 7: Proposed Livestock Exclusion Requirements from Waters of the State

With an approved Grazing Management Plan, a farmer could graze this area leaving no less than 3" of vegetative growth

### Legend

- Existing Fence
- Required Fence
- Stream
- Pasture
- Production Area Pasture
- Production Area
- Barnyard
- Barn
- Manure Pit
- Feed Storage
- Farm Roadway

VOGI



VERMONT

AGENCY OF AGRICULTURE, FOOD & MARKETS

75 0 75 150 225 Feet 1:1,200

# Custom Applicator Certification

Train & license  
custom manure  
applicators



- Custom Manure Applicators shall be certified by the Secretary
  - Must demonstrate knowledge of RAPs and NRCS 590 standard
  - Must demonstrate competency in methods and techniques to ensure appropriate nutrient application in compliance with environmental standards.
- Certified custom manure applicators shall train all employees and seasonal workers in methods and techniques to meet RAP and NRCS 590 standards for nutrient application
- Certification is valid for 5 years; Shall complete 8 hours of training in each 5 year period.

### Construction of Farm Structures

- Construction of farm structures in Flood Hazard Areas and River Corridors are required to obtain a Flood Hazard Area and River Corridor permit from ANR
- Prior to construction of farm structures, the farmer must notify the zoning administrator or town clerk in writing of the proposed activity
  - Must contain a sketch of the proposed structure including the setbacks from adjoining property lines, roads and right-of-ways
- The Secretary may grant a variance to municipal and local setbacks that will represent the minimum alternative that will afford relief and will represent the least deviation possible from these regulations
- Following minimum setbacks for all new WSF:
  - 100 feet from centerline of public road
  - 100 feet from abutting property line
  - 100 feet from the top of bank of any surface water
  - 200' from public or private wells



### **Site Specific On-Farm Conservation Practices**

- When the Secretary determines, after inspection of a farm, that a person engaged in farming is complying with the Required Agricultural Practices Rule but there still exists the potential for agricultural pollutants to enter the waters of the State, the Secretary shall require the person to implement additional, site-specific, on-farm conservation practices designed to prevent agricultural pollutants from entering the waters of the State.
- When requiring implementation of a conservation practice, the Secretary shall inform the person engaged in farming of the resources available to assist the person in implementing the conservation practices and complying with the requirements.

Requirement of RAPs	Cost of Implementation	FA Available	C/S Rate	Supporting Benefit in addition to FA
Cover Crop Frequently Flood Annual Crop Fields	\$89/ac (Seed = \$40 / ac for 100# rate)	\$67 /ac or \$79/acre (NRCS EQIP Practice Code 340)	75% to 90%	40# N Credit in Spring or 1 T DM / Ac break even for double cropping
Nutrient Management Plan Development (CSFO)	\$3,095 / 150 ac. farm	\$2,321 / 150 ac. Farm  (NRCS EQIP Practice Code 104)	75% to 90%	University Programs available to support farmer development of their own plan  21.7% Average Fertilizer Usage decrease Post-NMP (Darby, 2016)  Increases rate of adoption of supporting Conservation Practices
25' Vegetated Buffer on Surface Water	\$468 / ac  or \$850 / ac	\$680 / ac  (NRCS Practice Code 512)	75% to 90%	Numerous opportunities exist to support farmers in installing vegetated buffers on surface waters  Many scenarios include consideration for 'forgone income' of changing land use (from corn to hay)  Agency will be launching VT Critical Area Seeding & Filter Strip Program: available to pay for spot installation of grassed waterways, also to support farmers to leave hayable buffers when rotating from hay to corn

# Vegetative Buffer Zone Programs

## USDA EQIP

- **512: Forage and Biomass Planting**
  - (Cool Season, Establish or Reseed, Foregone Income)
  - Payment Rate \$ 680.86 /Ac.
- **393: Filter Strip**
  - (Filter Strip, Introduced species: Foregone Income)
  - Payment Rate: \$ 522.71 / Ac.
- **386: Field Border**
  - (Field Border-Native, Inc Foregone)
  - Payment Rate: \$ 624.58 / Ac.

## VAAFM Critical Area Seeding and Filter Strip Program

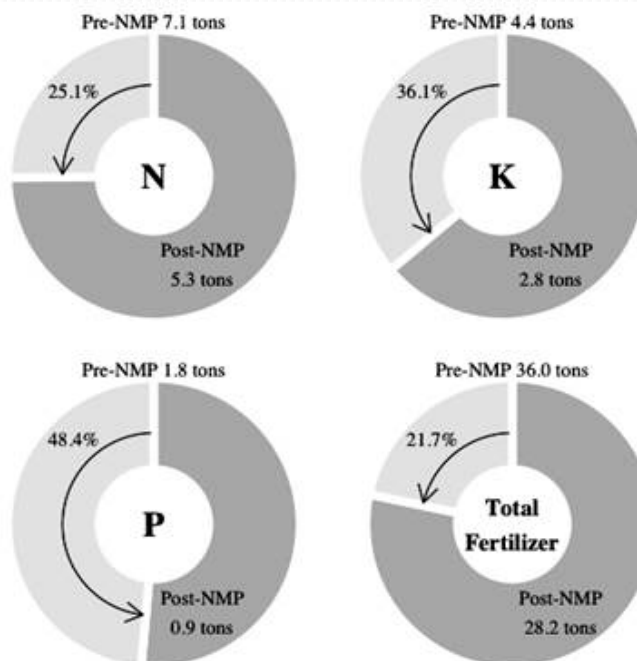
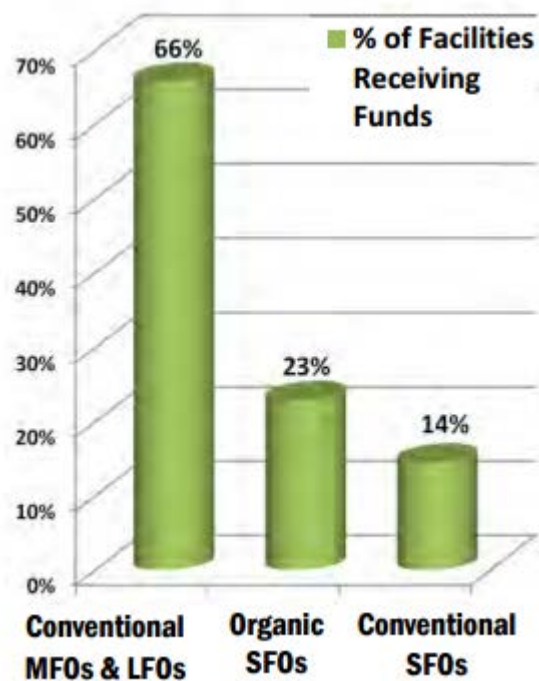
- Hayable Buffers
- Grassed Waterway Establishment
- Launch by spring 2015
- Will Replace Vermont Ag Buffer Program

## CREP

- \$4825/acre
- or \$321.67/acre/yr.



# RAPs: Technical and Financial Assistance Opportunities



**Table 5.**  
Practices Adopted by Producers Since Having an NMP

Conservation Practice	Percent Adoption Since NMP
Manure setbacks	57.3
Buffers	48.3
Timely manure incorporation	46.9
Applying NPK by recommendation	40.6
Cover cropping	33.6
Crop rotation	32.2
Reduced tillage	11.9
Strip cropping	4.90