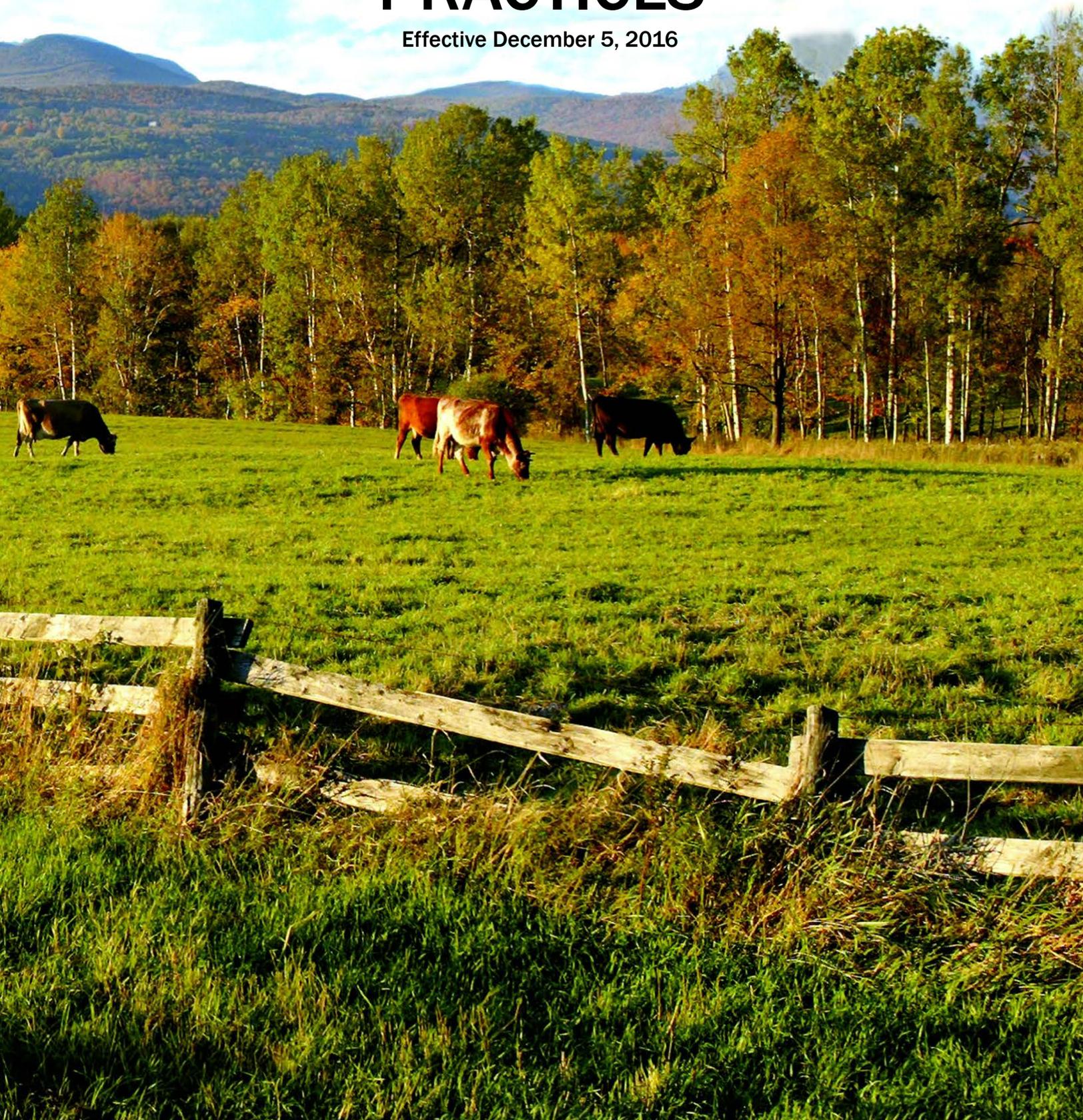


Vermont Agency of Agriculture, Food & Markets

A SUMMARY OF THE  
**REQUIRED  
AGRICULTURAL  
PRACTICES**

Effective December 5, 2016



# What are the Required Agricultural Practices (RAPs)?

The Required Agricultural Practices (RAPs) establish practices and management strategies to which all types of farms must be managed to reduce the impact of agricultural activities to water quality.

These standards are intended to improve the quality of Vermont's waters by reducing and eliminating cropland erosion, sediment losses, and nutrient losses through improved farm management techniques, technical and compliance assistance, and where appropriate, enforcement. The RAPs establish nutrient, manure, and waste storage standards, make recommendations for soil health and establish requirements for vegetated buffer zones and livestock exclusion from surface water. In addition, the RAPs establish standards for nutrient management planning and soil conservation.

In addition to the various standards included in the RAPs, small farms that meet the criteria to be considered a Certified Small Farm Operation (see page 3) will need to annually certify compliance with the RAPs as well as develop and implement nutrient management plans.

Resources are available in the form of both technical and financial assistance for farmers to help them comply with the RAPs. (See pages 11-12).

# Farm Size Classification

All Farms  
Must  
Comply  
with  
the  
RAPs.

## SMALL FARMING OPERATION (SFO)



Operate 4 or more acres for farming; OR

Have filed a 1040(F) Tax Form once in the last 2 years; OR



Earn an annual gross income of more than \$2,000 from the sale of agricultural products.

## CERTIFIED SMALL FARM OPERATION (CSFO)



Have at least the following animal numbers:

50 mature dairy cows, 75 young stock or heifers, 75 cattle or cow/calf pairs, 40 equines, 750 sheep or goats, or a combination of animals with total live weight exceeding 90,000 pounds (see RAPs for complete animal threshold numbers); OR



Operate more than 50 acres of annual cropland (corn, sweet corn, soybean, or pumpkin); OR



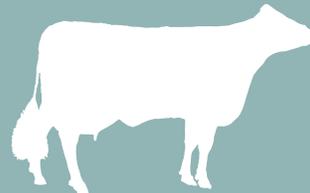
Operate more than 50 acres of vegetable production.

### Other Requirements:

- Annual Certification
- Farm Inspections
- 590 Nutrient Management Plan
- Water Quality Training

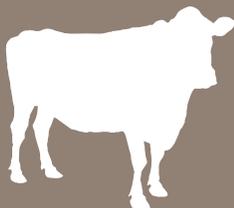
## MEDIUM FARM OPERATION (MFO)

Operates a farm within the thresholds for a Permitted Medium Farm Operation (MFO) (200-699 dairy cows, 300-999 youngstock or heifers; etc.)



- Annual Reporting
- Farm Inspections
- 590 Nutrient Management Plan
- Water Quality Training

## LARGE FARM OPERATION (LFO)



Operates a farm within the thresholds for a Permitted Large Farm Operation (LFO) (700+ dairy cows, 1,000+ youngstock or heifers ; etc.)

- Annual Reporting
- Farm Inspections
- 590 Nutrient Management Plan
- Water Quality Training

# RAP Summary

This summary is meant to inform farmers about the RAPs, but the full rule should be referenced for further information regarding site specific concerns, variances, exemptions, and complete management practices required by the RAPs.

## Small Farm Certification (Sec. 4.3)

Every year, **Certified Small Farm Operations (CSFOs)** will submit an Annual Certification Form that certifies the Farm's compliance with the RAPs.

A **CSFO** will be inspected at least once every seven years.



## Water Quality Training (Sec. 5)

**Large Farm Operation (LFO), Medium Farm Operation (MFO) and CSFO** will need 4 hours of water quality training every 5 years. This may be achieved through courses with UVM Extension, or trainings provided by the Vermont Agency of Agriculture, Food and Markets (VAAFM). Check the Agriview Calendar or the the VAFFM website to find approved courses. Trainings will be available both in person and online.

## Nutrient Management Planning (Sec. 6.03)

All **CSFOs, MFOs, and LFOs** need a field by field Nutrient Management Plan (NMP), that meets the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Nutrient Management Practice Code 590 Standard.

For all Small Farming Operations (SFOs) that don't need to certify, all sources of nutrients should be considered when deciding nutrient application rates. All fields receiving mechanical application of manure, agricultural wastes, or fertilizer need to be soil sampled every five years.

For all farms, records of soil analysis and nutrient application need to be kept for five years and contain:

- o Date of application
- o Field location
- o Application rate
- o Source of nutrients applied
- o Weather and field conditions at the time of application

VAFFM understands that as of 2017, few CSFOs will have a complete NMP, but expects farmers to be in the process of obtaining one, or be in contact with partner agencies in order to begin NMP development. Farmers should be actively working towards NMP completion by taking modified Morgan extractant soil samples and applying manure at agronomic rates.

## (Sec. 6.01) Discharges

Farms are not allowed to have a discharge of agricultural wastes from a farm to surface waters of the state through a pipe, ditch, or conduit.

Production areas should have runoff and collection systems, diversion, or other runoff management strategies to prevent and control runoff from reaching surface water or groundwater.



## (Sec. 6.04) Soil Health

Practices such as cover cropping, conservation tillage, green manures, and legume rotations that promote soil health are highly recommended and may be necessary to meet soil erosion requirements.

Frequently flooded soils, (USDA Soil Survey Flooding Frequency Class) must be cover-cropped for the winter by October 1 if broadcast seeded, or October 15 if drilled or incorporated.

Prevent fieldborne gully erosion with grassed waterways, filter strips, or crop rotations.



**Before**



**Grassed Waterway**

**After**

# Manure and Nutrient Storage (Sec. 6.02)

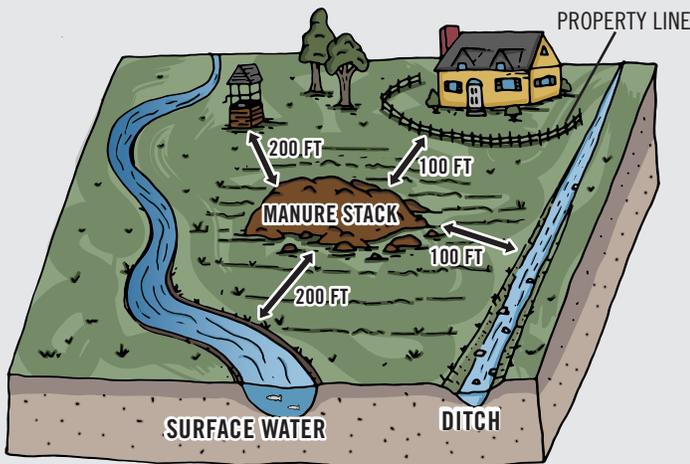
Prevent runoff or leaching of agricultural wastes into water or across property boundaries. Prevent structural or mechanical failure in waste management systems.

Pesticides and fertilizer shall be managed per appropriate regulations.

Waste storage facilities must be maintained to protect structural integrity, prevent leaks or overflows, and provide adequate volume to prevent overflows.

See diagram for manure stacking setback requirements. Additionally, manure cannot be stacked on exposed bedrock.

Any waste storage facility constructed (or modified) after July 1, 2006 must be designed and constructed per USDA NRCS standards or other equivalent standards certified by a licensed engineer.



**Manure Stacking Setbacks**

# Manure and Nutrient Application (Sec. 6.05)

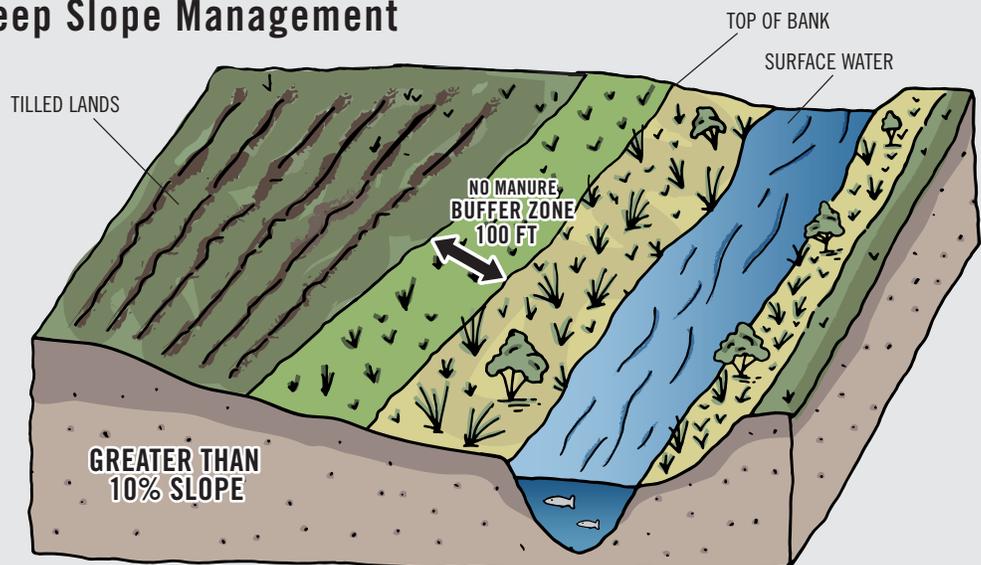


\*Manure and other agricultural wastes cannot be applied between December 15 and April 1.

\*Manure and other agricultural wastes cannot be applied to areas of land with frequently flooded soils, (USDA Soil Survey Flooding Frequency Class) between October 16 and April 14.

Manure cannot be spread within 100 feet of a private water supply, or 200 feet of a public water supply.

# Steep Slope Management



\*Site specific exemptions and variances exist; please see full RAPs for more details.

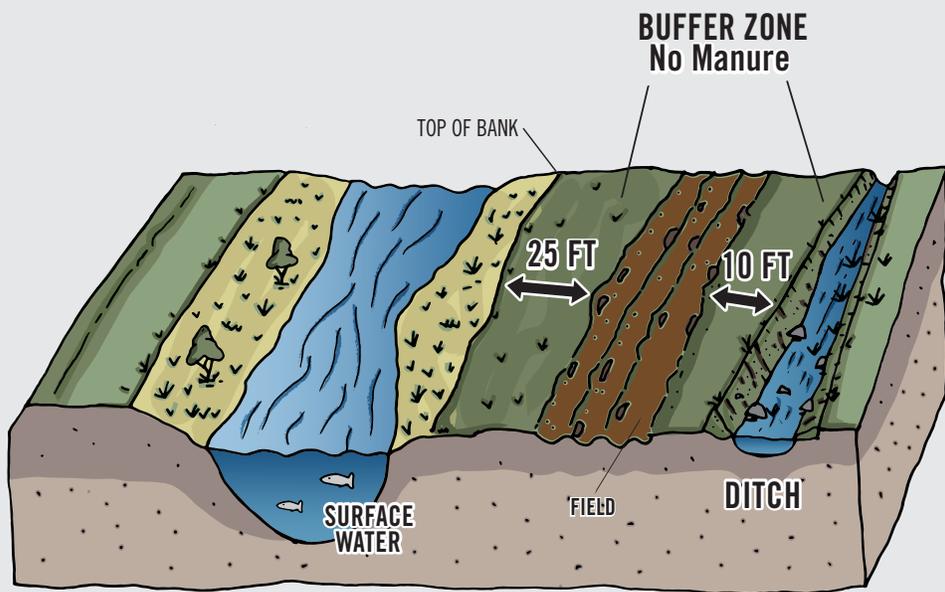
IF A TILLED FIELD IS GREATER THAN 10% IN SLOPE, A 100 FOOT BUFFER MUST BE MAINTAINED ON THE DOWNSLOPE BETWEEN THE FIELD AND SURFACE WATER.

## (Sec. 6.07) Buffers

Buffers can be grazed or harvested, but they cannot be tilled or have compost or fertilizer applied except for establishment or maintenance.

Buffer Zones are required:  
 10' on ditches  
 25' on surface water  
 25' on surface inlets

\*Site specific exemptions and variances exist; please see full RAPs for more details.



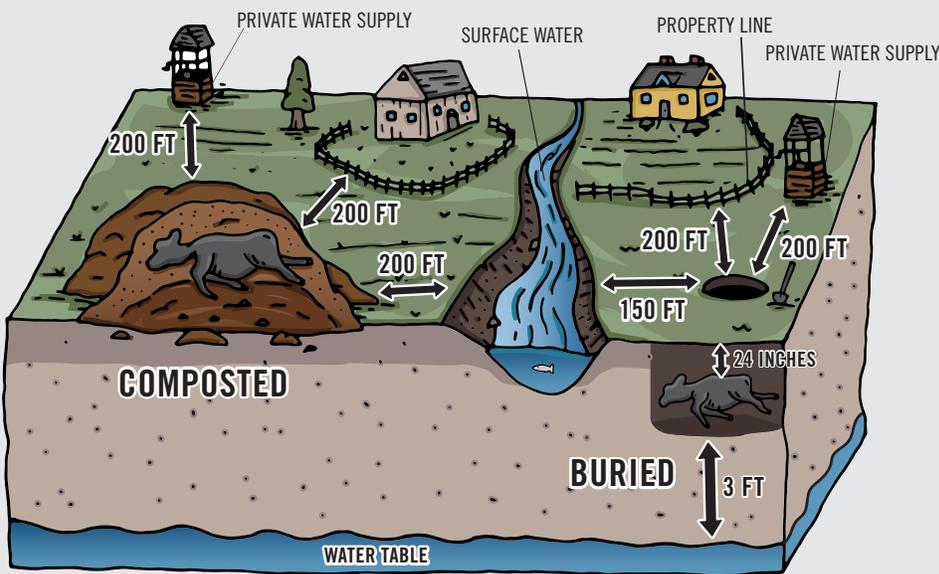
Buffer Zones

## Mortalities

(Sec. 6.08)

Animal mortalities must be managed within 48 hours in a way that doesn't impact water quality or create a nuisance to neighboring properties.

See the diagram for animal mortality siting requirements.



Animal Mortality Siting Setbacks

## Livestock Exclusion

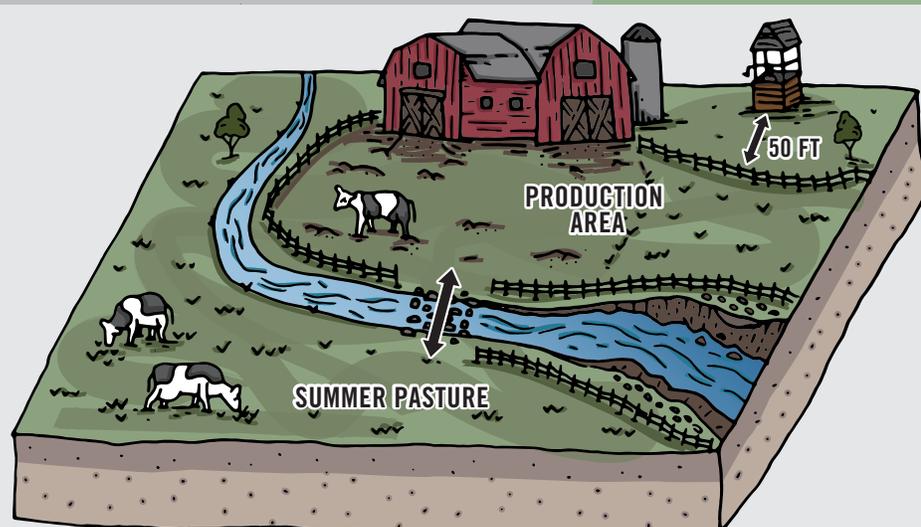
(Sec. 7)

Adequate vegetation on banks needs to be maintained.

Livestock must be fenced out of surface waters that have unstable or eroded banks.

Livestock cannot be pastured within 50 feet of a neighbors well.

If a stream goes through the farmstead and production area, make sure livestock are fenced out except at defined stream crossings or watering areas. (See diagram).



Livestock Exclusion from Surface Waters

## Ground Water (Sec. 8)

Manure stacking and field application need to be kept away from water supplies and exposed bedrock. If manure contamination occurs, it can result in high nitrates and bacteria in drinking water, which can be harmful to humans and livestock.

VAAFM can provide free ground water testing for agricultural contaminants to farmers, and neighbors of farming operations.

## Farm Structures (Sec. 9)

There are specific siting requirements for farm structures. VAAFM is the statewide zoning authority for farm structures.

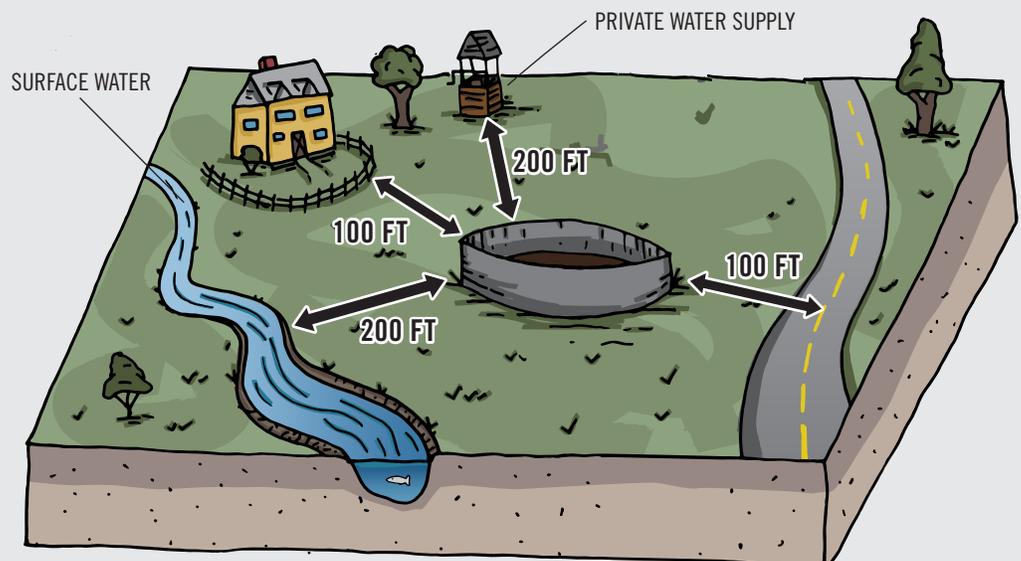


Farmers still must notify the zoning administrator or town clerk of proposed farm structure construction, but are not required to obtain a zoning permit or pay a fee.

For construction of farm structures in flood hazard and river corridor areas, you need to obtain a permit from the Agency of Natural Resources (ANR). Local municipalities can provide assistance if necessary.

For construction of new farm structures that disturb more than one acre, a stormwater construction permit from ANR is required.

**ALL NEW WASTE STORAGE FACILITIES PROPOSED ON SITES WHERE NO STORAGE FACILITY OR PRODUCTION AREA PREVIOUSLY EXISTED SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SETBACKS:**



**New Waste Storage Facilities**

# Important Dates

## Custom Manure & Ag Waste Applicator Certification

January 31

Custom Applicators are required to renew their annual certification and pay an annual fee by **January 31** of each year. Exams are required every 5 years. Applicators who are seeking certification should contact the VAAFM.

## CSFO Annual Certification

January 31

Farming operations that meet the threshold of a Certified Small Farm will be required to self-certify their operation with the Agency of Agriculture annually by January 31. The first Certification Form is due between **July 1, 2017 and January 31, 2018.**

## LFO Annual Reporting and Fee

February 15

Farming operations within the threshold of a Large Farm must submit their annual compliance report and operating fee before **February 15 of each year.**

## MFO Annual Reporting and Fee

April 30

Farming operations within the threshold of a Medium Farm must submit their annual compliance report and operating fee by **April 30 of each year.**

## Cover Cropping of Floodplains

October 1-15

Annually, fields need to be broadcast seeded by **October 1**, and drilled or otherwise incorporated by **October 15**. Requirements for cover crop establishment on frequently flooded areas of annual crop field begin in the **Fall of 2017.**

## Extended Winter Spreading Ban on Floodplains

October 16-April 14

The extended winter manure spreading ban for frequently flooded areas of annual crop fields will take place from October to April beginning **October 16, 2017.**

## Winter Manure Spreading Ban

December 15-April 1

This winter manure spreading ban has been in place since 1995 and prohibits spreading of manure or other agricultural wastes during the winter season. There are exemptions for emergency and non-emergency situations, call (802) 828-2431.

# Financial Assistance

## AGRONOMIC PRACTICES

### **NRCS Environmental Quality Incentives Program (EQIP):**

Contact (802) 951-6796 // Visit <https://www.nrcs.usda.gov/wps/portal/nrcs/main/vt/contact/> to find your local NRCS office.

### **VAAFM Farm Agronomic Practices (FAP) Program:**

Contact Clark Parmelee // (802) 661-8284 // Email [Clark.Parmelee@Vermont.gov](mailto:Clark.Parmelee@Vermont.gov)

## CONSERVATION PRACTICES AND WATER QUALITY IMPROVEMENTS

### **NRCS Environmental Quality Incentives Program (EQIP):**

Contact (802) 951-6796 // Visit <https://www.nrcs.usda.gov/wps/portal/nrcs/main/vt/contact/> to find your local NRCS office.

### **VAAFM Best Management Practice (BMP) Program:**

Contact Jeff Cook // (802) 828-3474 // Email [Jeff.Cook@Vermont.gov](mailto:Jeff.Cook@Vermont.gov)

## BUFFERS AND GRASSED WATERWAYS

### **NRCS Environmental Quality Incentives Program (EQIP):**

Contact (802) 951-6796 // Visit <https://www.nrcs.usda.gov/wps/portal/nrcs/main/vt/contact/> to find your local NRCS office.

### **VAAFM Conservation Reserve Enhancement Program (CREP):**

Contact Ben Gabos // (802) 461-3814 // Email [Ben.Gabos@vermont.gov](mailto:Ben.Gabos@vermont.gov)

### **VAAFM Grassed Waterway and Filter Strip Program**

Contact Ben Gabos // (802) 461-3814 // Email [Ben.Gabos@vermont.gov](mailto:Ben.Gabos@vermont.gov)

## CONSERVATION PRACTICE EQUIPMENT

### **VAAFM Capital Equipment Assistance Program (CEAP):**

Contact Trevor Lewis // (802) 585-5092 // Email [trevor.lewis@Vermont.gov](mailto:trevor.lewis@Vermont.gov)

**Contact your local Conservation District for other conservation practice equipment rentals such as No-Till Drills or Aerators.**

# Technical Assistance

## UVM EXTENSION

### State Office:

Contact // (802) 656-2990 or (866) 622-2990 // Visit [https://www.uvm.edu/extension/contact\\_us](https://www.uvm.edu/extension/contact_us) to contact your local Extension office.

**Berlin Office:** (802) 476-2003

**Rutland Office:** (802) 773-3349

**Brattleboro Office:** (802) 257-7967

**St. Johnsbury Office:** (802) 751-8307

**Middlebury Office:** (802) 388-4969

**St. Albans Office:** (802) 524-6501

**Pasture and Grazing Technical Assistance:** Jenn Colby // (802) 535-7606 // [jcolby@uvm.edu](mailto:jcolby@uvm.edu)

### Agronomy and Conservation Assistance Program (ACAP)

North Lake // Jeff Sanders // (802) 524-6501 // Email [Jeffrey.Sanders@uvm.edu](mailto:Jeffrey.Sanders@uvm.edu)

Central Lake // Kirsten Workman // (802) 388-4969 // Email [Kirsten.Workman@uvm.edu](mailto:Kirsten.Workman@uvm.edu)

South Lake // Jennifer Alexander // (802) 287-8339 // Email [Jennifer@pmnr.cd.org](mailto:Jennifer@pmnr.cd.org)

## YOUR LOCAL CONSERVATION DISTRICT

**Vermont Association of Conservation Districts (VACD)**  
(802) 496-5162

**Bennington County NRCD**  
(802) 442-2275

**Ottawaquechee NRCD**  
(802) 295-7942 x111

**Orleans County NRCD**  
(802) 334-6090 x118

**Windham County NRCD**  
(802) 254-5323 x104

**Winooski NRCD**  
(802) 828-4493 x113

**Lamoille County NRCD**  
(802) 888-9218 x113

**Poultney-Mettowee NRCD**  
(802) 287-8339

**White River NRCD**  
(802) 396-3167

**Franklin County NRCD**  
(802) 528-4176

**Otter Creek NRCD**  
(802) 388-6746 x126

**Caledonia County NRCD**  
(802) 748-3885 x110

**Grand Isle County NRCD**  
(802) 372-8400

**Rutland NRCD**  
(802) 775-8034 x117

**Essex County NRCD**  
(802) 424-5353

## YOUR LOCAL FARMER WATERSHED ALLIANCE:

**Farmer's Watershed Alliance, Franklin & Grand Isle** // Darlene Reynolds (802) 752-5156

**Champlain Valley Farmer Coalition** // Nate Severy (802) 388-4969

**Connecticut River Watershed Farmer Alliance** // Paul Doton (802) 457-2230

## BUSINESS PLANNING FOR WATER QUALITY IMPROVEMENTS

### UVM Extension Water Quality Business Analysis

Contact Tony Kitsos at (802) 524-6501 // Email [Tony.Kitsos@uvm.edu](mailto:Tony.Kitsos@uvm.edu)

### VHCB Vermont Farm & Forest Viability Program:

Contact VHCB at (802) 828-3370 // Email [vffvp@vhcb.org](mailto:vffvp@vhcb.org)

**Vermont Agency of Agriculture**

**Email: [AGRWaterQuality@Vermont.gov](mailto:AGRWaterQuality@Vermont.gov)**

**Web: [www.agriculture.vermont.gov/water-quality](http://www.agriculture.vermont.gov/water-quality)**

**116 State Street**

**94 Harvest Lane, Suite 203**

**Montpelier VT, 05602**

**Williston VT, 05495**

**(802) 828-2431**

**(802) 828-1702**

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[agr.agriview@Vermont.gov](mailto:agr.agriview@Vermont.gov)**



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