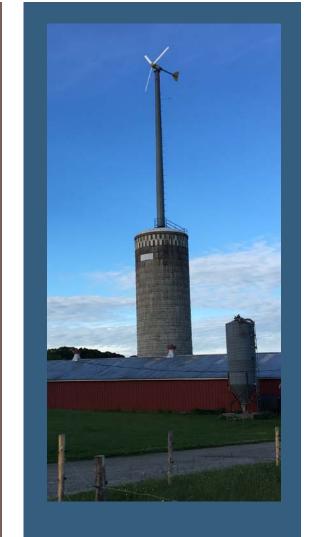
CLEAN WATER INITIATIVE SERIES: RAP IMPLEMENTATION





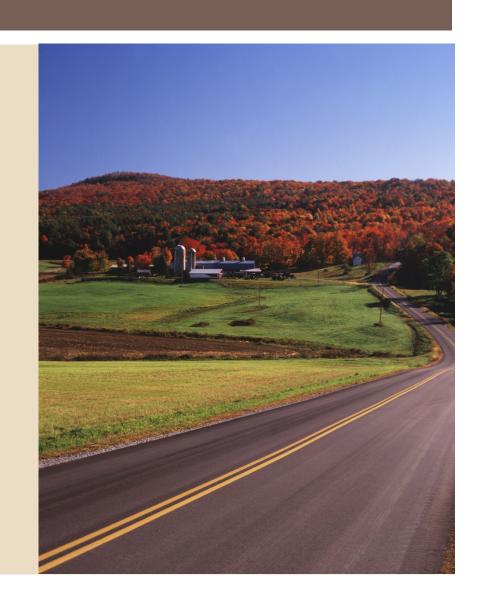


December 14, 2017

Kaitlin Hayes Nina Gage

ROADMAP

- Effective Dates
- Custom Applicator
- Educational Credits
- CSFO Program
- Inspections and Enforcement
- Variances
- Grants
- MFO/LFO Permit Revisions
- Tile Drain Update



LIST OF ACRONYMS



- VAAFM: Vermont Agency of Agriculture, Food & Markets
- RAP: Required Agricultural Practices
- SFO: Small Farm Operation
- CSFO: Certified Small Farm Operation
- MFO: Medium Farm Operation
- LFO: Large Farm Operation
- GP: General Permit
- WQ: Water Quality
- NRCS: Natural Resource Conservation Services
- NMP: Nutrient Management Plan
- GMP: Grazing Management Plan

RAPS: SUMMARIZED

- Discharges
- CSFO Certification
- Water Quality Training
- Nutrient Management Planning
- Manure and Nutrient Storage
- Manure and Nutrient Application
- Soil Health
- Buffers
- Mortalities
- Livestock Exclusion
- Ground Water
- Farm Structures



EFFECTIVE DATES



RAP Dates:

- Became effective December 5, 2016
 - Pursuant to Act 64, enacted June 16, 2015
- Custom Applicator Certification: Began March 2017
 - Exams every 5 years
 - Annual fee and Certification: January 31
- Winter Spreading Ban: Dec 15-April 1
 - Floodplain extended spreading ban: Oct 16-April 14
 - Secretary may prohibit 12/1-12/15 or 4/1-4/30
- CSFO Certification Program
 - Began July 2017
- RAP tile drainage rules in 2018

CUSTOM APPLICATOR

Learning Goal:

Application methods to minimize runoff and identification of weather or soil conditions that increase risk of runoff.

- Winter Certification Class 2017
- Online Webinar Certification Class
- Seasonal Employee Trainings
- Final Certification Training and Evaluations
 - December 19- St. Albans
 - December 20- St. Johnsbury
 - January 5- Middlebury









EDUCATIONAL WQ TRAINING CREDITS

- CSFOs, MFOs, and LFOs must acquire 4 Water Quality Training Credits every 5 years pursuant to Sec. 5 of the RAPs.
- Training events must be approved at least 30 days prior to the event by the Secretary
- Forms: Application, Approval, Sign-In
- Awards: Most credit hours annually, and every five-year cycle



EDUCATIONAL WQ TRAINING CREDITS, CONT.

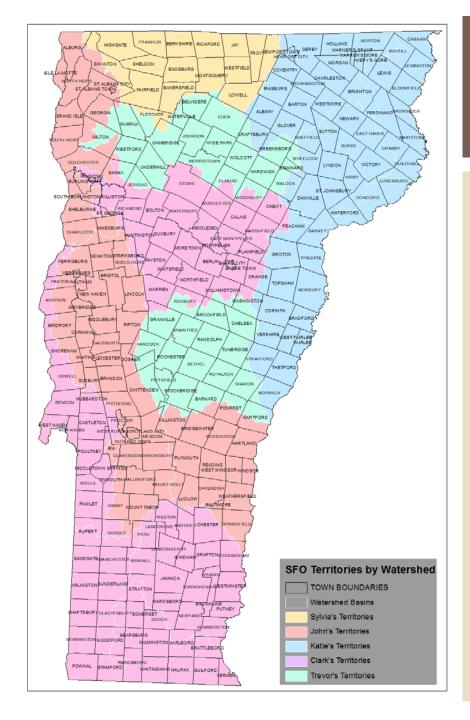


- Credits must fall under one of the follow categories:
 - the prevention of discharges;
 - the mitigation and management of stormwater runoff;
 - statutory and regulatory requirements of the operation of a large, medium, or small farm and financial resources available to assist in compliance;
 - the mechanical application of manure or nutrients and methods or techniques used to minimize the runoff of applied manure or nutrients to waters of the State;
 - weather and soil conditions that increase the risk of runoff of manure or nutrients to waters of the State; and
 - standards for nutrient management including nutrient management planning.

CERTIFIED SMALL FARM OPERATION PROGRAM

- Estimated 700-800 CSFOs in Vermont:
 - Growing more than 50 acres of annual cropland (e.g. corn, sweet corn, soybean, or pumpkin), OR
 - Growing more than 50 acres of vegetables, OR
 - That house and manage at least the following animal numbers;
 - 50 mature dairy cows
 - 75 youngstock or heifers
 - 75 yeal calves
 - 75 cattle or cow/calf pairs
 - 188 swine weighing over 55 pounds
 - 750 swine weighing less than 55 pounds
 - 40 equines
 - 750 sheep or goats
 - 4,125 turkeys
 - 2,250 laying hens or broilers or 375 ducks (w/ liquid manure system)
 - 6,250 laying hens or broilers or 2,500 ducks (w/out a liquid manure system)
 - A combination of animals with total live weight exceeding 90,000 pounds





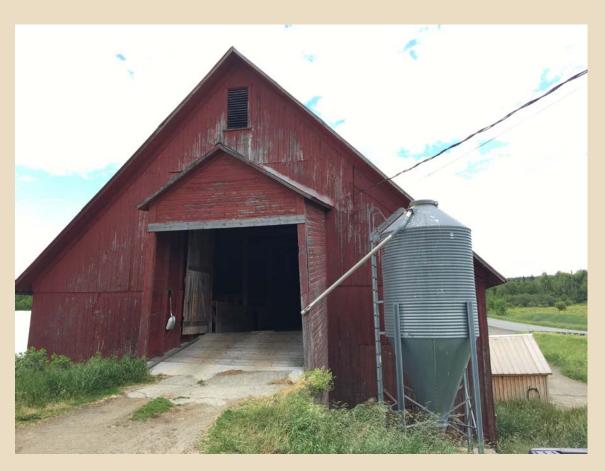
CSFO PROGRAM, CONT.

- Requirements for CSFOs
 - Must certify by January 31, 2018 using Annual Certification Form
 - Began in July 2017
 - Inspection at least once every seven-years
 - NRCS Standard 590 Nutrient Management
 Plan
 - Fulfill WQ Training Credits

76.4% of All Liveweight 93% of all Dairy Cows

50% of all Vegetable Acreage 93% of all Corn for Silage

INSPECTION PROCESS



- Farm Inspection
 - CSFO 7 years
 - MFO 3 years (change from 5 years)
 - LFO Every year

***Any farm that receives a complaint will be visited by an Agency staff regardless of inspection status

- Inspection Summary
- Inspection Reports

ENFORCEMENT AUTHORITY

Recognizes VAAFM
water quality
enforcement
authority in 6
V.S.A. Chapter.
215 Subchapter
10.



VAAFM now has the authority to

- issue emergency orders to protect water quality;
- require the implementation of mandatory corrective actions; and
- remove livestock when the volume of waste exceeds farm capacity.

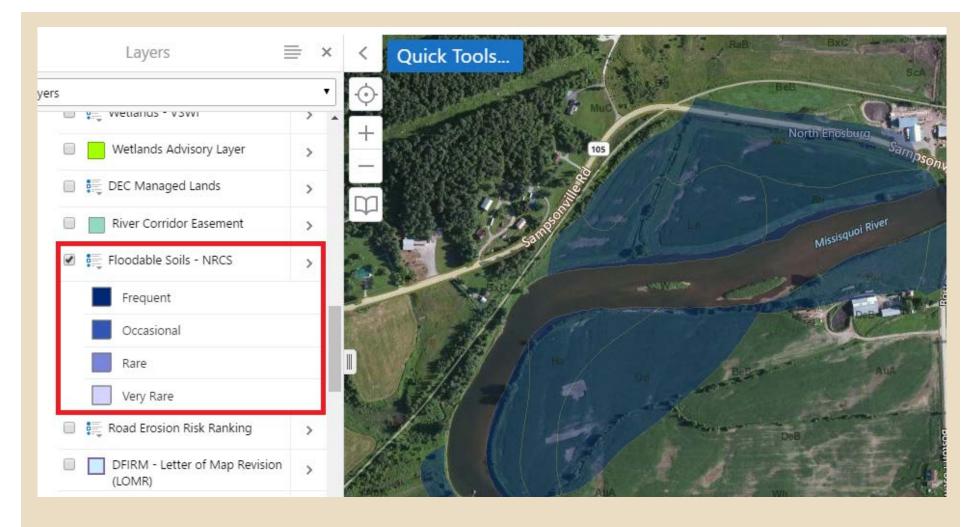


Under 6 V.S.A. Chapter. 215, when VAAFM identifies a small, medium, or large farm in violation of the LFO, MFO, or RAP requirements, **VAAFM** shall initiate the enforcement process.

INSPECTIONS AND INVESTIGATIONS RESULTING IN ENFORCEMENT: NUMBERS

| Final 2016 | Preliminary 2017 |
|---|---|
| 379 total inspections/investigations | 218 total Inspections/investigations |
| ■ 103 complaints (investigations) | ■ 118 complaints (investigations) |
| • 187 compliance checks/ enforcement action follow-ups/ routine inspections | • 100 compliance checks/ enforcement action follow-ups/ routine inspections |
| 48 enforcement actions | ■81 enforcement actions |

***Does not include routine inspections conducted that DID NOT result in an enforcement action



- Frequently flooded soils began 2017:
 - Extended manure spreading ban October 16 April 14
 - Must cover crop (broadcast by 10/1, drilled by 10/15)

FLOODPLAIN MANAGEMENT RULES



VARIANCES

DEVELOPED

- Frequently Flooded
- Stacking Site

IN DEVELOPMENT

- Site Specific Buffers
- NMP Alternative for Vegetable Growers

REMINAING TO BE DEVELOPED

- RAP Grazing management plans
- Allowing grazing in areas where GMP cannot work
- Alternatives to the floodplain maps
- Seasonal spreading plans
- Management plan to determine whether RAPs apply
- Alternative cover crop planting dates
- Winter spreading exemptions
- Removing a farm from SFO certification

GRANTS PROGRAMS FOR FARMERS

- Best Management Practices (BMP)
- Farm Agronomic Practices (FAP)
- Capital Equipment
 Assistance Program (CEAP)
- Conservation Reserve Enhancement Program (CREP)



FAP PROGRAM OVERVIEW

FY 2017

- 24 Recipients
- **\$76,575.39**
- 3,211 Acres

FY 2018

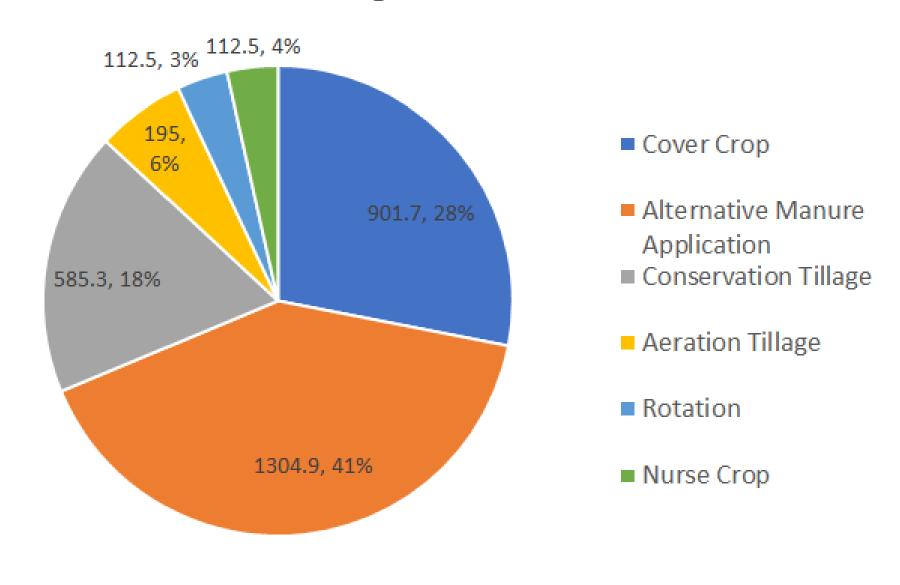
- 58 Grant Recipients
- ■\$204,5909 Funds Obligated
- 7051 Acres







FY17 Acreage Enrolled in FAP



CEAP

\$5,323,734.32 Ask
61 Applicants
112 Pieces of Equipment Requested





GRANTS FOR PARTNERS

- Grassed Waterway and Filter Strip (GWFS) Program
- Pasture and Surface Water Fencing (PSWF) Program
- Ag-Clean Water Initiative Program Grants (Ag-CWIP)
 - FY 2018 RFP CURRENTLY OPEN
 - Agriculture.Vermont.gov/WQ-RFP



MEDIUM FARM OPERATION GENERAL PERMIT REVISION

- Medium Farm Operation General Permit
 - All MFOs in Vermont are covered under one GP
 - Required by Rule (2006) to be updated every five years
 - First GP was effective in 2007, and then amended in 2012 → The current GP
 - Now due for revision in 2017
 - Draft GP:
 - Public Hearing November 2, 2017
 - Public Comment Period started October 2, 2017 and concluded on December 1, 2017
- Now: Reviewing comments, will formulate responses, make amendments to permits and post Final Updated MFO GP and Responsiveness Summery (estimated January 2018)

MFO / LFO Coordinator Zones Farm Coordinator: Steve Cash Tyler Knapp Mary Montour Abbi Pajak Maria Steyaart Coordinator Contact Information: Mary Montour (802) 461-6087 Mary Montour@vermont.gov Maria Steyaart (802) 477-2517 Maria.Steyaart@vermont.gov

CHANGES TO MFO GP

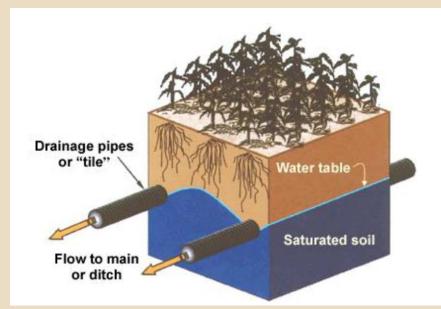
- Removal of redundant language covered by the RAPs and USDA 590 Standard
- Importation of Substrates
- Electronic submittal of shapefiles
- Removed transfer of permits
- Inspections every 3 years, annual fees: April 30
- Improved clarity of language surrounding nutrient management

LARGE FARM OPERATION RULE REVISION

- Annual Report and Fee due by February 15
- Beginning the process to revise LFO Rule
 - Many steps in Rule revision process
- Currently engaging in PIVOT / LEAN Process for overview of LFO Rule
 - What is the current programmatic process



AGRICULTURAL SUBSURFACE TILE DRAINS





Ongoing Research

- ■VAAFM RFP:
 - Sampling analysis: ~40 Sites
 - Biweekly sampling December 2017-?
 - Working through contracts

RAP Rulemaking for Tile Drains: Prefiling in January 2018

THANK YOU!





AGENCY OF AGRICULTURE, FOOD & MARKETS

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