Vermont Agency of Agriculture, Food and Markets Agricultural Water Quality Enforcement Program State Fiscal Year 2019 Annual Report

Required Agricultural Practices Regulations Enforcement
Medium Farm Operation General Permit Enforcement
Large Farm Operation Individual Permit Enforcement
Engineering and Technical Assistance

Dear Reader, April 14, 2020

The Water Quality Division of the Vermont Agency of Agriculture, Food and Markets (VAAFM) implements a comprehensive approach to the regulation of farms in the State in order to best protect water resources. The development of a three-tiered approach to the regulation of Vermont farms allows for a logical progression in regulatory oversight as a farm grows in size from a Small Farm Operation (SFO)/Certified Small Farm Operation (CSFO) subject to regulation under the Required Agricultural Practices Regulations (RAPs), to a Medium Farm Operation (MFO) regulated under the state's MFO General Permit, to a Large Farm Operation (LFO) regulated under an individual LFO permit.

In State Fiscal Year (FY) 2019, the Water Quality Division continued to utilize staff to focus on:

- evaluating farms of all sizes for compliance with the revised RAPs;
- conducting inspections of Certified Small Farm Operations (CSFOs) and introducing them to the revised RAP requirements;
- implementing an accelerated schedule of MFO inspections (from once every five years to once every three years as mandated by Act 64);
- enhancing communication efforts to the farming and non-farming community regarding the Agency's agricultural water quality protection regulations;
- conducting ongoing staff training on nutrient management planning, RAP implementation, investigative principles, and report writing skills;
- conducting compliance checks to ensure that farmers receiving funds under financial assistance grant programs are complying with the terms of their agreements; and,
- conducting compliance checks on farms as requested by land conservancy and lender groups.

TREND ANALYSIS OF ENFORCEMENT EFFORTS

Figure 1 provides a trend analysis of the Agency's Agricultural Water Quality enforcement efforts since 2010.

- Inspection/investigation numbers have increased steadily starting in 2015 as the Agency has added additional staff to work in the Water Quality Division.
- The number of enforcement actions issued to farms spiked in 2012 and 2013 as a result of the Agency taking enforcement action against MFOs that either failed to submit their Notice of Intent to Comply (NOIC) with the renewed MFO General Permit (renewed every five years) or failed to send in their MFO Annual Report.
- The number of enforcement actions issued to farms in 2017, FY 2018, and FY 2019 has steadily increased partially as a result of actions issued for a Farm's failure to submit MFO or LFO Annual Operating Fees, or failure to comply with annual reporting requirements.

• Please note that the total number of visits to farms each year far exceeds the number of inspections and investigations reported in this graphic and includes technical and engineering assistance visits quantified within this report.

Figure 1. Water Quality Enforcement Efforts From 2010 Through FY 2019.

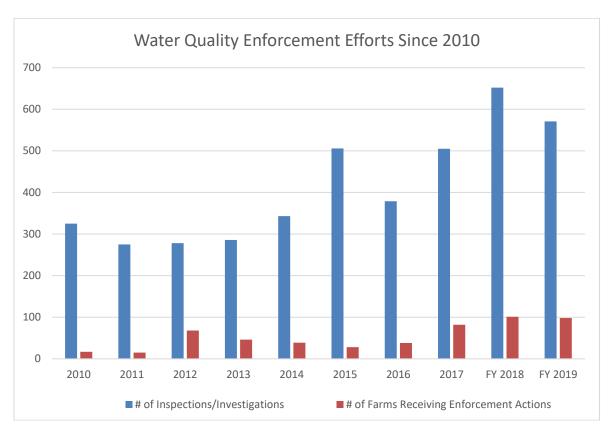


Table 1. The Numbers of Enforcement Efforts Spanning the Years from 2010-FY 2019.

Numbers of Enforcement Efforts from 2010-FY 2018										
									FY	FY
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
# of Inspections/Investigations	325	275	278	286	343	506	379	505	652	571
# of Farms Receiving Enforcement										
Actions	17	15	68	46	39	28	38	82	101	98

Information about the RAPs, the MFO general permit program, and the LFO individual permit program can be found at the following links:

- RAPs https://agriculture.vermont.gov/rap
- MFO General Permit Program https://agriculture.vermont.gov/mfo
- LFO Permitting Program https://agriculture.vermont.gov/lfo

The following report summarizes the Agency's inspection, enforcement, and engineering/technical assistance efforts over the 2019 State Fiscal Year (FY 2019).

In FY 2019, the Agency performed a total of 1,240 inspections/visits to farms to determine compliance with the RAPs, the MFO General Permit and Rule, the LFO Individual Permits and Rule, and to offer technical and engineering assistance to help farms comply with regulatory requirements. "Inspections" represent a formal inspection done on a farm to assess compliance with a rule and/or permit, either as a routine compliance check or as a result of a complaint received by the Agency, and include "Programmatic Follow-up Inspections", which are conducted to resolve issues identified during inspections that did not go to enforcement, "Regulatory Program Assistance", which is conducted to discuss regulatory programs and permitting issues with farms, and does not include a walk-around inspection of the farm, and "Enforcement Action Follow-up Inspections", which are conducted to specifically evaluate a farm's progress in correcting issues cited in enforcement actions. "Visits" are representative of technical and engineering assistance provided on the ground. In addition, the Agency conducted four inspections of Custom Manure Applicators for compliance with the RAPs.

In FY 2019, 98 farms received a total of 115 formal enforcement actions. 38 farms were referred to the Vermont Agency of Natural Resources, Department of Environmental Conservation (DEC) for suspected direct discharges of wastes to surface water. Six farms were referred to the Attorney General's Office for further enforcement. In addition, two custom applicators of manure were issued two formal enforcement actions for violations of the RAPs.

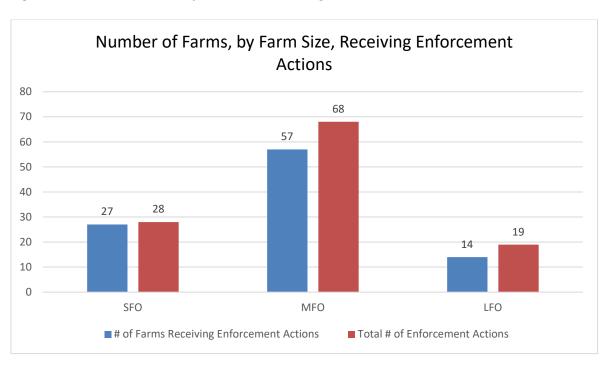


Figure 2. Number of Farms, by Farm Size, Receiving Enforcement Actions.

SMALL FARM OPERATION (SFO)/CERTIFIED SMALL FARM OPERATION (CSFO) COMPLIANCE REPORT

<u>RAP Compliance and Assistance</u>: In FY 2019, a total of 787 visits were made to SFO/CFOs. Of these, 325 inspections were conducted to assess compliance with the RAPs. 462 visits were conducted to offer technical and engineering assistance to farms.

Table 2. SFO/CSFO Visits

Total Number of SFO/CSFO Visits	787
SFO/CSFO Inspections	325
Complaints from the public	104 (representing 101 farms)
Complaint-related visits to Farms	86
 Complaints resulting in enforcement 	13
 Complaints directly referred to DEC with no visit 	11
Compliance checks	128 (representing 106 SFO/CSFOs)
 Compliance checks resulting in enforcement 	6
SFO/CSFO Programmatic Follow-up Inspections	31
SFO/CSFO Enforcement Action Follow-up Inspections	14
SFO/CSFO Regulatory Program Assistance	66
SFO Technical Assistance / Engineering Visits	462

The 106 SFO/CSFOs assessed for compliance represent a total of 128 individual facilities inspected. One SFO/CSFO can consist of more than one facility managed as part of the SFO/CSFO. Each facility is subjected to a comprehensive compliance assessment.

In FY 2019, 27 SFO/CSFOs received a total of 28 enforcement actions. Specifically, as a result of compliance efforts conducted in FY 2019 and reported in Table 2 above, 19 SFO/CSFOs received a total of 20 formal enforcement actions for violations of the RAPs. In addition, since this report now summarizes the Agency's enforcement efforts on a fiscal year basis, we report that an additional eight farms received a total of eight enforcement actions in FY 2019 based on inspections conducted during FY 2018. These are reported in Table 2a below. 25 SFO/CSFOs were referred to DEC for suspected point source discharges of waste to surface water, and four SFO/CSFOs were referred to the Attorney General's Office for further enforcement.

Table 2a – SFO/CSFO Enforcement Actions

Enforcement Actions	Number of FY2019 Cases	Number of FY2018 Cases
§ 4991(7) Letter	3	
Corrective Action Letter (CAL)	15	8
Cease and Desist Order (CDO)		
Mandatory Corrective Action Order (MCAO)	1	
Notice of Violation with Administrative Penalty (NOV)	1	
 Assurance of Discontinuance (AOD) 		
Final Order		
SFO Referrals		
Department of Environmental Conservation (DEC) ¹	24	1
Attorney General's Office (AGO)	2	2

¹ Under a MOU with ANR, cases involving suspected point source discharges of waste to water are referred to DEC for investigation.

MEDIUM FARM OPERATION (MFO) GENERAL PERMIT COMPLIANCE REPORT

<u>MFO General Permit Compliance</u>: In FY 2019, a total of 220 visits were made to MFOs. Of these, 97 inspections were conducted to assess compliance with the State's MFO General Permit, MFO Rule, and the RAPs. 123 visits were conducted to offer technical and engineering assistance.

Table 3 – MFO Visits

Total Number of MFO Visits	220
MFO Inspections	97
Complaints from the public	32 (representing 31 farms)
Complaint-related visits to Farms	28
 Complaints resulting in enforcement 	6
 Complaints directly referred to DEC with no visit 	3
Compliance checks	49 facilities (representing 33 MFOs)
 Compliance checks resulting in enforcement 	7
MFO Programmatic Follow-up Inspections	9
MFO Enforcement Action Follow-up Inspections	8
■ Enforcement Action follow-ups resulting in	1
further enforcement/referral	
MFO Regulatory Program Assistance	3
MFO Technical Assistance / Engineering Visits	123

The 33 MFOs assessed for compliance represent a total of 49 individual facilities inspected. One MFO can consist of more than one facility managed as part of the MFO. Each facility is subjected to a comprehensive compliance assessment. Act 64 now requires that MFOs be inspected every three years, as opposed to the previous five-year inspection cycle. 123 visits to MFOs involved providing technical/engineering assistance to farmers.

In FY 2019, 57 MFOs received a total of 68 formal enforcement actions. Specifically, as a result of compliance efforts conducted in FY 2019 and reported in Table 3 above, 13 MFOs received a total of 13 formal enforcement actions for violations of the MFO General Permit and/or the RAPs. An additional 37 farms received a total of 47 enforcement actions for either failing to pay the Annual MFO Operating Fee or failing to submit their Annual MFO Compliance Report and/or GIS Shape files or Notice of Intent to Comply (NOIC) with the revised MFO General Permit. As these actions are not the result of on-farm compliance efforts, they are not represented in Table 3, but they are included in Table 3a below. An additional seven farms received a total of eight enforcement actions in 2019 based on inspections conducted during FY 2018. These are also reported in Table 3a below. Eight MFOs were referred to DEC for suspected point source discharges of waste to surface water, and one MFO was referred to the Attorney General's Office for further enforcement.

Table 3a - MFO Enforcement Actions

Enforcement Actions	Number of FY2019 Cases	Number of FY2018 Cases
6 V.S.A. Section §4991(7) Letter	1	2
Corrective Action Letter (CAL)	45	4
Cease and Desist Order (CDO)		
Notice of Violation with Administrative Penalty (NOV)	12	1
Assurance of Discontinuance (AOD)		1
• Final Order (FO)	2	
MFO Referrals		

Department of Environmental Conservation (DEC) ²	8	
Attorney General's Office (AGO)	1	

LARGE FARM OPERATIONS (LFO) INDIVIDUAL PERMIT COMPLIANCE REPORT

<u>LFO Individual Permit Compliance</u>: In FY 2019, a total of 233 visits were made to LFOs. Of these, 149 inspections were conducted to assess a farm's compliance with their LFO Individual Permit, the LFO Rules, and the RAPs. 84 visits were conducted to offer technical and engineering assistance.

Table 4 – LFO Visits

Total Number of LFO Visits	233
LFO Inspections	149
Complaints from the public	19 (representing 18 farms)
Complaint-related visits to Farms	15
 Complaints resulting in enforcement 	1
 Complaints directly referred to DEC with no visit 	
Compliance checks	112 facilities (representing 38 LFOs)
 Compliance checks resulting in enforcement 	7
LFO Programmatic Follow-up Inspections	5
LFO Enforcement Action Follow-up Inspections	10
LFO Regulatory Program Assistance	7
LFO Technical Assistance / Engineering Visits	84

The 38 LFOs assessed for compliance represent a total of 112 individual facilities inspected. One LFO can consist of more than one facility managed as part of the LFO. Each facility is subjected to a comprehensive compliance assessment. There are 33 permitted LFOs in the State and each gets inspected on a calendar year basis. Because this report now summarizes inspection efforts on a fiscal year basis, a single LFO may have been inspected twice within the reporting time frame.

In FY 2019, 14 LFOs received a total of 19 formal enforcement actions. Specifically, as a result of compliance efforts conducted in FY 2019 and reported in Table 4 above, eight LFOs received a total of eleven enforcement actions for violations of the LFO Rule and/or the RAPs. An additional two LFOs received a total of three enforcement actions for failing to pay the Annual LFO Operating Fee. As these actions are not the result of on-farm compliance efforts, they are not represented in Table 4, but they are included in Table 4a below. An additional four LFOs received a total of five enforcement actions in 2019 based on inspections conducted during FY 2018. These are also reported in Table 4a below. Five LFOs were referred to DEC for suspected direct discharges of waste to surface water and one LFO was referred to the Attorney General's Office for further enforcement.

Table 4a – LFO Enforcement Actions

Enforcement Actions	Number of FY2019 Cases	Number of FY2018 Cases
6 V.S.A. Section §4991(7) Letter	5	
Corrective Action Letter (CAL)	2	3
Cease and Desist Order (CDO)		
Emergency Administrative Order (EAO)	1	
Notice of Violation with Administrative Penalty (NOV)	2	1
 Assurance of Discontinuance (AOD) 	3	1

²Under a MOU with ANR, cases involving suspected point source discharges of waste to water are referred to DEC for investigation.

• Final Order (FO)	1	
LFO Referrals		
Department of Environmental Conservation (DEC) ³	5	
Attorney General's Office (AGO)	1	

SUMMARY OF ENFORCMENT ACTIONS AND REFERRALS BY BASIN

Table 5. Number of Enforcement Actions and Referrals Summarized by Basin

Basin	Number of Enforcement Actions ⁴	Referrals
Battenkill-Walloomsac-Hoosic	3	DEC - 3
Southern Lake Champlain	8	DEC - 5
Otter Creek-Little Otter Creek-Lewis Creek	29	DEC – 7 AGO - 2
Northern Lake Champlain	13	DEC - 1
Missisquoi	21	DEC - 8
Lamoille	3	DEC - 4
Winooski	9	DEC - 4
White	7	DEC - 2
Ottauquechee-Black-CT Direct		
West-Williams-Saxtons-CT Direct	1	
Deerfield-CT Direct		AGO - 1
Stevens-Wells-Waits-Ompompanoosuc-CT Direct	3	DEC - 1
Passumpsic	1	
Upper Connecticut	6	
Lake Memphremagog	13	DEC – 3 AGO - 3

³ Under a MOU with ANR, cases involving suspected direct discharges of waste to water are referred to DEC for investigation.

 $^{^{\}rm 4}$ Includes the two enforcement actions issued to Custom Manure Applicators.

SUMMARY OF ENFORCMENT ACTIONS ISSUED DUE TO RAP VIOLATIONS, MFO GENERAL PERMIT OR LFO INDIVIDUAL PERMIT VIOLATIONS, and ASSOCIATED NUMBER OF COUNTS/VIOLATIONS

Key for Table 6

CAL = Corrective Action Letter

CDO = Cease and Desist Order

EAO = Emergency Administrative Order

FO = Final Order

MCAO = Mandatory Corrective Action Order

NOV = Notice of Violation

Table 6. Enforcement Actions Issued by General Nature of Violation of RAP Regulations, MFO General Permit, and LFO Individual Permit.⁵

General Nature of Violation	Actual Number of Individual Counts/Violations ⁶	Enforcement Actions Issued
SFO Compliance		
Field Practices	7	CAL - 5
Productions Area	46	CAL – 16; NOV – 1; MCAO – 1
Permitting	2	CAL - 1
MFO Permit Compliance		
Annual Fee Payment / Reporting	50	CAL – 24; NOV – 6; FO - 2
Field Practices	8	CAL – 7
Production Area	18	CAL – 7; NOV - 2
Recordkeeping/NMP	6	CAL – 4; NOV - 1
Permitting	18	CAL – 13; NOV - 5
LFO Permit Compliance		
Annual Fee Payment / Reporting	3	NOV – 2; FO - 1
Field Practices	8	CAL – 3; NOV – 1
Production Area	11	CAL – 4; NOV – 1; EAO – 1
Recordkeeping / NMP		
Permitting	2	CAL – 1
Custom Manure Applicator		
Field Practices	2	CAL
Recordkeeping	1	CAL
TOTAL		

Questions regarding the Vermont Agricultural Water Quality Enforcement Program or this report in general can be directed to VAAFM Agricultural Resource Management Division:

(802) 828-2431 or agr.waterquality@vermont.gov

⁵ Assurances of Discontinuance (AODs) and § 4991(7) letters are not included in this table. While they are enforcement actions, they are not charging documents with specific counts.

⁶ An enforcement action may include more than one count/violation of the RAPs or MFO/LFO permit requirements, so numbers of counts/violations may exceed the total number of enforcement actions issued. In addition, the total number of enforcement actions listed in Table 6 exceeds the 118 enforcement actions issued in FY 2018. If an enforcement action contains counts for more than one "General Nature of Violation", that action is listed multiple times for each different violation contained in the action.

Vermont Agency of Agriculture, Food and Markets Agricultural Water Quality Enforcement Program FY 2019 Report – Appendix

Required Agricultural Practices Regulations Enforcement
Medium Farm Operation General Permit Enforcement
Large Farm Operation Individual Permit Enforcement
Engineering and Technical Assistance

This Appendix is a companion piece to the FY 2019 Agricultural Water Quality Enforcement Program Report and is intended to provide a graphic representation of the enforcement and compliance assistance efforts undertaken by the Agency during FY 2019. If you are interested in reviewing the actual data on which these graphics are based, please consult the FY 2019 Report. You can obtain a copy of the report by contacting the Agency at (802) 828-2431, or by visiting the Agency's website at: https://agriculture.vermont.gov/water-quality/enforcement-compliance

Figure 1. In FY 2019, the Agency performed a total of 1,240 inspections/visits of farms to determine compliance with the Required Agricultural Practices (RAPs) Regulations, the Medium Farm Operation (MFO) General Permit, and the Large Farm Operation (LFO) Rule and individual permits, and to offer technical and engineering assistance.

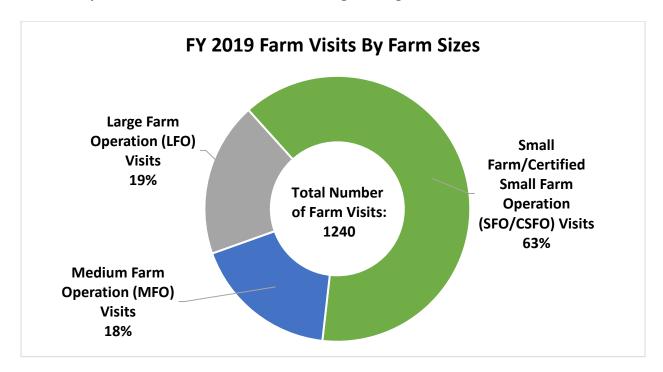


Figure 2. RAP Compliance and Assistance: In FY 2019, a total of 787 visits were made to SFOs and CSFOs. CSFOs are farms above a particular farm size that are required to certify compliance with the RAPs on an annual basis, develop a nutrient management plan (NMP), obtain four hours of approved water quality training at least once in every five years, and be inspected by the Agency every seven years. Of these, 325 inspections were conducted to determine compliance with the RAPs and 462 visits were conducted to offer technical and engineering assistance to farms.



Figure 3. MFO General Permit Compliance and Assistance: In FY 2019, a total of 220 visits were made to MFOs. Of these, 97 inspections were conducted on MFOs to evaluate compliance with the State's MFO General Permit conditions and the RAPs, and 123 visits were conducted to offer technical and engineering assistance to farms.



Figure 4. LFO Individual Permit Compliance and Assistance: In FY 2019, a total of 233 visits were made to LFOs. Of these, 149 inspections were conducted to evaluate a farm's compliance with the LFO Rules, individual LFO permits and the RAPs, and 84 visits were conducted to offer technical and engineering assistance to farms.

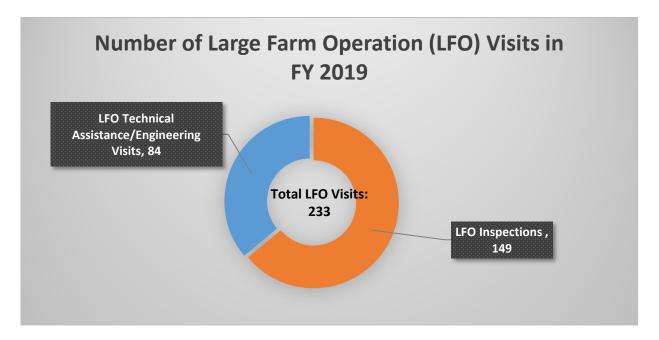


Figure 5. The Agency provides both regulatory services and non-regulatory services in the form of technical assistance. Technical assistance is provided by Agency engineers, a Conservation Reserve Enhancement Program (CREP) Coordinator, and Agency regulatory field staff. Agency staff will perform multiple technical assistance visits to ensure that a farm moves steadily towards achieving compliance.

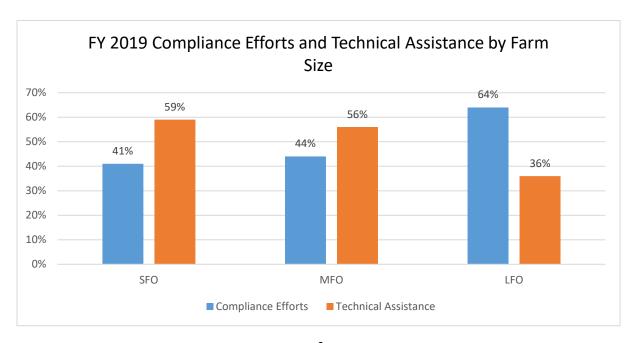
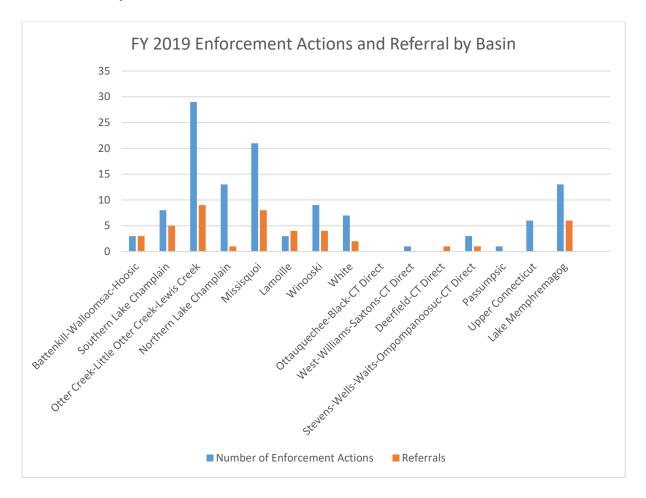


Figure 6. This graphic is a companion piece to Table 5 in the FY 2019 Annual Report and summarizes, by Basin, the number of enforcement actions and referrals.



Figures 7a, 7b, and 7c. These graphics comprise a companion piece to Table 6 in the FY 2019 Report and summarize enforcement actions issued by general nature of violation of RAP Regulations, MFO General Permit, and LFO Individual Permit and actual number of individual counts.

An enforcement action may include more than one count/violation of the RAPs or MFO/LFO permit requirements, so the number of counts/violations may exceed the total number of enforcement actions issued. In addition, the total number of enforcement actions listed in Table 6 exceeds the 115 enforcement actions issued to Farms in FY 2019. If an enforcement action contains counts for more than one "General Nature of Violation", then that action is listed multiple times for each different violation contained in the action.

Figure 7a.

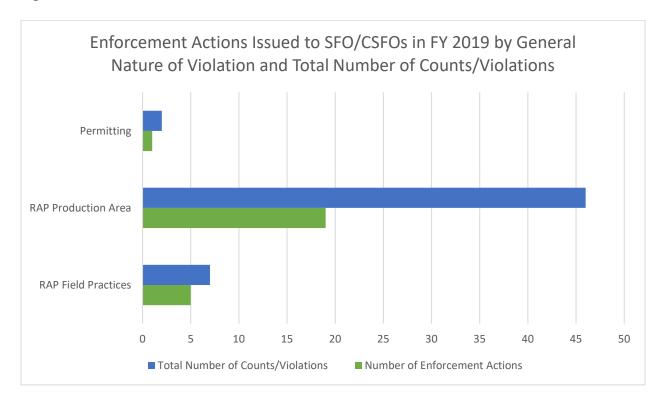


Figure 7b.

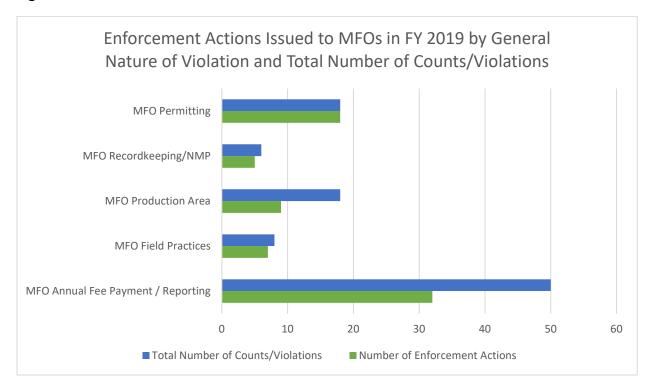


Figure 7c.

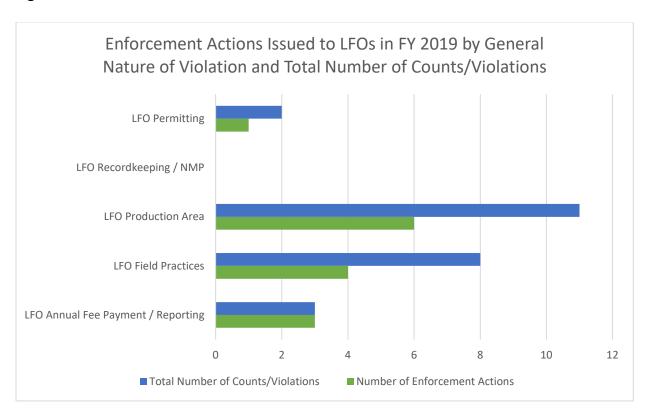
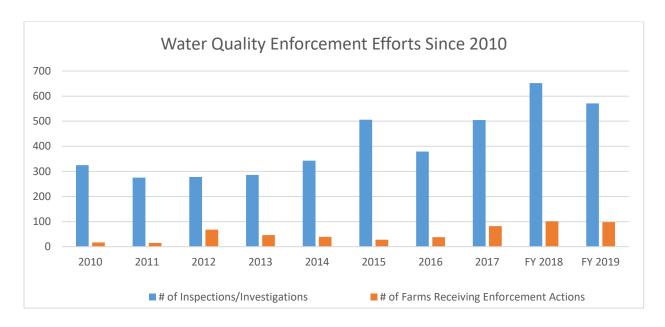


Figure 8. This chart provides a trend analysis of the Agency's agricultural water quality enforcement efforts since 2010.

- Inspection/investigation numbers have increased steadily starting in 2015 as the Agency has added additional staff to work in the Water Quality Program.
- The number of enforcement actions issued to farms spiked in 2012 and 2013 as a result
 of the Agency taking enforcement action against MFOs that either failed to submit their
 Notice of Intent to Comply (NOIC) with the renewed MFO General Permit or failed to
 send in their MFO Annual Report.
- The number of enforcement actions issued to farms in 2017 and FY 2018 has steadily increased as actions are issued for a Farm's failure to submit MFO or LFO Annual Operating Fees, or failure to comply with annual reporting requirements.
- Please note that the total number of visits to farms each year far exceeds the number of
 inspections/investigations reported in this graphic and includes technical and
 engineering assistance visits quantified within this report.



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