



Office of the Secretary
116 State Street
Montpelier, VT 05620
www.VermontAgriculture.com

[phone] 802-828-5667
[fax] 802-828-2361

Agency of Agriculture Food & Markets

Julie Moore, Secretary
Vermont Agency of Natural Resources
1 National Life Drive
Davis 2
Montpelier, Vermont 05620-3901

March 8, 2017

Dear Secretary Moore,

Enclosed please find the 2016 Annual Report for the Agricultural Water Quality Enforcement Program, submitted in accordance with the Agricultural Nonpoint Source Pollution Reduction Program Memorandum of Understanding, entered into by the Agency of Natural Resources, Department of Environmental Conservation and the Agency of Agriculture on April 16, 1993.

Please note that this is a comprehensive enforcement report that includes inspections conducted to determine compliance with the Required Agricultural Practices (RAP) Regulations and Medium and Large Farm Operations permits. The report summarizes the efforts of four Field Agents that respond to small farm compliance issues in addition to their normal duties regulating pesticides, feed, seed and fertilizers; five Medium and Large Farm Operations Permit and Inspection Coordinators, five Small Farm Water Quality Inspectors, a state-wide Conservation Reserve Enhancement Program Coordinator (CREP), and the Agency's four Agricultural Engineers.

The Annual Report's Appendix presents our compliance and enforcement efforts in graphic form. We may use this Appendix as a stand-alone document that will provide a more easily "digestible" representation of our efforts over the past year.

If you have any questions or concerns regarding this report, please feel free to contact Laura DiPietro, Deputy Director, (802) 595-1990, or David Huber, Chief Policy Enforcement Officer, (802) 828-0790, of the Agricultural Resource Management Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Anson B. Tebbetts".

Anson B. Tebbetts, Secretary
Vermont Agency of Agriculture, Food and Markets



cc: Emily Boedecker, Commissioner
Department of Environmental Conservation

Peter LaFlamme, Director
VT DEC Watershed Management Division

Representative Carolyn Partridge, Chair
House Committee on Agriculture and Forestry

Representative David Deen, Chair
House Committee on Natural Resources, Fish, and Wildlife

Senator Robert Starr, Chair
Senate Committee on Agriculture

Senator Christopher Bray, Chair
Senate Committee on Natural Resources and Energy

**Vermont Agency of Agriculture, Food and Markets
Agricultural Water Quality Enforcement Program
2016 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,

March 6, 2017

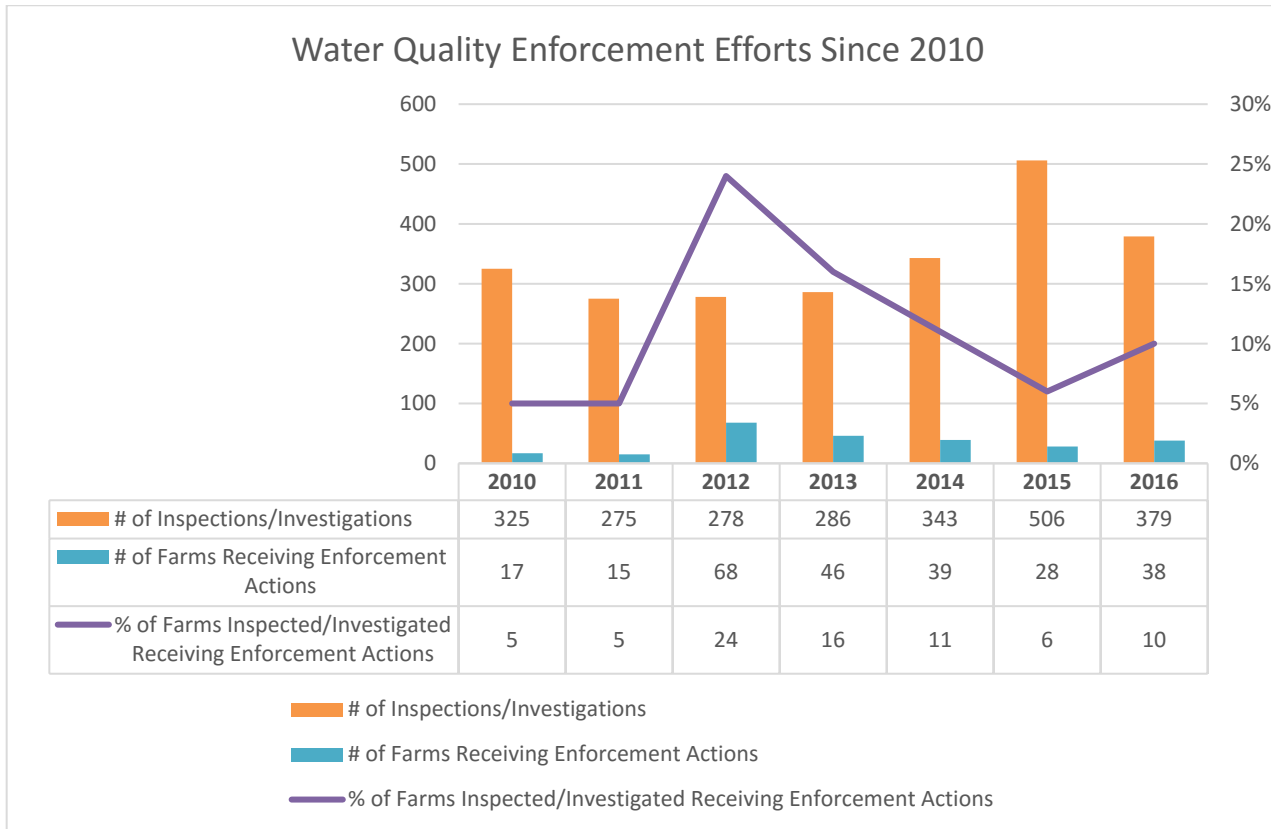
The Agricultural Resource Management (ARM) Division of the Vermont Agency of Agriculture, Food and Markets (VAAFMM) implements a comprehensive approach to the regulation of farms in the State in order to best protect water resources. The development of a three-tiered approach to the regulation of Vermont farms allows for a logical progression in regulatory oversight as a farm grows in size from a Small Farm Operation (SFO) 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 2016, the Water Quality Section of the ARM Division was heavily focused on revising the RAPs and hiring 12 new staff members to carry out the additional work mandated by Act 64, signed into law by then Governor Shumlin on June 16, 2015. The revision of the RAPs began over four years ago, with the convening of the Agricultural Working Group, which helped to develop a regulatory framework informed by a diverse group of agricultural stakeholders which informed many of the changes found in Act 64 and the RAPs. In the fall of 2015, the Agency released the first of two drafts of the RAPs under the informal rulemaking process. In May of 2016, the rulemaking process officially began with the third public draft of the RAPs. The Agency hosted over 80 meetings and over 2,000 people participated in the process. On December 5, 2016, the RAPs became effective following approval by the Legislative Committee on Administrative Rules (LCAR). LCAR recognized that farmers and environmental advocates still had remaining concerns about provisions included in the final rule. Therefore, the Agency will be taking this feedback and, in 2017, will work to form a RAP Development Committee composed of farmers who will help inform the Agency on process and procedure as the Agency implements the multifaceted rule.

The 12 new staff members hired in 2016 joined the original 10.5 positions in the ARM Division already working on water quality issues. The new staff include: one Chief Policy Enforcement Officer, one MFO/LFO Program Supervisor, one SFO Program Supervisor, one Engineer, one Communications Lead, one Geographic Information Specialist (GIS), one Education & Outreach Coordinator, three MFO/LFO inspectors, and two SFO inspectors. This literal doubling of staff numbers, along with space constraints in the Montpelier office, required the Agency to open a new office location in Williston. The operational set up and training, both in the field and in classroom settings, required a considerable amount of the new employees' and supervisors' time. In addition, during 2016, a significant number of new policies were developed in order to create clear and consistent guidance regarding inspections and enforcement matters.

Also in 2016, the Environmental Protection Agency (EPA) finalized the Lake Champlain Total Maximum Daily Load (TMDL) which requires significant reductions in agricultural pollutant loading in key areas (Missisquoi Bay and South Lake Champlain). The Conservation Law Foundation (CLF) petition against the Agency was also settled in February of 2016 and will require intensive on-farm assessment, planning and implementation efforts by the Agency and farmers. With the accomplishment of these major milestones, the Agency participated in numerous public outreach events in order to explain the initiatives and provide updates on the Agency's efforts in these areas. In 2017, the Agency will continue to check in regularly with our conservation partners to ensure that implementation efforts are on-track.

The following chart provides a trend analysis of the Agency’s Agricultural Water Quality enforcement efforts since 2010. Inspection/investigation numbers have increased in 2015 and 2016 as the Agency has added additional staff to work in the Water Quality Program. Please note that the number of enforcement actions issued to farms spiked in 2012, 2013, and 2016 as a result of the Agency taking enforcement action against medium farms that either failed to submit their Notice of Intent to Comply (NOIC) with the renewed MFO General Permit, failed to send in their MFO Annual Report, or failed to pay their MFO Annual Operating Fee (a new requirement in 2016). 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.



Information about the Required Agricultural Practices Regulations (RAPs), the MFO general permit program, and the LFO individual permit program can be found at the following links:

- RAPs
<http://agriculture.vermont.gov/RAP>
- MFO General Permit Program
<http://agriculture.vermont.gov/water-quality/regulations/mfo>
- LFO Permitting Program
<http://agriculture.vermont.gov/water-quality/regulations/lfo>

The following report summarizes the Agency’s enforcement and engineering/technical assistance efforts over the 2016 calendar year. The report summarizes the efforts of four Field Agents that respond to small farm compliance issues in addition to their normal duties regulating pesticides, feed, seed and fertilizers; five Medium and Large Farm Operations Permit and Inspection Coordinators, five Small Farm Water Quality Inspectors, a state-wide Conservation Reserve Enhancement Program Coordinator (CREP), and the Agency’s four Agricultural Engineers.

In 2016, the Agency performed a total of 812 inspections/visits/surveys to farms to determine compliance with the Required Agricultural Practices rules, the MFO General Permit, LFO Individual Permits, 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; “visits” are representative of technical and engineering assistance on the ground; “surveys” are specific to a special assessment or project. In May 2015, the Agency launched the North Lake Farm Survey (NLFS), a pilot project designed to begin quantifying water quality needs for the North Lake by surveying livestock farm facilities located in the Missisquoi River Basin and St. Albans Bay watershed. In 2015, the Agency surveyed over 250 facilities. The survey effort was completed during 2016 with the assessment of an additional 68 facilities. While conducting these surveys, field staff worked closely with farmers to assess their potential impact on water quality and help them to understand Vermont’s water quality regulations.

As a result of inspections conducted, a total of 28 farms received formal enforcement actions, ten enforcement actions are pending, one small farm was referred to the Agency of Natural Resources (ANR) for suspected direct discharges of wastes to surface water, and one small farm was referred to the Attorney General’s Office for further enforcement.

RAP Compliance and Assistance: In 2016, a total of 520 visits were made to SFOs. Of these, 212 inspections/surveys were conducted to assess compliance with the RAPs.

Table 1. Small Farm Operation Visits

Total Number of SFO Visits	520
SFO Inspections	155
Complaints from public	63
▪ <i>Complaints resulting in enforcement</i>	7
Compliance checks	67
▪ <i>Compliance checks resulting in enforcement</i>	2
Inspections conducted with VTDEC(*) / USEPA(*)	0
SFO Regulatory Follow-up Visits	25
SFO North Lake Farm Surveys (# of facilities)	57
SFO Technical Assistance / Engineering Visits	308

(*) Inspections conducted in cooperation with VTDEC and USEPA evaluate a farm operation for compliance with the Federal Concentrated Animal Feeding Operation (CAFO) permit requirements.

While the RAP enforcement program has, over the years, been shifting steadily towards more of an inspection-based program as opposed to being driven solely by complaints from the public, Act 64 now requires farms that meet the definition of “Certified Small Farm Operation” (e.g. 50 or more mature dairy cows or 50 or more acres of land in corn), to be inspected at least once every seven years. That inspection cycle will begin in 2017.

As indicated in the attached investigation tracking summary table (Table 7), compliance check surveys were conducted to ensure compliance with the winter manure spreading ban. Each survey is logged as a single investigation, but each survey covers a number of farms in a given area. In 2016, 11 pre-winter spreading ban compliance checks, covering approximately 49 farms, were conducted to ensure that farmers were properly managing their manure, emptying their pits, and preparing appropriately for the winter spreading ban. Once the ban was in effect, 12 compliance checks were conducted to ensure that no manure spreading was occurring during the winter spreading ban. Those checks covered approximately 105 farms. So, while only 23 inspections are logged for these compliance check efforts before and during the manure spreading ban, a total of 154 farms were found to be in compliance at the time of these checks.

As a result of compliance efforts conducted in 2016, nine SFOs received formal enforcement actions. One of these nine farms was later referred to the Attorney General's Office for further enforcement, while another was referred to ANR for suspected direct discharges of waste to surface water.

Table 1a – Small Farm Operation Enforcement Actions

Enforcement Actions	Number of Cases
Corrective Action Letter (CAL)	9
Notice of Violation with Administrative Penalty (NOV)	
▪ Assurance of Discontinuance (AOD)	
▪ Final Order	
Actions Pending	
SFO In-Field Corrections (verbal warnings)	3
SFO Referrals	
Agency of Natural Resources (ANR) (*)	1
Attorney General's Office (AGO)	1
SFO Cases in Continuance	13

(*) Under a Memorandum of Understanding with ANR, cases involving suspected direct discharges of waste to water are referred to ANR for investigation.

MFO GENERAL PERMIT COMPLIANCE REPORT

MFO General Permit Compliance: In 2016, a total of 192 visits were made to MFOs. Of these, 118 inspections/surveys were conducted on medium farms to assess compliance with the State's MFO general permit conditions.

Table 2 – Medium Farm Operation Visits

Total Number of MFO Visits	192
MFO Inspections	111
Complaints from Public	28
▪ <i>Complaints resulting in enforcement</i>	16
Compliance checks	62
▪ <i>Compliance checks resulting in enforcement</i>	7 (includes 5 pending)
Inspections conducted with VTDEC(*) / USEPA(*)	20
MFO Regulatory Follow-up Visits	1
MFO North Lake Farm Surveys (# of facilities)	7
MFO Technical Assistance / Engineering Visits	74

(*) Inspections conducted in cooperation with VTDEC and USEPA evaluate a farm operation for compliance with the Federal Confined Animal Feeding Operation (CAFO) permit requirements in addition to the State MFO general permit.

The 62 MFOs assessed for compliance with the MFO General Permit in 2016 represent a total of 108 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. 74 visits to MFOs involved providing technical/engineering assistance to farmers that showed interest and motivation to correct a potential violation identified through an inspection. The Agency will perform multiple technical/engineering assistance visits to ensure a farm moves steadily towards achieving compliance. *Note: Starting in 2016, in accordance with 6 V.S.A. § 4858(e), MFOs are required to pay an Annual Operating fee. Failure to pay this fee is reported under "Complaints" in Table 2.*

**As a result of compliance efforts conducted in 2016, a total of 18 MFOs received formal enforcement actions and five enforcement actions are pending.
16 of the farms that received enforcement actions failed to pay their 2016 MFO Annual Operating Fee.**

Table 2a – Medium Farm Operation Enforcement Actions

Enforcement Actions	Number of Cases
Corrective Action Letter (CAL)	17
Notice of Violation with Administrative Penalty (NOV)	7
▪ Assurance of Discontinuance (AOD)	
▪ Final Order (FO)	3
Actions pending	5
MFO In-Field Corrections (verbal warnings)	1
MFO Referrals	
Agency of Natural Resources (VT ANR) (*)	
Attorney General’s Office (AGO)	
MFO Cases in Continuance	6

(*) Under a Memorandum of Understanding with ANR, cases involving suspected direct discharges of waste to water are referred to ANR for investigation. **Note:** an AOD or FO is only issued after a NOV has been issued. Therefore, while we report that 18 MFOs received enforcement actions, a total of 27 actions were issued to these farms.

LFO INDIVIDUAL PERMIT COMPLIANCE REPORT

LFO Individual Permit Compliance: In 2016, a total of 100 visits were made to LFOs. Of these, 49 inspections/surveys were conducted to assess a farm’s compliance with their individual LFO permit and the LFO Rules. In addition, Consultation Meetings (pursuant to 6 V.S.A. § 4991(7)) were held with 26 LFOs to discuss nutrient management planning on their farms.

Table 3 – Large Farm Operation Visits

Total Number of LFO Visits	100
LFO Inspections	45
Complaints from public	12
▪ <i>Complaints resulting in enforcement</i>	1
Compliance checks	27
▪ <i>Compliance checks resulting in enforcement</i>	5 pending
Inspections conducted with VTDEC(*) / USEPA(*)	1
LFO Regulatory Follow-up visits	5
LFO North Lake Farm Surveys (# of facilities)	4
LFO Technical Assistance / Consultation Meetings / Engineering Visits	51

(*) Inspections conducted in cooperation with VTDEC and USEPA evaluate a farm operation for compliance with the CAFO permit requirements in addition to the farm’s LFO Permit.

The 27 LFOs assessed for compliance with the LFO Rules and their individual permits represent a total of 80 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. Note: Starting in 2016, in accordance with 6 V.S.A. § 4851(i), LFOs are required to pay an Annual Operating fee. Failure to pay this fee is reported under “Complaints” in Table 2.

As a result of compliance efforts conducted in 2016, one LFO received formal enforcement action for not paying the 2016 LFO Annual Operating Fee and five actions are pending.

Table 3a – Large Farm Operation Enforcement Actions

Enforcement Actions	Number of Cases
Corrective Action Letter (CAL)	1
Notice of Violation with Administrative Penalty (NOV)	1
▪ Assurance of Discontinuance (AOD)	
▪ Final Order (FO)	1
Actions Pending	5
LFO In-Field Corrections (verbal warnings)	
LFO Referrals	
Agency of Natural Resources (VT ANR) (*)	
Attorney General’s Office (AGO)	
LFO Cases in Continuance	2

(*) Under a Memorandum of Understanding with ANR, cases involving suspected direct discharges of waste to water are referred to ANR for investigation.

Key for Tables 4, 6, and 7

AGO = Attorney General’s Office
LOW = Letter of Warning
CDO = Cease and Desist Order

CON = Case Continuing
CAL = Corrective Action Letter
PA = Case Permanently Abeyed/Closed

AOD = Assurance of Discontinuance
NOV = Notice of Violation

Table 4. Inspections and Enforcement Actions by Watershed

Watershed / (watershed number on attached table) (*)	Number of Inspections	Enforcement Actions, Verbal Warnings, Referrals
Battenkill-Walloomsac-Hoosic (1)	8	CAL (MFO)
Southern Lake Champlain (2)	28	Action Pending (LFO), Verbal (SFO)
Otter Creek-Little Otter Creek-Lewis Creek (3)	34	CAL (SFO), CAL (MFO) – 2, Action Pending (LFO), Verbal (SFO), Referred - ANR (SFO)
Northern Lake Champlain (4)	23	CAL (MFO), CAL/NOV (MFO), CAL/NOV/FO (MFO), NOV (MFO), Action Pending (MFO) – 4
Missisquoi (5)	36	CAL (SFO) – 2, CAL (MFO) – 2, CAL/NOV (MFO) – 2, Action Pending (MFO), Action Pending (LFO) – 2, Verbal (MFO)
Lamoille (6)	6	CAL (SFO)
Winooski (7)	14	CAL (SFO), CAL (MFO)
White (8)	12	CAL (SFO), CAL (MFO) - 2

Otteuquechee-Black-CT Direct (9)	5	Verbal (SFO)
West-Williams-Saxtons-CT Direct (10)	7	
Deerfield-CT Direct (11)	3	
Stevens-Wells-Waits-Ompompanoosuc-CT Direct (12)	7	
Passumpsic (13)	5	Action Pending (LFO)
Upper Connecticut (14)	4	CAL (MFO)
Lake Memphremagog (15)	24	CAL (SFO) – 3, Referred - AGO (SFO), CAL (MFO), CAL/NOV/FO (MFO) -2, CAL/NOV/FO (LFO),

NOTE: Table 4 only addresses the inspections conducted to determine compliance with the RAPs and those inspections of MFOs and LFOs that either lead to the issuance of an enforcement action or were undertaken in response to complaints from the public (these investigations are summarized in Table 7). A number of inspections, such as surveys for compliance with the winter manure spreading ban, encompass more than one watershed. Therefore, the number of investigations on a watershed basis may exceed the absolute number of inspections conducted. The enforcement action taken is paired with the designation “SFO” for small farm, “MFO” for medium farm, and “LFO” for large farm. In some cases, field staff address and correct issues in the field without the need for a written enforcement action. These cases are referred to as “verbal”.

Table 5. General Nature of Complaints Received and Compliance Checks Conducted.

This table summarizes all compliance checks and inspections into alleged violations of RAPs, MFO and LFO inspections conducted in response to complaints, and MFO and LFO inspections that led to enforcement actions based on the inspections tracked in Table 7. It does not track all MFO and LFO inspections conducted in 2016. Some inspections addressed more than one concern, so the numbers in this table may exceed the number of inspections conducted. As in past years, the majority of complaints were related to manure management on SFOs.

Nature of Complaint / Subject of Compliance Check	Number of Complaints	Number of Compliance Checks
RAP Regulations Compliance		
RAP – Enforcement Action Follow-up		25
RAP – Field Practices – Cropfield Runoff - Erosion	2	
RAP – Field Practices – Ditch Maintenance – Impacts to Water	1	
RAP – Field Practices – Farmer Request for Assistance		
RAP – Field Practices – General Compliance Check		
RAP – Field Practices – Livestock Pasturing Near Wells	1	
RAP – Field Practices – Manure Management	8	1
RAP – Field Practices – Manure Management – Spreading During Ban	3	
RAP – Field Practices – Manure Management – Spreading Ban Compliance Check		12
RAP – Field Practices – Manure Management – Manure Spreading Exemption Request		1
RAP – Field Practices – Manure Management – Pre-spreading Ban Compliance Check (Nov. 1 – Dec. 15)		11
RAP – Field Practices – Vegetative Buffers	1	2
RAP – Production Area – Carcass Disposal / Slaughter Waste	3	

RAP – Production Area – Composting - Livestock		
RAP – Production Area – Composting – Non-Livestock		
RAP – Production Area – Construction of Farm Structures		
RAP – Production Area – Farmer Request for Assistance		1
RAP – Production Area – General Compliance Check	1	
RAP – Production Area – Livestock Access to Water / Streambank Impacts	10	
RAP – Production Area – Manure Management	34	
RAP – Production Area – Milkhouse Waste	1	
RAP – Production Area – Silage Leachate / Waste Feed		
MFO Permit Compliance		
Enforcement Action Follow-up		1
Field Practices	8	10
Production Area	4	9
Recordkeeping/Reporting/MFO Annual Operating Fee Payment	16	
LFO Permit Compliance		
Enforcement Action Follow-up		4
Field Practices	8	32
Production Area	4	1
Recordkeeping/Reporting/ LFO Annual Operating Fee Payment	2	
TOTAL	107	110

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

[Note - an enforcement action may include more than one count / violation of the RAPs or MFO / LFO permit requirements, so numbers of violations may exceed the total number of enforcement actions issued.]

Required Agricultural Practices Section	Number of Violations / Enforcement actions / Verbal warnings
4.01 - Discharges	CAL (8), Referred – ANR (1), Referred – AGO (1)
4.02 - Nutrient and Pesticide Storage	CAL (11)
4.03 - Nutrient and Pesticide Application	CAL (2)
4.04 - Soil Cultivation	
4.05 - Agricultural Waste Management	
4.06 - Buffer Zones	
4.07 - Construction of Farm Structures	
4.08 - Ground Water Quality	
MFO General Permit	
Production Area Concerns / Manure Storage	CAL (1), Verbal (1)
Field Practices	CAL (2), Pending Action (5), Verbal (1)
Recordkeeping/Reporting/MFO Annual Operating Fee Payment	CAL (9), NOV, CAL/NOV (3), CAL/NOV/FO (3)
LFO Individual Permit	
Production Area Concerns / Manure Storage	Pending Action (1)
Field Practices	Pending Action (5)
Recordkeeping/Reporting/LFO Annual Operating Fee Payment	CAL/NOV/FO (1)

Table 7. RAP/MFO/LFO Enforcement Inspection Tracking Summary Table. This table tracks all compliance checks and inspections into alleged violations of RAPs; MFO and LFO inspections conducted in response to complaints received; and, MFO and LFO compliance inspections that led to enforcement actions. If there is no date under the “date received” column, no complaint was received. The visit was initiated by a Field Agent or Office staff, or the inspection was requested by the farmer. This Table does not track all LFO, MFO, and SFO inspections conducted in 2016. Specifically, this table does not track SFO compliance inspections conducted in response to requests from land conservancy and lender groups; checks into a farm’s compliance with the Farm Agronomic Practices (FAP) Program; or, Technical Assistance/Engineering visits. Please see Tables 2 and 3 for a total number of LFO, MFO and SFO inspections conducted in 2016.

Questions regarding the Vermont Agricultural Water Quality Enforcement Program or this report in general can be directed to the Agency of Agriculture, Agricultural Resource Management Division at (802) 828-2431.

Table 7 RAP/MFO/LFO Enforcement Inspection Tracking Summary Table

Case #	Total Farms Visited	Farms Visited Basin #1	Farms Visited Basin #2	Farm Size	Date Received	Site Visit	Basin ID #1	Basin ID #2	Nature of Complaint / Investigation	Violation	Action	Referred	Date
1				SFO	1/6/2016	No site visit	Northern Lake Champlain		RAP - Production Area - Manure Management		PA		3/1/2016
2	1	1		SFO	1/11/2016	1/18/2016	Southern Lake Champlain		RAP - Production Area - Manure Management		PA		1/18/2016
3	1	1		SFO	1/11/2016	1/18/2016	Southern Lake Champlain		RAP - Field Practices - Cropfield Runoff-Erosion; RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		1/18/2016
4	1	1		SFO	1/11/2016	1/18/2016	Southern Lake Champlain		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		1/18/2016
5	1	1		SFO		1/14/2016	Northern Lake Champlain		RAP - Enforcement Action Follow-up		PA		1/14/2016
6	1	1		SFO	1/29/2016	referred	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Manure Management	4.01(a)	referred	ANR	1/29/2016
7	1	1		SFO	1/20/2016	2/3/2016 3/9/2016	Missisquoi		RAP - Field Practices - Manure Management		PA		2/3/2016
8	1	1		SFO	2/8/2016	2/12/2016 3/17/2016	West, Williams, Saxtons - CT Direct		RAP - Production Area - Manure Management	4.02(a)	PA		3/17/2016
9	1	1		SFO	2/9/2016	2/10/2016 4/18/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management - Spreading During Ban		PA		4/18/2016
10	1	1		MFO	2/10/2016	2/24/2016	Otter Creek - Little Otter Creek - Lewis Creek		MFO Permit Compliance - Production Area		PA		11/18/2016
11	1	1		SFO	2/12/2016	2/24/2016	White		RAP - Production Area - Carcass Disposal / Slaughter Waste		PA		3/4/2016
12	1	1		SFO		2/3/2016	Missisquoi		RAP - Enforcement Action Follow-up		PA		9/19/2016
13	1	1		MFO		3/4/2016	Missisquoi		MFO Permit Compliance - Production Area		PA		3/4/2016
14	1	1		SFO	3/15/2016		Missisquoi		RAP - Field Practices - Manure Management		PA		3/16/2016
15	1	1		MFO	3/14/2016	3/16/2016	Lake Memphremagog		MFO Permit Compliance - Field Practices		PA		3/16/2016
16	1	1		SFO	3/21/2016	3/23/2016	Lake Memphremagog		RAP - Field Practices - Ditch Maintenance - Impacts to Water		PA		3/30/2016
17	1	1		MFO	3/22/2016	3/23/2016	Missisquoi		MFO Permit Compliance - Field Practices		PA		3/31/2016
18	1	1		SFO		3/17/2016	Lamoille		RAP - Field Practices - Manure Management - Manure Spreading Exemption Request		PA		3/18/2016
19	1	1		SFO	3/28/2016	3/29/2016	Winooski		RAP - Production Area - Manure Management	4.02(a)	CON		
20	1	1		LFO	3/18/2016	3/18/2016	Missisquoi		LFO Permit Compliance - Production Area		PA		9/27/2016
21	1	1		SFO	3/28/2016	3/29/2016	Winooski		RAP - Field Practices - Manure Management - Spreading During Ban		PA		3/29/2016
22	1	1		SFO	3/29/2016	4/6/2016	Southern Lake Champlain		RAP - Production Area - Manure Management		PA		4/6/2016
23	1	1		SFO		3/22/2016	Stevens - Wells - Waits - Ompompanoosuc - CT Direct		RAP - Enforcement Action Follow-up		CON		
24				SFO	4/1/2016	No visit	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		4/1/2016
25	1	1		SFO	4/1/2016	4/4/2016	Upper Connecticut		RAP - Production Area - Manure Management		PA		4/4/2016
26	1	1		SFO		3/23/2016	Northern Lake Champlain		RAP - Enforcement Action Follow-up		CON		
27				MFO	4/2/2016	No Visit	Missisquoi		MFO Permit Compliance - Field Practices		PA		4/4/2016
28	1	1		MFO		4/1/2016	Missisquoi		MFO Permit Compliance - Production Area		CON		
29	1	1		MFO		4/1/2016	Missisquoi		MFO Permit Compliance - Production Area		CON		
30	1	1		SFO		2/18/2016 3/23/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Enforcement Action Follow-up		PA		4/7/2016
31	1	1		SFO		1/27/2016 3/28/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Enforcement Action Follow-up		PA		4/7/2016
32				LFO	4/7/2016	No Visit	Missisquoi		LFO Permit Compliance - Field Practices		PA		4/8/2016
33	1	1		MFO		3/31/2016	Southern Lake Champlain		MFO Permit Compliance - Production Area		PA		11/18/2016
34	1	1		MFO		4/1/2016	Northern Lake Champlain		MFO Permit Compliance - Production Area		PA		4/21/2016
35	1	1		SFO	8/11/2016	8/12/2016	Upper Connecticut		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		8/12/2016
36	1	1		MFO		4/12/2016	Missisquoi		MFO Permit Compliance - Field Practices		CON		
37	1	1		MFO		4/12/2016	Missisquoi		MFO Permit Compliance - Field Practices	MFO GP	PA		4/30/2016
38				LFO	3/15/2016	No visit	Lake Memphremagog		LFO Permit Compliance - Recordkeeping / Reporting / Fee Payment	6 V.S.A. §4851(j)	CAL NOV Final Order		8/26/2016 11/16/16 12/29/2016
39	1	1		MFO		5/4/2016	Winooski		MFO Permit Compliance - Field Practices	MFO GP - buffers	CAL		8/2/2016

Case #	Total Farms Visited	Farms Visited Basin #1	Farms Visited Basin #2	Farm Size	Date Received	Site Visit	Basin ID #1	Basin ID #2	Nature of Complaint / Investigation	Violation	Action	Referred	Date
40	1	1		SFO	4/18/2016	4/19/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Manure Management	4.02(a)	CAL		6/7/2016
41	1	1		SFO	4/18/2016	4/20/2016	Missisquoi		RAP - Production Area - Manure Management	4.02(a) 4.02(c)	CAL		6/29/2016
42	1	1		SFO		3/18/2016	White		RAP - Production Area - Manure Management	4.01(b), 4.02(d)	CAL		8/2/2016
43	1	1		LFO		4/6/2016	Southern Lake Champlain		LFO Permit Compliance - Enforcement Action Follow-up		PA		11/16/2016
44	1	1		SFO		4/15/2016	Lake Memphremagog		LFO Permit Compliance - Production Area		PA		4/15/2016
45	1	1		LFO	4/15/2016	4/19/2016	Missisquoi		RAP - Enforcement Action Follow-up		PA		4/19/2016
46	1	1		SFO	4/18/2016	4/20/2016	Lake Memphremagog		LFO Permit Compliance - Field Practices		PA		4/19/2016
47	1	1		SFO	6/1/2016	6/2/2016	Winooski		RAP - Production Area - Manure Management	4.01(b) 4.02(d)	CAL		6/3/2016
48	1	1		SFO	5/6/2016	5/6/2016	Lake Memphremagog		RAP - Production Area - General Compliance Check		PA		6/1/2016
49	1	1		SFO	5/17/2016	5/25/2016	Stevens - Wells - Waits - Ompompanoosuc - CT Direct		RAP - Production Area - Manure Management	4.01(b) 4.03(a)	CAL		8/2/2016
50	1	1		SFO	6/6/2016	6/8/2016	Lamiolle		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		5/25/2016
51	1	1		SFO	6/8/2016	6/8/2016	Lake Memphremagog		RAP - Production Area - Manure Management	4.01(b) 4.02(a)	CAL		8/2/2016
52	1	1		SFO		6/8/2016	Missisquoi		RAP - Field Practices - Vegetative Buffers; RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		6/8/2016
53	1	1		SFO		6/15/2016	Winooski		RAP - Field Practices - Manure Management		PA		10/12/2016
54	1	1		SFO	5/19/2016	5/25/2016	Northern Lake Champlain		RAP - Field Practices - Vegetative Buffers		CON		
55	1	1		SFO	5/22/2016	5/23/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Manure Management		PA		6/14/2016
56	1	1		LFO	6/22/2016	6/29/2016	Lake Memphremagog		RAP - Field Practices - Livestock pasturing near wells		PA		10/20/2016
57	1	1		SFO	6/24/2016	6/30/2016	Missisquoi		LFO Permit Compliance - Production Area; LFO Permit Compliance - Recordkeeping / Reporting / Fee Payment; LFO Permit Compliance - Field Practices		CON		
58	1	1		SFO	6/28/2016	7/27/2016	Southern Lake Champlain		RAP - Field Practices - Manure Management	4.01(b)	CAL		11/21/2016
59	1	1		SFO	6/30/2016	7/5/2016	Passumpsic		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		8/25/2016
60	1	1		MFO	7/18/2016	8/3/2016	Northern Lake Champlain		RAP - Field Practices - Manure Management		PA		8/18/2016
61	1	1		SFO	7/21/2016	7/26/2016	Winooski		MFO Permit Compliance - Field Practices		PA		8/3/2016
62	1	1		MFO	7/25/2016	8/4/2016	Passumpsic		RAP - Production Area - Manure Management	4.01(b) 4.02(a)	CAL		8/19/2016
63	1	1		SFO	7/26/2016	7/28/2016	Missisquoi		MFO Permit Compliance - Production Area		CON		
64	1	1		SFO	8/3/2016	8/4/2016	Northern Lake Champlain		RAP - Production Area - Manure Management		PA		8/25/2016
65	1	1		SFO		4/6/2016	Southern Lake Champlain		RAP - Production Area - Manure Management		PA		8/4/2016
66	1	1		SFO	8/8/2016	8/9/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Vegetative buffers		PA		8/25/2016
67	1	1		SFO	7/20/2016	7/27/2016	White		RAP - Production Area - Manure Management		PA		8/9/2016
68	1	1		SFO	7/21/2016	7/27/2016	Ottawaquechee - Black - CT Direct		RAP - Production Area - Manure Management		PA		7/27/2016
69	1	1		SFO	8/9/2016	8/10/2016	Southern Lake Champlain		RAP - Production Area - Manure Management		PA		10/20/2016
70	1	1		SFO		6/20/2016	West, Williams, Saxtons - CT Direct		RAP - Production Area - Manure Management		PA		6/20/2016
71	1	1		SFO	7/8/2016	7/8/2016	White		RAP - Enforcement Action Follow-up		PA		6/20/2016
72	1	1		SFO	8/11/2016	8/11/2016	Winooski		RAP - Production Area - Carcass Disposal / Slaughter Waste		PA		7/8/2016
73	1	1		MFO	4/25/2016	4/26/2016	Missisquoi		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		8/23/2016
74	1	1		LFO	4/26/2016	4/26/2016	Missisquoi		MFO Permit Compliance - Field Practices		PA		4/26/2016
75	1	1		LFO	4/22/2016	4/25/2016	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices		PA		4/26/2016
76	1	1		SFO		4/20/2016	Northern Lake Champlain		LFO Permit Compliance - Field Practices		PA		4/25/2016
									RAP - Enforcement Action Follow-up		PA		4/28/2016

Case #	Total Farms Visited	Farms Visited Basin #1	Farms Visited Basin #2	Farm Size	Date Received	Site Visit	Basin ID #1	Basin ID #2	Nature of Complaint / Investigation	Violation	Action	Referred	Date
77	1	1		SFO	4/29/2016	4/29/2016	Stevens - Wells - Waits - Ompompanoosuc - CT Direct		RAP - Production Area - Milkhouse Waste		PA		4/29/2016
78	1	1		MFO		7/27/2016	Missisquoi		MFO Permit Compliance - Production Area MFO Permit Compliance - Field Practices	MFO GP	CAL		10/18/2016
79	1	1		SFO		8/9/2016	Lake Memphremagog		RAP - Production Area - Manure Mangement RAP - Production Area - Livestock Access to Water	4.01(b) 4.01(c) 4.02(d)	CAL		9/8/2016
80	1	1		MFO	5/3/2016	5/4/2016	Missisquoi		MFO Permit Compliance - Field Practices		PA		5/4/2016
81	1	1		SFO	5/4/2016	5/6/2016	Lamoille		RAP - Production Area - Manure Management		PA		6/17/2016
82	14	14		SFO		12/27/2016	Missisquoi		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		12/27/2016
83	1	1		SFO	5/5/2016	5/11/2016	Missisquoi		RAP - Field Practices - Cropfield Runoff		PA		5/11/2016
84	1	1		LFO	5/9/2016	5/19/2016	Southern Lake Champlain		LFO Permit Compliance - Field Practices		PA		5/19/2016
85	1	1		MFO	5/6/2016	5/10/2016	Northern Lake Champlain		MFO Permit Compliance - Field Practices		PA		5/10/2016
86	1	1		LFO	5/11/2016	5/13/2016	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices		PA		5/13/2016
87	1	1		MFO	4/28/2016	4/28/2016	Otter Creek - Little Otter Creek - Lewis Creek		MFO Permit Compliance - Field Practices		PA		4/29/2016
88	1	1		SFO		4/13/2016	Batten Kill - Walloomsac - Hoosic		RAP - Enforcement Action Follow-up		PA		5/18/2016
89	1	1		SFO		4/13/2016	Batten Kill - Walloomsac - Hoosic		RAP - Enforcement Action Follow-up		PA		5/18/2016
90	1	1		SFO		4/13/2016	Batten Kill - Walloomsac - Hoosic		RAP - Enforcement Action Follow-up		PA		11/22/2016
91	1	1		SFO	5/11/2016	5/16/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Manure Management		PA		6/3/2016
92	1	1		SFO	3/9/2016	3/17/2016 3/29/2016	West, Williams, Saxtons - CT Direct		RAP - Production Area - Manure Management		PA		5/18/2016
93	1	1		SFO	3/29/2016	3/29/2016	Deerfield - Connecticut Direct		RAP - Field Practices - Manure Management		PA		5/18/2016
94	1	1		SFO	5/14/2016	5/16/2016	Ottawaquechee - Black - CT Direct		RAP - Production Area - Manure Management	4.02(a) 4.03(g)	PA		6/7/2016
95	1	1		LFO	8/19/2016	8/23/2016	Missisquoi		LFO Permit Compliance - Production Area		CON		
96	1	1		SFO	4/4/2016	4/4/2016	Winooski		RAP - Production Area - Manure Management		PA		8/25/2016
97	1	1		MFO		7/21/2016	Lamiolle		MFO Permit Compliance - Production Area	MFO GP	CON		
98	1	1		SFO		8/17/2016	Lake Memphremagog		RAP - Enforcement Action Follow-up		PA		8/17/2016
99	1	1		SFO		8/18/2016	Lake Memphremagog		RAP - Enforcement Action Follow-up		PA		8/18/2016
100				MFO	5/31/2016	no site visit	Otter Creek - Little Otter Creek - Lewis Creek		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
101				MFO	5/31/2016	no site visit	Missisquoi		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
102				MFO	5/31/2016	no site visit	Missisquoi		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL NOV		9/19/2016 12/19/2016
103	13	7	6	SFO		12/28/2016	Upper Connecticut	Passumpsic	RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		12/28/2016
104				MFO	5/31/2016	no site visit	Lake Memphremagog		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
105				MFO	5/31/2016	no site visit	Northern Lake Champlain		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
106				MFO	5/31/2016	no site visit	White		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
107				MFO	5/31/2016	no site visit	Batten Kill - Walloomsac - Hoosic		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
108				MFO	5/31/2016	no site visit	Missisquoi		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL NOV		9/19/2016 12/9/2016
109				MFO	5/31/2016	no site visit	Lake Memphremagog		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL NOV Final Order		9/19/2016 12/9/2016 1/19/2017
110				MFO	5/31/2016	no site visit	Lake Memphremagog		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL NOV Final Order		9/19/2016 12/9/2016 1/19/2017
111				MFO	5/31/2016	no site visit	White		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
112				MFO	5/31/2016	no site visit	Otter Creek - Little Otter Creek - Lewis Creek		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
113				MFO	5/31/2016	no site visit	Northern Lake Champlain		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL NOV Final Order		9/19/2016 12/9/2016 1/19/2017

Case #	Total Farms Visited	Farms Visited Basin #1	Farms Visited Basin #2	Farm Size	Date Received	Site Visit	Basin ID #1	Basin ID #2	Nature of Complaint / Investigation	Violation	Action	Referred	Date
114				SFO	10/5/2016	10/10/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Livestock Access to Water / Streambank Impacts		CON		
115				MFO	5/31/2016	no site visit	Upper Connecticut		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL		9/19/2016
116				MFO	5/31/2016	no site visit	Northern Lake Champlain		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	CAL NOV		9/19/2016 12/9/2016
117	1	1		SFO	8/31/2016	9/7/2016	West, Williams, Saxtons - CT Direct		RAP - Production Area - Manure Management		PA		9/8/2016
118	1	1		SFO	8/30/2016	9/1/2016	Lake Memphremagog		RAP - Production Area - Manure Management		PA		9/1/2016
119				MFO	9/7/2016	no site visit	Lamoille		MFO Permit Compliance - Production Area		PA		9/7/2016
120	1	1		SFO	9/15/2016	9/16/2016	White		RAP - Production Area - Manure Management		CON		
121	1	1		SFO	9/7/2016	9/8/2016	Northern Lake Champlain		RAP - Production Area - Livestock Access to Water / Streambank Impacts		PA		9/8/2016
122				SFO		no site visit	White		RAP - Production Area - Manure Management		PA		9/20/2016
123	1	1		SFO	9/30/2016	10/6/2016	West, Williams, Saxtons - CT Direct		RAP - Production Area - Manure Management		PA		10/18/2016
124	1	1		SFO	10/18/2016	10/20/2016	Lake Memphremagog		RAP - Production Area - Manure Management		PA		10/27/2016
125	1	1		MFO		7/15/2016	Northern Lake Champlain		MFO Permit Compliance - Production Area MFO Permit Compliance - Field Practices	MFO GP	Pending		
126	1	1		MFO	11/16/2016	11/22/2016	Southern Lake Champlain		MFO Permit Compliance - Production Area	MFO GP	PA		11/22/2016
127	1	1		SFO		10/11/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Enforcement Action Follow-up		PA		10/11/2016
128	1	1		SFO		8/15/2016 9/8/2016	Batten Kill - Walloomsac - Hoosic		RAP - Enforcement Action Follow-up		CON		
129	1	1		SFO		8/18/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Farmer Request for Assistance		PA		8/18/2016
130	1	1		LFO	10/3/2016	10/5/2016	Lake Memphremagog		LFO Permit Compliance - Production Area		PA		10/20/2016
131	1	1		SFO		8/15/2016	Batten Kill - Walloomsac - Hoosic		RAP - Enforcement Action Follow-up		PA		10/20/2016
132	1	1		SFO		7/18/2016 8/24/2016 9/20/2016	Southern Lake Champlain		RAP - Production Area - Manure Management		CON		
133	1	1		SFO	11/22/2016	11/29/2016	Lamoille		RAP - Production Area - Manure management		CON		
134	1	1		SFO		6/29/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Enforcement Action Follow-up		PA		10/20/2016
135	1	1		SFO	5/11/2016	5/16/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Production Area - Manure Management		PA		10/20/2016
136	1	1		SFO		8/26/2016	Otter Creek - Little Otter Creek - Lewis Creek		Follow-up on AGO Enforcement Case		PA		10/20/2016
137	1	1		SFO	11/23/2016	11/29/2016	Lake Memphremagog		RAP - Production Area - Manure Management		PA		11/30/2016
138				MFO	5/31/2016	No site visit	Northern Lake Champlain		MFO Permit Compliance - Record Keeping / Reporting / Fee Payment	6 V.S.A. \$4858(e)	NOV		12/9/2016
139	1	1		SFO	11/29/2016	11/30/2016	Northern Lake Champlain		RAP - Field Practices - Manure Management		PA		11/30/2016
140	1	1		SFO		12/21/2016	White		RAP - Production Area - Manure Management		PA		12/21/2016
141	1	1		SFO		11/23/2016	Missisquoi		RAP - Enforcement Action Follow-up		PA		11/23/2016
142	1	1		SFO	12/9/2016	Pending	Southern Lake Champlain		RAP - Production Area - Carcass Disposal / Slaughter Waste		CON		
143	1	1		SFO	12/14/2016	12/14/2016	Northern Lake Champlain		RAP - Field Practices - Manure Management		PA		12/14/2016
144	1	1		SFO		11/14/2016	Lake Memphremagog		RAP - Enforcement Action Follow-up		Referred	AGO	1/18/2017
145	1	1		LFO		7/6/2016	Northern Lake Champlain		LFO Permit Compliance - Enforcement Action Follow-up		PA		7/6/2016
146	1	1		SFO	12/16/2016	12/16/2016	Northern Lake Champlain		RAP - Field Practices - Manure Management - Spreading During Ban		PA		12/16/2016
147	1	1		LFO	12/19/2016	12/20/2016	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices		PA		1/30/2017
148	1	1		SFO	12/28/2016	12/28/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management	4.02(a)	PA		12/31/2016
149	1	1		SFO	12/2/2016	12/19/2016	Winooski		RAP - Production Area - Manure Management		CON		
150	1	1		LFO		6/13/2016	Winooski		LFO Permit Compliance - Enforcement Action Follow-up		PA		1/10/2017
151	1	1		LFO		6/13/2016	Winooski		LFO Permit Compliance - Enforcement Action Follow-up		PA		1/10/2017
152	1	1		MFO		11/18/2016	Otter Creek - Little Otter Creek - Lewis Creek		MFO Permit Compliance - Production Area MFO Permit Compliance - Field Practices		CON		
153	1	1		MFO		7/20/2016	Northern Lake Champlain		MFO Permit Compliance - Field Practices	MFO GP	Pending		

Case #	Total Farms Visited	Farms Visited Basin #1	Farms Visited Basin #2	Farm Size	Date Received	Site Visit	Basin ID #1	Basin ID #2	Nature of Complaint / Investigation	Violation	Action	Referred	Date
154				LFO		No visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/14/2016
155				LFO		No visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/23/2016
156				LFO		No visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/24/2016
157				LFO		No visit	Northern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/24/2016
158				LFO		No visit	Lake Memphremagog		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/20/2016
159				LFO		No Visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/15/2016
160				LFO		No visit	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/15/2016
161				LFO		No visit	Missisquoi		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/30/2016
162				LFO		No visit	Stevens - Wells - Waits - Ompompanoosuc - CT Direct		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/14/2016
163				LFO		No visit	West, Williams, Saxtons - CT Direct		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/19/2016
164				LFO		No visit	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/21/2016
165				LFO		No visit	Lake Memphremagog		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/30/2016
166				LFO		No visit	Winooski		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/21/2016
167				LFO		No visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/16/2016
168				LFO		No visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/7/2016
169				LFO		No visit	Stevens - Wells - Waits - Ompompanoosuc - CT Direct		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/19/2016
170				LFO		No visit	Lake Memphremagog		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/14/2016
171				LFO		No visit	Missisquoi		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/21/2016
172				LFO		No visit	Lake Memphremagog		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/16/2016
173				LFO		No visit	Lake Memphremagog		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/16/2016
174				LFO		No visit	Missisquoi		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/20/2016
175				LFO		No visit	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		8/2/2016
176				LFO		No visit	Missisquoi		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/24/2016
177				LFO		No visit	Missisquoi		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/15/2016
178				LFO		No visit	Passumpsic		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		7/20/2016
179				LFO		No visit	Southern Lake Champlain		LFO Permit Compliance - Field Practices - NMP		Consultation Meeting		6/16/2016
180	6	6		SFO		1/13/2016	White River		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		1/13/2016
181	7	7		SFO		1/14/2016	Deerfield - Connecticut Direct		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		1/14/2016
182	8	8		SFO		1/15/2016	Ottawaquechee - Black - CT Direct		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		1/15/2016
183	10	10		SFO		1/26/2016	West, Williams, Saxtons - CT Direct		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		1/26/2016
184	12	6	6	SFO		1/28/2016	Ottawaquechee - Black - CT Direct	Stevens-Wells Waits-Ompompanoosuc-CT Direct	RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		1/28/2016
185	6	3	3	SFO		2/1/2016	Winooski	White	RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		2/1/2016
186	11	6	5	SFO		2/3/2016	Winooski	White	RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		2/3/2016
187	4	4		SFO		2/9/2016	Ottawaquechee - Black - CT Direct		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		2/9/2016

Case #	Total Farms Visited	Farms Visited Basin #1	Farms Visited Basin #2	Farm Size	Date Received	Site Visit	Basin ID #1	Basin ID #2	Nature of Complaint / Investigation	Violation	Action	Referred	Date
188	5	5		SFO		2/11/2016	Deerfield - Connecticut Direct		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		2/11/2016
189	3	3		SFO		11/1/2016	Batten Kill - Walloomsac - Hoosic		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		11/1/2016
190	2	2		SFO		11/7/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		11/7/2016
191	5	5		SFO		11/14/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		11/14/2016
192	4	4		SFO		11/15/2016	Batten Kill - Walloomsac - Hoosic		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		11/15/2016
193	7	7		SFO		11/18/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		11/18/2016
194	5	5		SFO		11/30/2016	Southern Lake Champlain		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		11/30/2016
195	4	4		SFO		12/1/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		12/1/2016
196	7	7		SFO		12/2/2016	Southern Lake Champlain		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		12/2/2016
197	3	3		SFO		12/5/2016	Southern Lake Champlain		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		12/5/2016
198	4	4		SFO		12/7/2016	Southern Lake Champlain		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		12/7/2016
199	5	5		SFO		12/13/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Field Practices - Manure Management - Pre-spreading Ban Compliance Check (Nov. 1 - Dec. 15)		PA		12/13/2016
200	9	9		SFO		1/5/2016	Stevens - Wells - Waits - Ompompanoosuc - CT Direct		RAP - Field Practices - Manure Management - Spreading Ban Compliance Check		PA		1/5/2016
201	1	1		SFO		11/15/2016	Otter Creek - Little Otter Creek - Lewis Creek		RAP - Enforcement Action Follow-up		CON		
202	1	1		MFO		9/14/2016	Missisquoi		MFO Permit Compliance - Field Practices	MFO GP	Pending		
203	1	1		LFO		11/1/2016	Southern Lake Champlain		LFO Permit Compliance - Field Practices	LFO Rules	Pending		
204	1	1		LFO		9/27/2016	Missisquoi		LFO Permit Compliance - Field Practices LFO Permit Compliance - Production Area	LFO Rules	Pending		
205	1	1		MFO		8/30/2016	Northern Lake Champlain		MFO Permit Compliance - Field Practices MFO Permit Compliance - Enforcement Action Follow-up	MFO GP	Pending		
206	1	1		MFO		11/1/2016	Northern Lake Champlain		MFO Permit Compliance - Field Practices	MFO GP	Pending		
207	1	1		LFO		10/25/2016 10/27/2016	Missisquoi		LFO Permit Compliance - Field Practices	LFO Rules and Permit	Pending		
208	1	1		LFO		11/1/2016	Passumpsic		LFO Permit Compliance - Field Practices	LFO Rules and Permit	Pending		
209	1	1		LFO		10/18/2016	Otter Creek - Little Otter Creek - Lewis Creek		LFO Permit Compliance - Field Practices	LFO Rules and Permit	Pending		
210	1	1		SFO		8/30/2016	Southern Lake Champlain		RAP - Enforcement Action Follow-up		CON		
211	1	1		SFO		8/30/2016	Southern Lake Champlain		RAP - Enforcement Action Follow-up		PA		8/30/2016
212	1	1		SFO		8/30/2016	Southern Lake Champlain		RAP - Enforcement Action Follow-up		PA		8/30/2016

**Vermont Agency of Agriculture, Food and Markets
Agricultural Water Quality Enforcement Program
2016 Annual 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 2016 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 the past year. If you are interested in reviewing the actual data on which these graphics are based, please consult the 2016 Annual 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: <http://agriculture.vermont.gov/water-quality/enforcement-compliance/enforcement-tracking>.

Figure 1. In 2016, the Agency performed a total of 812 inspections/visits/surveys^(*) 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) individual permits, and to offer technical and engineering assistance. Overall regulatory compliance rates are high for farms of all sizes and exceed 78%.

(*) In May 2015, the Agency launched the North Lake Farm Survey (NLFS), a pilot project designed to begin quantifying the impacts of agriculture on Lake Champlain by surveying farm facilities located in the Missisquoi River Basin and St. Albans Bay watershed. In 2015, the Agency surveyed over 250 facilities. The survey effort was completed in 2016 with the assessment of an additional 68 facilities. While conducting these surveys, field staff worked closely with farmers to assess their potential impact on water quality and help them to understand Vermont’s water quality regulations.

2016 Farm Visits By Farm Sizes

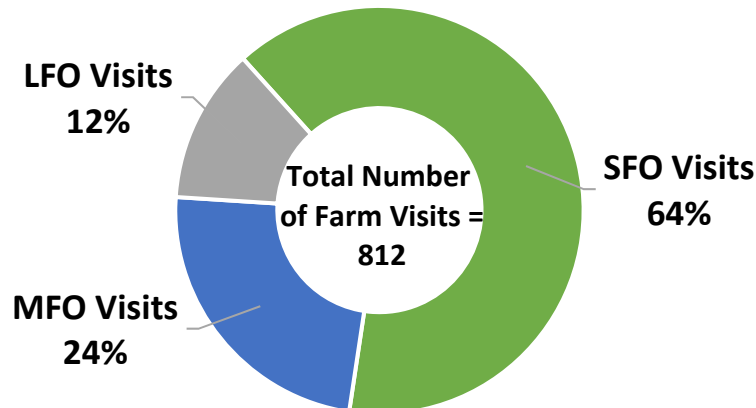


Figure 2. RAP Compliance and Assistance: In 2016, a total of 520 visits were made to small farms (SFO). Of these, 212 inspections/surveys were conducted to determine compliance with the RAPs.

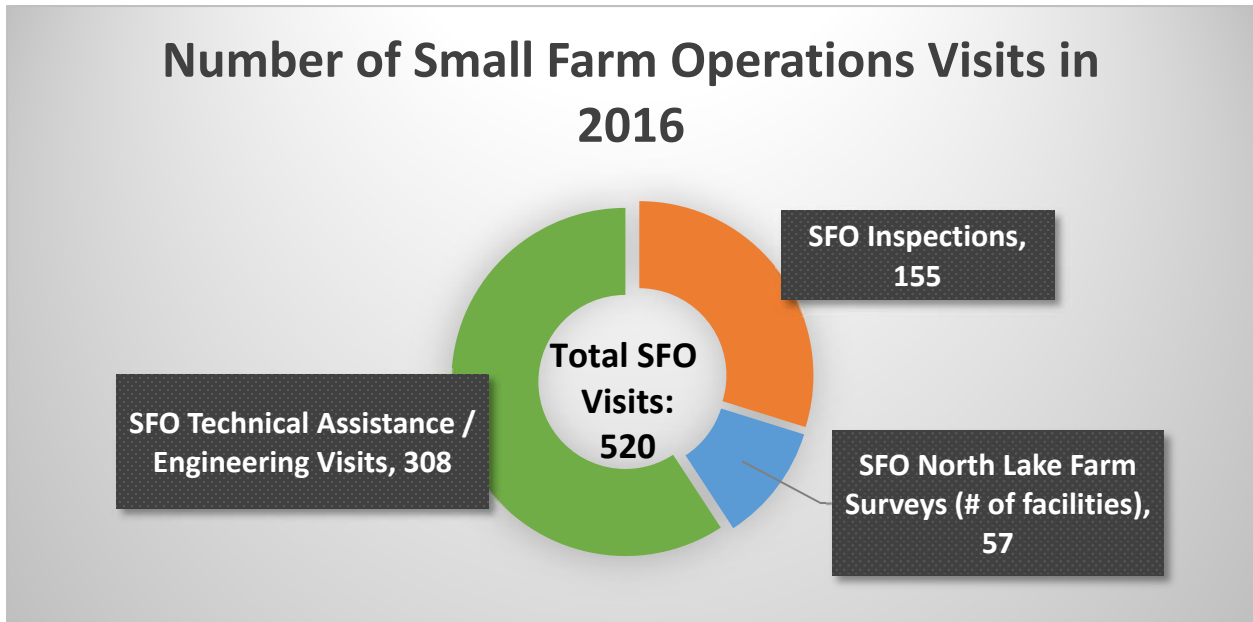


Figure 3. As a result of SFO inspections conducted in 2016, nine small farms received formal enforcement actions (one of these small farms was also referred to the Attorney General's Office (AGO)), one case was referred to the Agency of Natural Resources, and three cases were solved in the field, resulting in a regulatory compliance rate of 92%.

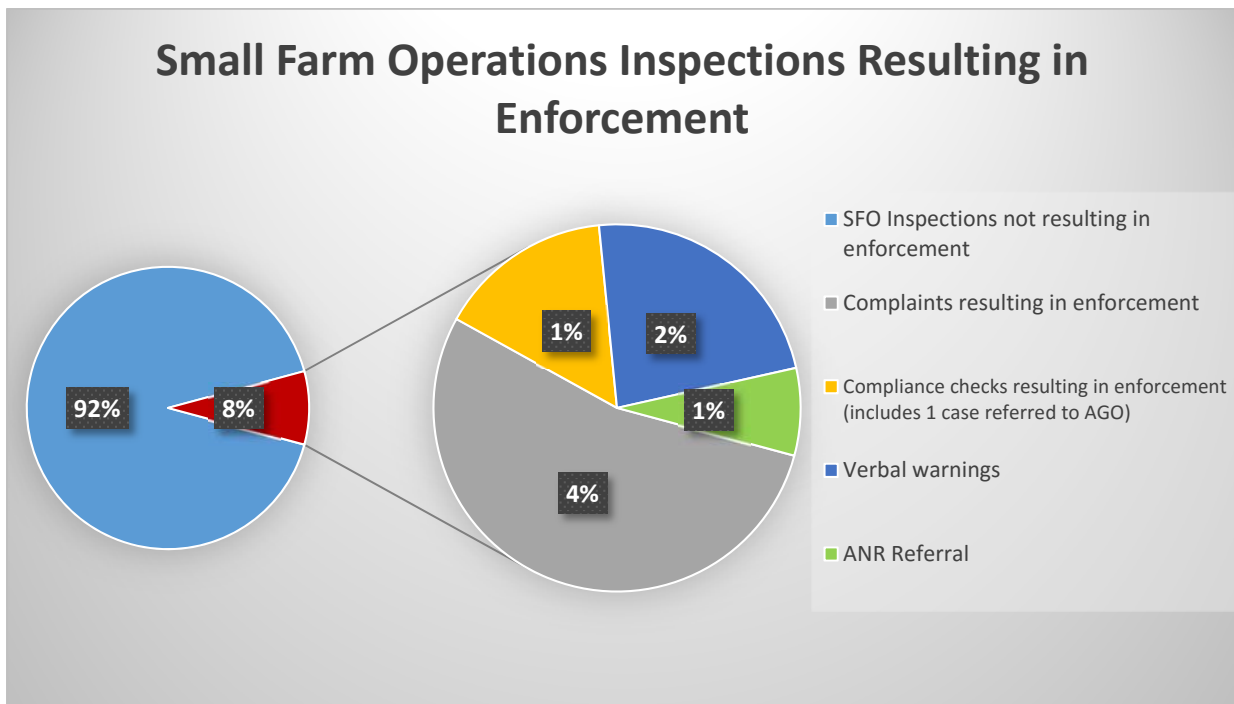


Figure 4. MFO General Permit Compliance: In 2016, a total of 192 visits were made to Medium Farm Operations. Of these, 118 inspections/surveys were conducted on medium farms to evaluate compliance with the State’s MFO general permit conditions.

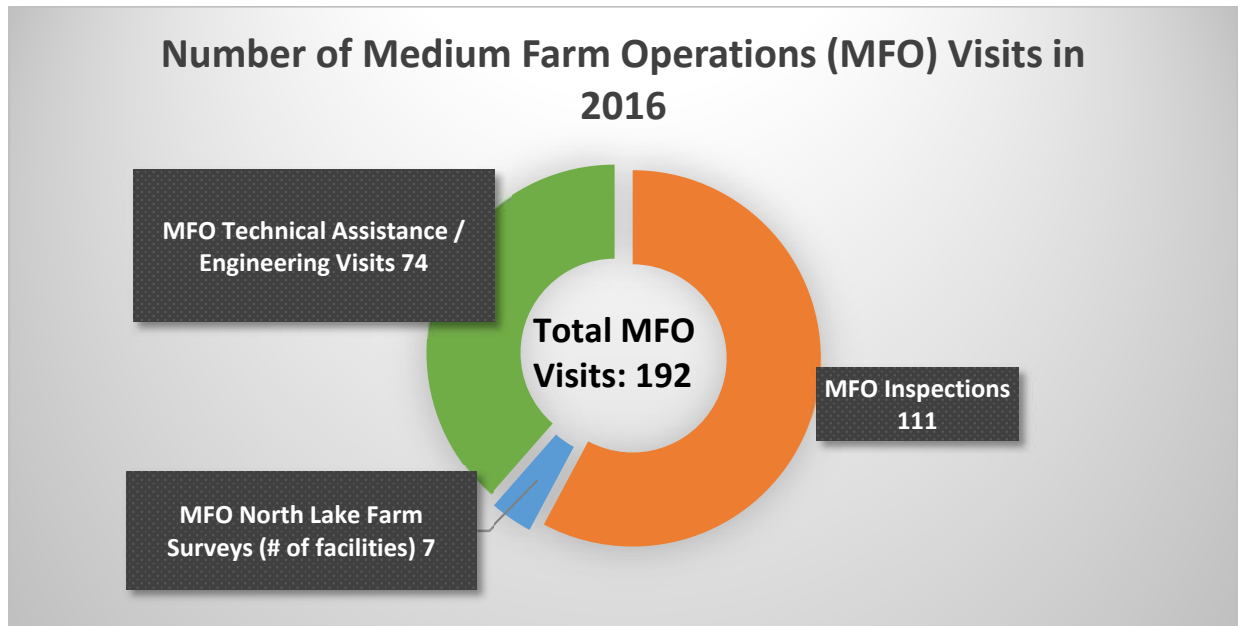


Figure 5. As a result of MFO inspections conducted in 2016, a total of 18 medium farms received formal enforcement actions, five actions are pending, and one case was solved in the field, resulting in a regulatory compliance rate of 78%. It is worth noting that the majority of the enforcement actions issued to MFOs were for failure to pay their MFO Operating Fee. If these actions are removed from the calculations, the MFO compliance rate increases to 93%.

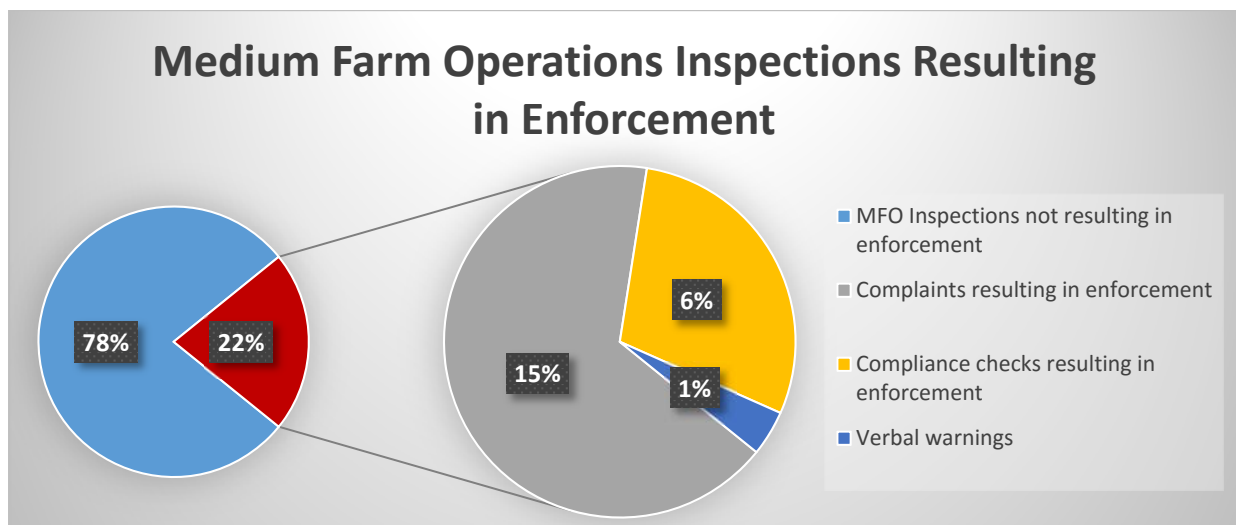


Figure 6. LFO Individual Permit Compliance: In 2016, a total of 100 visits were made to Large Farm Operations. Of these, 49 inspections/surveys were conducted to evaluate a farm’s compliance with their individual LFO permit

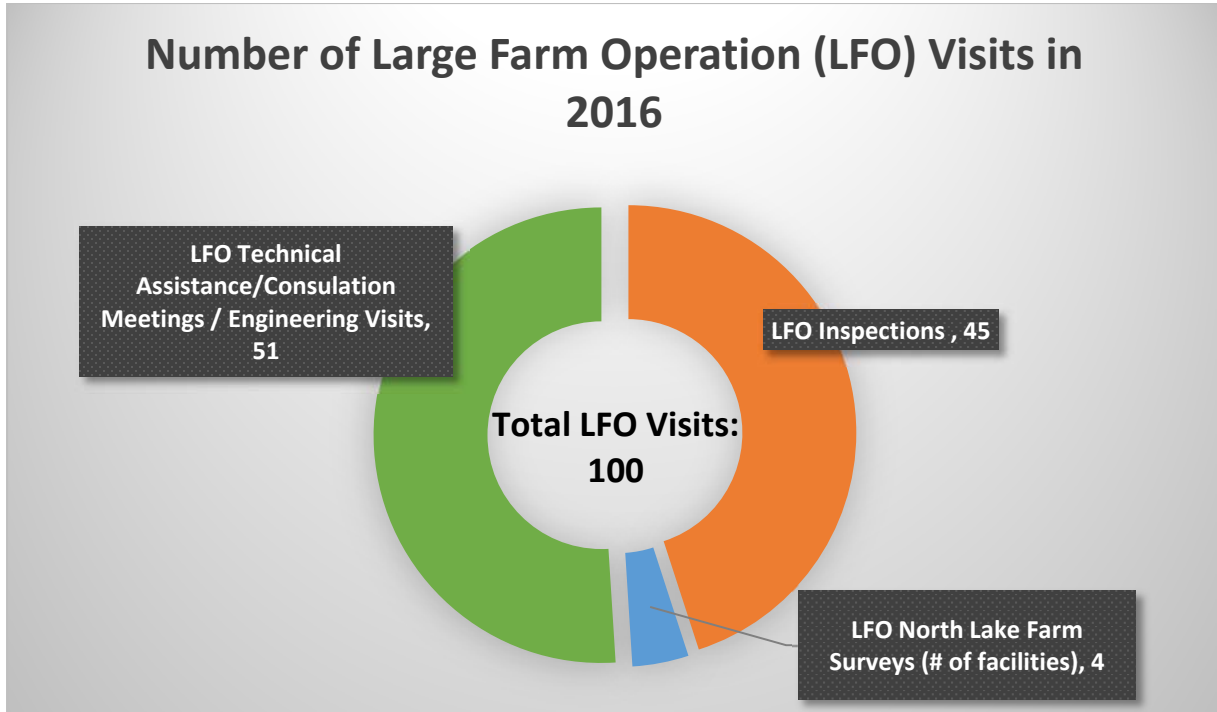


Figure 7. As a result of LFO inspections conducted in 2016, one large farm received formal enforcement actions and five actions are pending, resulting in a regulatory compliance rate of 87%.

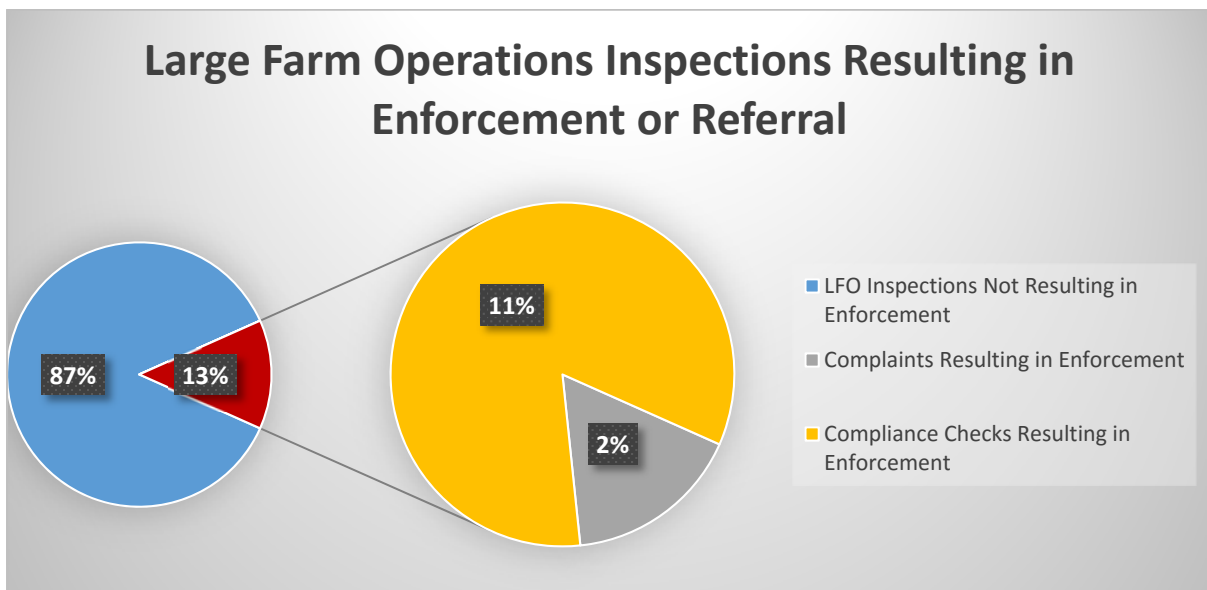


Figure 8. The Agency provides both regulatory services and non-regulatory services in the form of technical assistance. Technical assistance is provided by Agency Engineers, a Conservation Reserve Enhancement Program Coordinator, and also by the regulatory field staff. In 2016, the Agency also conducted 26 consultation meetings, pursuant to 6 V.S.A. § 4991(7), with large farm operations to discuss nutrient planning on their farms. Agency staff will perform multiple technical assistance visits to ensure a farm moves steadily towards achieving compliance.

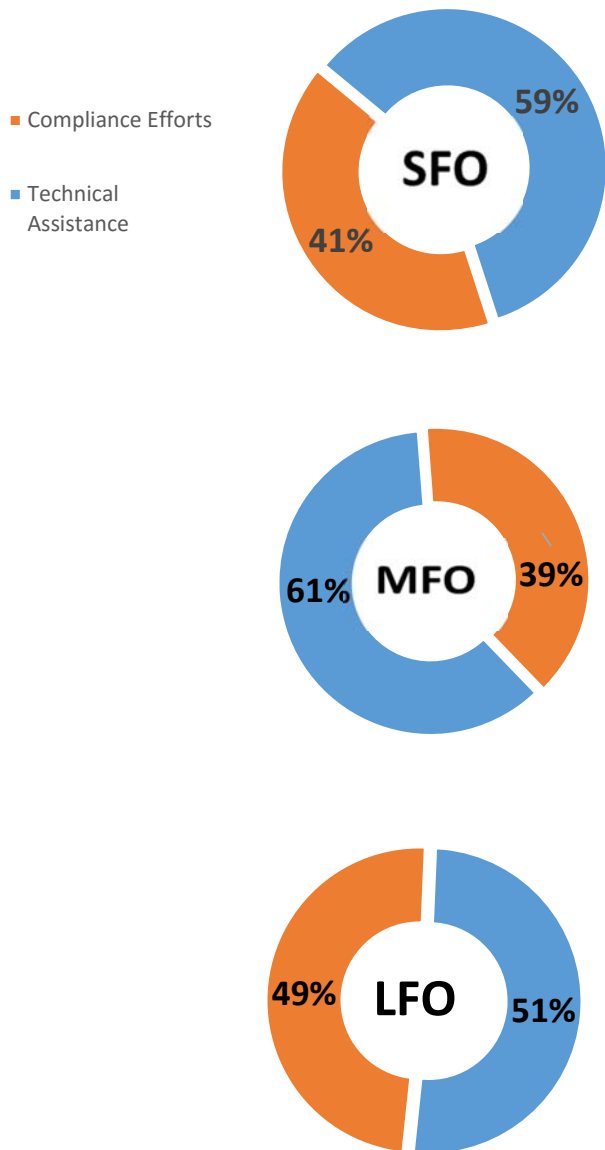
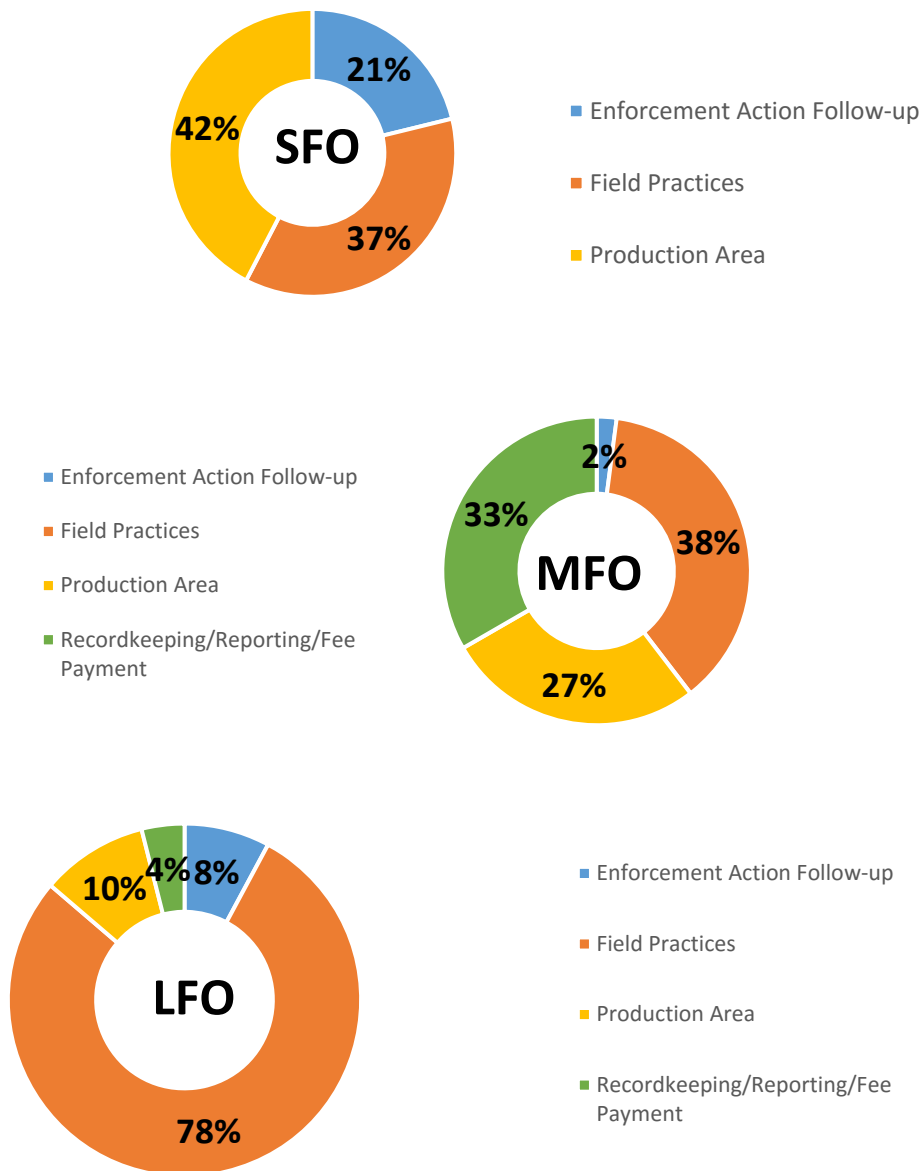


Figure 9. The following charts illustrate the general nature of the complaint-generated inspections and compliance checks conducted on small, medium, and large farms.

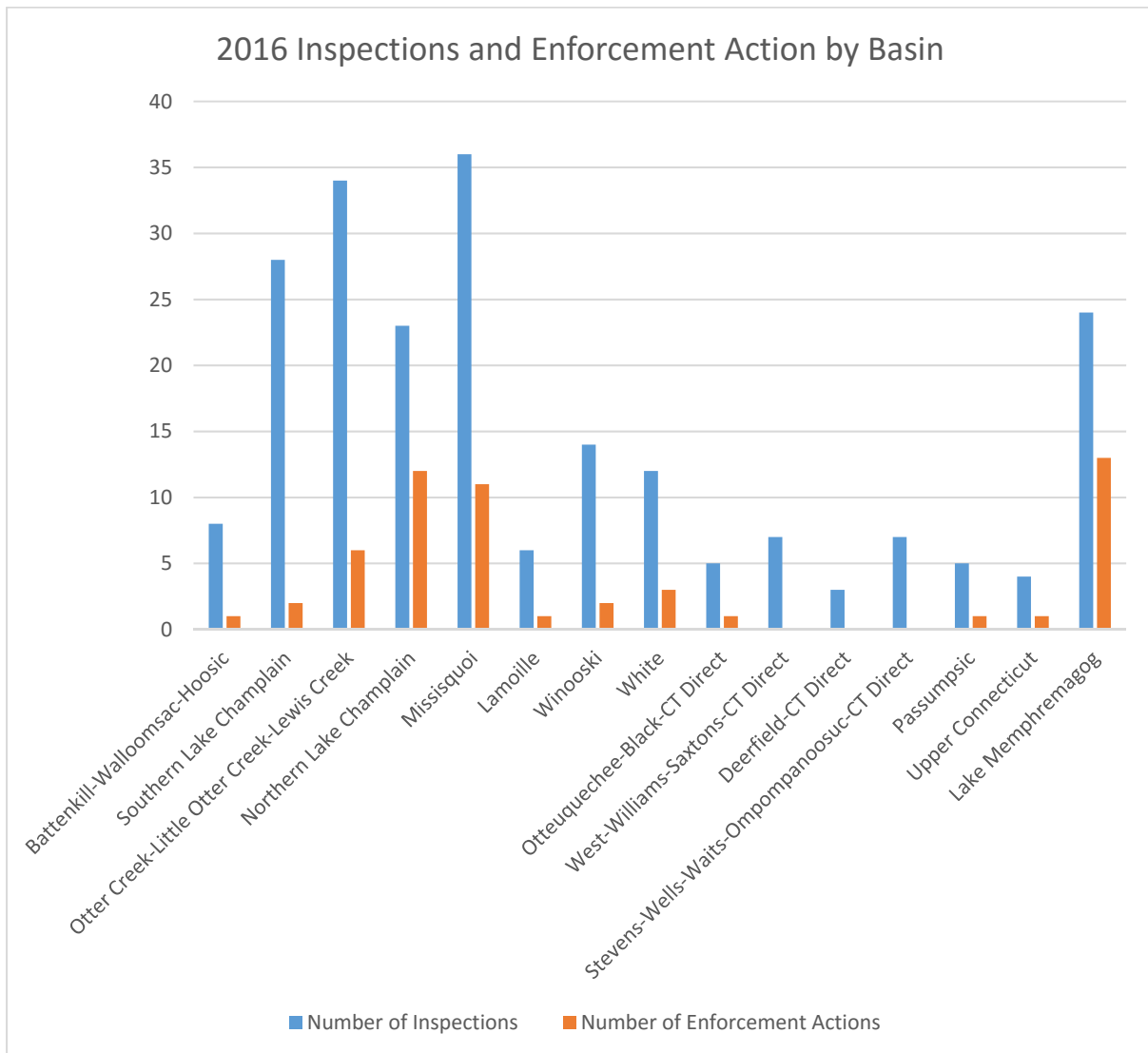


Note: This graphic is a companion piece to Table 5 in the 2015 Annual Report. To assist in the comparison between the three farm sizes, specific RAP requirements have been grouped as follows:

Field Practices includes: cropland runoff – erosion, ditch maintenance/impacts to water, Farmer request for assistance, general compliance check, livestock pasturing near wells, manure management, spreading during the ban, spreading ban compliance checks, manure spreading exemption requests, pre-spreading ban compliance checks, and vegetative buffers.

Production Area includes: carcass disposal/slaughter waste, livestock and non-livestock composting, construction of farm structures, Farmer request for assistance, general compliance check, livestock access to water/streambank impacts, manure management, milkhouse waste, and silage leachate/waste feed.

Figure 10. This graphic is a companion piece to Table 4 in the 2016 Annual Report, and represents all compliance checks and inspections into alleged violations of RAPs, MFO and LFO inspections conducted in response to complaints, and MFO and LFO inspections that led to enforcement actions. This graphic does not track all SFO, MFO and LFO inspections conducted in 2016. Specifically, this graphic does not include SFO compliance inspections conducted in response to requests from land conservancy and lender groups; checks into a farm’s compliance with Farm Agronomic Practices (FAP) Program; or, Technical Assistance/Engineering visits. Please see Figures 4 and 6 of this Appendix for a total number of SFO, MFO and LFO inspections conducted in 2016.



Figures 11a and 11b. These charts illustrate the number of enforcement actions (including pending actions, verbal warnings and ANR referrals) by farm size for violations of the RAPs, MFO general permit, and LFO individual permits and Rules. To aid in the comparison of the nature of the violation by farm size, RAP requirements have been grouped into “production area” and “field practices”.

Figure 11a.

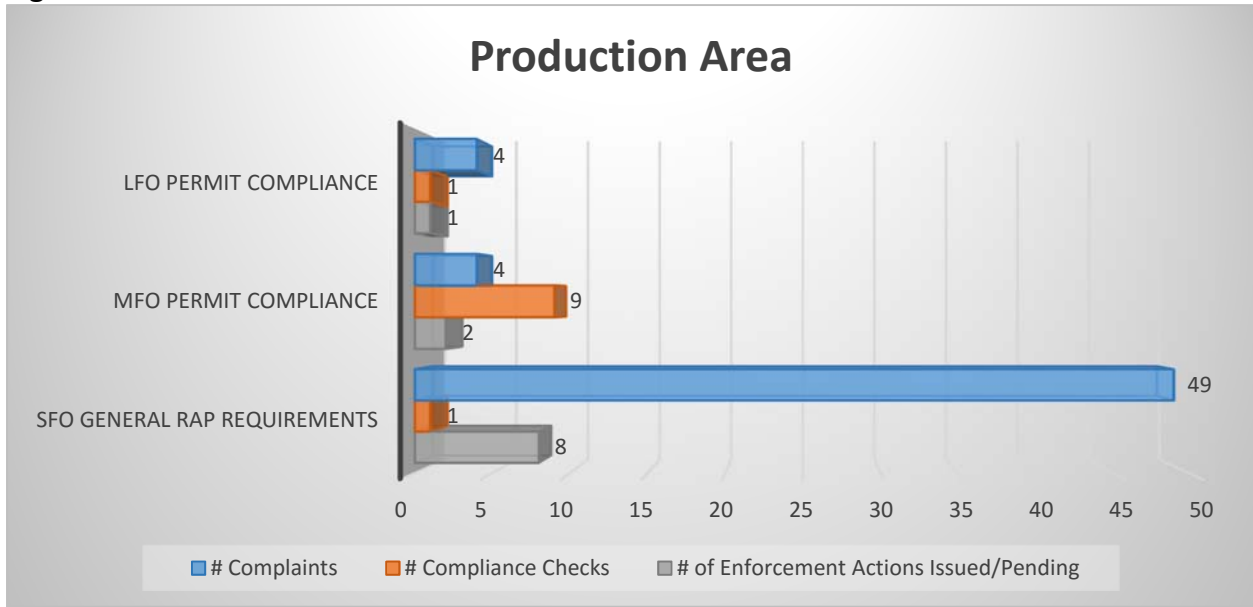


Figure 11b.

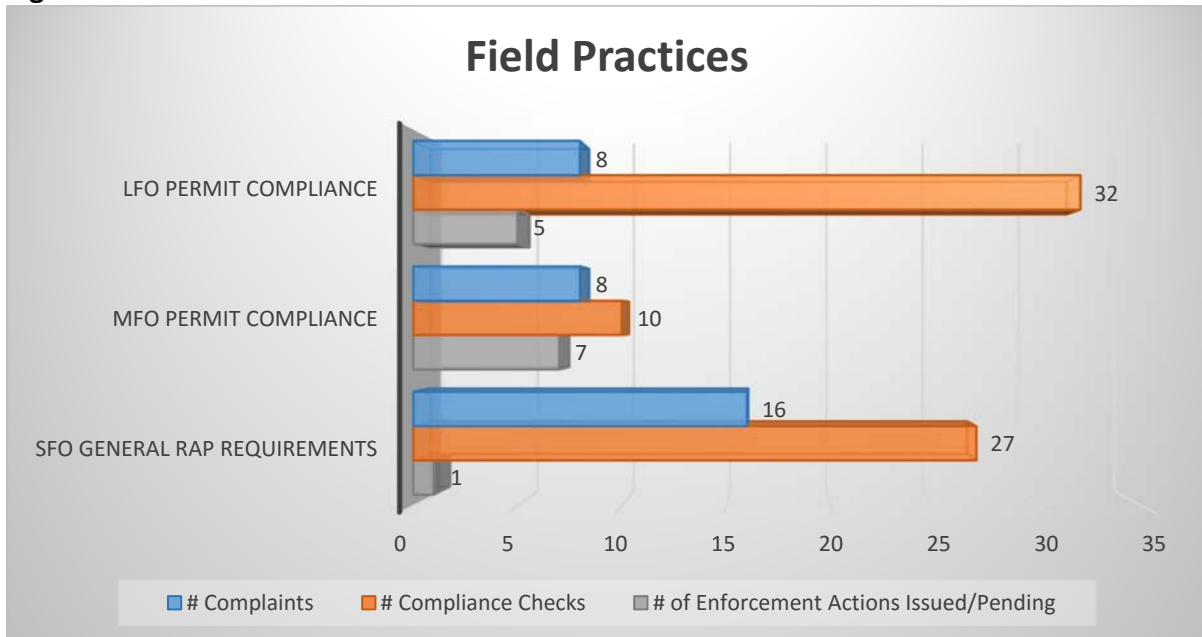


Figure 12. This chart provides a trend analysis of the Agency’s Agricultural Water Quality enforcement efforts since 2010. Inspection/investigation numbers have increased in 2015 and 2016 as the Agency has added additional staff to work in the Water Quality Program. Please note that the number of enforcement actions issued to farms spiked in 2012, 2013, and 2016 as a result of the Agency taking enforcement action against medium farms that either failed to submit their Notice of Intent to Comply (NOIC) with the renewed MFO General Permit, failed to send in their MFO Annual Report, or failed to pay their MFO Annual Operating Fee (a new requirement in 2016). 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 the 2016 Agricultural Water Quality Enforcement Program Report

