

Agency of Agriculture Food and Markets

FY 14 Performance Outcomes and Measures by Appropriation

The Mission of the Agency of Agriculture, Food and Markets is: Facilitate, support and encourage the growth and viability of agriculture while protecting the working landscape, human health, animal health, plant health, consumers and the environment.

Administration Division

Programs in Administration meet the mission: Protecting the Working Landscape and Encourage the Growth and Viability of agriculture.

Performance outcomes and measures:

1. Land Use Planning – Agency will partner with VT Housing and Conservation Board to conserve 3 farms in FY 2014 protecting prime agricultural soils in Vermont and will act as liaison with Vermont Land Trust and farmers to provide education and information prior to conservation.
2. Fair Stipend – Agency will direct funding to Agricultural fairs in Vermont and collect baseline attendance data from each fair. Information will be used to track performance in following years. Goal to increase attendance at fairs around the state.

Number Served

Program	FY 12	FY 13YTD
Land Use Planning	*Facilitated the conservation of nearly 600 acres and agency staff participated in the development of a subordination agreement on Vermont conservation easements for agriculture lenders. *Five Franklin county farms were also appraised for conservation easement values. *Agency staff processed six pre-applications and three grant applications were submitted to the Vermont Housing and Conservation Board.	Agency Staff guided three farms through the Grant process with VHCB. 2 were funded and will be guided through the closing process
Fair Stipend	Fair Attendance 2011 – 623, 410	Fair Attendance 2012 – 639,959

Success Story

Land Use Planning – Agency Land Use planner served on Community Wellness research project. Importance of open agricultural land to community wellness – ability to produce local foods.

Fairs and Field Days – fairs recovered from Irene damage and decreased attendance in 2012.

Potential Improvements

Land Use Planning – Working with VT Land Trust and VT Housing and Conservation Board on amendments to Co-held easements. What process to use and how to involve the public. Working with Natural Resource Board to clarify ACT 250 definition of Primary Agricultural soils.

Fairs and Field Days – Working on performance based contracting for fairs and field days. This is a new process for Fairs and Field Days and training will be needed to assist volunteers in this effort.

Food Safety and Consumer Assurance Division

Programs in Food Safety and Consumer Protection meet the mission: Protecting Human Health, Animal Health and Consumer Protection.

Performance Outcomes and measures:

1. Meat and Poultry Inspection. Maintain state inspection program approved by USDA Food Safety Inspection Service to allow for state inspection and regulation of in-state slaughter facilities. Conduct mandatory inspections on all state slaughter and processing facilities in Vermont. Report number and outcomes of inspections to verify slaughter and processing facilities are following their food safety plans. Measurable – maintain the annual determination by USDA FSIS that Vermont’s State Meat Inspection Program is operating in a manner and with authorities that are “at least equal to” the Federal Inspection Program as provided for by the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Humane Methods of Slaughter Act of 1978. (12 page document of performance requirements and measurable results – will share upon request.)
 - a. Inspect and investigate commercial distribution of meat and poultry products to assure only inspected and passed meat and poultry products are for sale in VT. Random inspection to include all commercial distribution establishments over a 3 year cycle and complaint driven inspection.
 - b. Labeling of product review on a random basis and complaint driven.
 - c. Periodic review of establishments not subject to traditional inspection to insure sanitary conditions for consumer protection.
2. Protect Vermont’s domestic bee population from injurious insect and disease pests through technical assistance, hive inspection and quarantine programs. Inspect all bee hives yearly and interact with hive owners to provide technical assistance. Meet yearly with VT Bee Keepers Association to discuss issues and trends with the association. Goal to maintain healthy domestic bee hive population.
3. Assure an adequate supply of pure fresh milk and maintain uniform dairy standards and establish appropriate dairy laws to protect the public health and welfare. Agency of Agriculture will inspect all dairy farms 2 times per year and all dairy processing facilities a minimum of 4 times per year. Number of dairy farms excluded from the milk market due to failing inspections should average less than 1% per year. Number of dairy processors excluded from marketing their product due to failing inspections should average less than 1% per year.
4. Promote and protect the health and welfare of animals in the State of Vermont and enhance the viability of our animal industries. Agency of Agriculture will license livestock dealers, haulers and transporters, as well as for registering shelters, rescue organizations and fairs.

a. Animal Health Definitions:

- i. Incident- animal welfare call that requires a site visit or communication with a humane agent
- ii. Investigation- any incident involving a licensed livestock dealer or hauler in regards to animal movement or any situation that violates state or federal laws or regulations
- iii. Technical assistance- providing education on calls or inquiries received by the Animal Health section that do not rise to the level of an investigation

b. Animal Health Performance Outcomes (PO) and Measures (M):

c. FDA Tissue Residue Program- Animal Health Section will investigate tissue residue cases provided by the FDA.

- i. M= 10 Investigations/year tracked by Animal Health Section
- ii. PO= 100% completion of FDA requests for investigation

d. Animal Welfare- Animal Health personnel will provide technical assistance with regard to animal welfare calls and complaints. Animal welfare calls that require a site visit and/or communication with a Humane Agent (ACO, Law Enforcement, and Humane Society) will be classified as an “incident” and entered into USAHERDS, which is the animal health section’s web-based software program.

- i. M= Tracking incidences using USA Herds database
- ii. PO= Responding to technical assistance inquiries in ≤ 2 days; receipt of no calls from the private sector expressing dissatisfaction about timeliness of response.

e. Annual Inspections- Animal Health personnel will perform annual inspections of cervid farms, licensed pet merchants and registered animal shelters.

- i. M= Tracking annual inspections via USA Herds
- ii. PO= 100% of inspections of licensed pet merchants, registered shelters and cervid farms completed/year

f. Animal Movement- Compliance with rules and regulations governing intra- and interstate animal movement will be monitored by the Animal Health section. Responsibilities include: performing investigations, providing technical assistance, issuing import permits and reviewing import and export certificates of veterinary inspection (CVI) for compliance and comparison to known animal movements.

- i. M= Tracking technical assistance calls, via data entry into a daily log book, that do not rise to the level of an investigation. Investigations will be entered into and tracked using USAHERDS.
- ii. PO= 100% of noncompliance events brought to the attention of the state veterinarians are investigated in a timely fashion to minimize the negative impact on livestock and public health.

g. Cooperative Agreements (CA) between the Vermont Agency of Agriculture and

USDA/APHIS/VS- The Animal Health section will develop an annual work plan and financial plan in order to receive federal financial assistance for managing four cooperative agreements. Execution of the CAs will coincide with work plan duties described in the agreement.

Implementation of the CA workplans includes field investigations, surveillance, diagnostic sample collection and testing. The cooperative agreements are: Avian Influenza (AI) in Live

Bird Marketing System (LBMS) and Upland Game Birds (UGB), Animal Disease Traceability, and Scrapie Inspection and Surveillance.

- i. M&PO= the CA workload and budget are tracked on a quarterly basis by section personnel and by the business office.
 - h. **Commission Sales** – Animal Health personnel will provide technical assistance to sale barn personnel in regards to humane animal handling, animal identification, import/export compliance and freemartin testing.
 - i. M= 30 sale barn inspections/year
 - ii. PO= 100% completion of sale barn inspections
 - i. **Livestock/Poultry/Cervid Industry Support**- Animal health personnel will provide technical assistance to producers in the state in the areas of housing, nutrition, health, reportable diseases and animal movement. Disease surveillance and monitoring activities will also be performed on poultry, livestock and cervids.
 - i. M= Tracking technical assistance calls via data entry into a log book.
 - ii. M= Poultry AI testing
 - a. Ninety Hours per year
 - b. 5 LBMS inspections per year
 - c. 155 Hours farm inspection per year
 - d. 6 UGB Inspections per year
 - e. 40 Hours Testing and sampling UGB per year
 - iii. M= CWD sample collection and testing of 100% on-farm cervid mortalities
 - iv. M= Bovine TB – Performance of Comparative Cervical Tests on 100% of reactors to bovine Caudal Fold Tests reported by accredited veterinarians.
 - v. M= Trace back and herd sampling on 100% of positive Brucellosis Ring Tests
 - vi. M= Bovine Spongiform Encephalopathy (BSE) sample collection and testing on 100 samples/year
 - vii. M= Monitor and record TB and Brucellosis submission in USA Herds
 - viii. M= Monitor and record Certificates of Veterinary Inspection for imported and exported livestock in USA HERDS
 - j. **Emergency management**- Animal health personnel, in conjunction with other Agency employees, will participate in 100% of the VEM-required drills/exercises in support of SSF11 activities. Animal health personnel will also participate in additional exercises and training activities that support the section’s ability to protect animal health and public health/safety.
5. Protect public health, maintain and improve the integrity of Vermont agricultural products. Performance outcomes and measures:
 - a. Weights and Measures Program – Provide legally mandated testing and inspection programs involving small, medium and heavy capacity scales, oil and l.p. gas meters on delivery vehicles, motor fuel dispensers and other weighing and measuring devices. Yearly testing of these devices for accuracy will maintain a violation rate under 10 % per year.
 - b. Point of Sale Scanner Audits – Provide scanner audits at a variety of businesses annually to assure pricing accuracy for consumers. Retail businesses such as grocery stores that sell a large number of items at one transaction will be monitored closely. A combination of technical

assistance and audits will result in the percentage of violations found to be kept under 10% annually.

- c. Consumer Complaints – Follow up on all credible consumer complaints within 72 hours. Document outcomes.
- d. Retail Agricultural Products – Provide monitoring of product quality, method of sale and net weight of products. Violations of these standards will be less than 5% per year.
- e. Education – Provide training and technical assistance to orchards, egg producers and maple producers on producing and packing a quality product. This effort will work with our inspection programs to maintain the less than 5% violation goals.
- f. USDA Programs – Provide inspection services for the Shell Egg, Frozen Poultry, Country of Origin Labeling and Good Agricultural Practices Programs. The goal of 100% inspection coverage will be attained with the addition of more staff trained in these programs.

Number Served

Program	FY 12	FY 13YTD
Meat and Poultry Inspection	2,900 inspection of slaughter facilities, custom meat cutting and retail establishments – follow-up on non compliance	2,044 inspection of slaughter facilities, customer meat cutting and retail establishments – follow-up on non compliance
Consumer Protection – weights and measures	10,000 inspections on scales, meters, gas pumps, labeling and agricultural product inspections. Licenses issued for various retail and weights & measures devices and services totaled 4,559.	14,900 inspections on scales, meters, gas pumps, labeling and agricultural product inspections. Licenses issued for various retail and weights & measures devices and services totaled 5,469.
Consumer Protection – Good Ag Practices	30 audits, with 15 initial audits and 15 unannounced audits.	41 audits, with 20 initial audits and 21 unannounced audits.
Dairy – Farms	2627 inspections on Vermont’s 1025 dairy farms in 2011 – calendar year	2,578 inspections on Vermont’s 1,014 dairy farms in 2012 – calendar year
Dairy -Processing Facilities	306 inspections on Vermont’s 78 dairy processing plants and conducted 300 milk pasteurization system inspections in these dairy plants.	272 inspections on Vermont’s 82 processing plants and conducted 318 pasteurizer inspections in these dairy plants.
Animal Health	<ul style="list-style-type: none"> * 87 animal welfare investigations; * issued 27 licenses for pet merchants, *98 licenses for livestock dealers, transporters and packers; *registered 16 fairs, *33 shelters and euthanasia facilities; * 100 tests for avian influenza, *900 tests for pullorum typhoid; *monitored 1582 Brucellosis and 1758 TB submissions; *recorded 3,581 Brucellosis vaccinations. * Attended 15 horse pulls and monitored 97 drug test submissions. *Performed 10 antibiotic tissue residue inspections. *Collected 123 CWD samples. *Attended 6 Poultry Swaps. * Attended 104 Livestock Sales. *Disbursed \$3700.00 (Walker Fund Grant) to large animal veterinarians who participate in the Vermont Johnes Control Program. *Conducted 2 Animal Cruelty Investigation Training Sessions for law enforcement. 	<ul style="list-style-type: none"> *26 animal welfare investigations; * issued 35 licenses for pet merchants, * 89 licenses for livestock dealers, transporters and packers; *registered 14 fairs, *11 shelters and euthanasia facilities * 283 tests for avian influenza, *706 tests for pullorum typhoid *monitored 1,422 Brucellosis and 1,454 TB submissions; * recorded 317 Brucellosis vaccinations. * Attended 17 horse pulls and monitored 61 drug test submissions. *Performed 14 antibiotic tissue residue *Collected 18 CWD samples. *Attended 5 Poultry Swaps. * Attended 45 Livestock Sales *Disbursed \$10,000 (Walker Fund Grant) to large animal veterinarians who participate in the Vermont Johnes Control Program. *Conducted 3 Animal Cruelty Investigation Training Sessions for law enforcement.

	*Deployed Animal Health Field Inspectors in response to Tropical Storm Irene. Visited 45 farms in affected areas.	
--	---	--

Success Story

Meat and Poultry Inspection - Verification activities for humane handling are performed by the in-plant inspection personnel on every day of slaughter operation, as well as at any time live animals are present in the establishment. Humane handling verification activities are recorded using the Humane Handling Activities Tracking system (HATS). The categories that in-plant inspection personnel verify related to humane handling include: protection of animals from inclement weather, handling during truck unloading, water and feed availability, handling animals during ante-mortem inspection, handling of disabled and suspect animals, humane use of prods or other objects to move animals, monitoring for slips and falls of animals during movement, stunning effectiveness to produce unconsciousness in the animal before it is shackled, hoisted, thrown, cast or cut, and verification that the establishment ensures that animals do not regain consciousness throughout shackling, sticking and bleeding. From July 1, 2011 to June 30, 2012, 138 Humane Handling verification activity tasks were performed at the state inspected livestock slaughter establishment.

Consumer Protection – weights and measures - The weights and measures lab was destroyed by Tropical Storm Irene, and it has taken a huge effort from the Consumer Protection Weights and Measures Specialist and staff to recreate the lab in a new location and restore and improve recognized testing abilities to serve Vermont and other states.

Dairy - Over the year, the Section has implemented a new compliance program where farms that have repeat problems are given the opportunity to resolve those issues through a less formal and more efficient process. During this process, the producer works collaboratively with the assigned farm inspector and the Section’s lead farm inspector to develop a plan of action that is likely to result in compliance with the regulation. This revised compliance protocol not only meets the Section’s public health protection goals, but it also reduces the stress and resultant backlog on the Agency’s regulatory enforcement system, legal counsel, for which is currently severely understaffed.

Animal Health - The Animal Health Section continued to participate in the New England States Animal Agriculture Security Alliance (NESAASA) in 2012 and embarked on surveying all commercial Vermont dairy farms to evaluate their ability to ship milk safely during a Foot and Mouth Disease outbreak. While the information obtained during this survey outreach project will help to ensure the business continuity of Vermont’s dairy industry during a highly contagious disease outbreak, it has also allowed the Animal Health Section to obtain emergency contact and other statistical information that can be used to benefit dairy farmers during all emergency events.

Potential Improvements

Meat and Poultry Inspection - The program handled several hundred requests for information from producers & consumers concerning facilities, product safety & handling & also offered labeling assistance with pre-approvals. Challenge on staff to provide technical assistance with all other duties.

Consumer Protection – Weights and Measures -Lab tests & approves hydrometers used in the maple industry. In 2012, staff tested nearly 7,000 sap & syrup hydrometers that were distributed throughout the maple producing regions of the U.S. and Canada. Only state lab that offers this service.

Dairy - 82 processing facilities and 11 new facilities in FY13. Legislature approved additional Inspector – better service to processors with 3 inspectors. Expect more processors in 2013!

Animal Health - Animal Health worked with DMV to educate on requirements for moving livestock in interstate commerce. Collaboration is mutually beneficial & protects the health of VT livestock. Enables DMV officials to properly educate livestock haulers about health-related requirements during truck stops and to take enforcement action when needed.

Agricultural Development Division

Programs in Agricultural Development meet the mission: Protecting the Working Landscape and Encourage the Growth and Viability of agriculture.

Performance Outcomes and measures:

1. Analyze key agricultural sectors to determine appropriate investment and focus of Vermont's development resources. Sectors include: organic dairy, artisanal cheese, produce and livestock for meat. Agency of Ag staff will interact closely with Northeast Organic Farmers Association, Vermont Cheese Council, Food Hubs and Beef Council to review market trends and potential marketing programs to increase sales. Measurable results will be increase in the number of organic dairies by 1% per year, increase in artisanal cheese producers by 5% per year and one joint promotional activity with the Beef Council each year.
2. VT Farm Safety Program: This program provides Vermont dairy producers with tools and support to implement and maintain a farm safety program – including train-the trainer education and an on-farm audit. Each participant will have support material for an on-farm safety program. Each participant will develop a farm safety program and have monthly employee safety meetings. Outcome: 7 farms in the program this year – 5 are LFO's - improved farm safety, fewer farm accidents and lower worker compensation insurance costs for producers. Submit a qualified producer application for the annual governor safety award and earn a minimum of one of the awards to date.
3. Identify and assist in developing new markets, local and out of state for Vermont AG products and develop individual growth strategies for each sector of the agricultural industry. Agency of Ag will work collaboratively with agricultural groups and Food Export USA to assist in their growth and interaction with members to increase market opportunities. This growth in state will be measured by the number of farmers' markets which will increase by 1% per year and the amount of sales at the Vermont Building at the Eastern States Exhibition in W. Springfield, VT which will increase by 2.5% per year.
4. Open new markets for Vermont Farm and Food Businesses through the Farm to School program, Farm to Institution and Food Export USA programs, industry and infrastructure development.
 - a. 5 new schools will be added to the Farm to School program and network
 - b. Work with BGS to facilitate delivery of CSA to 3 state facilities
 - c. Facilitate export of product from 2 VT agriculture and food related businesses
 - d. Partner with Industry to determine research needs – University of Vermont for Dairy Products

- e. Apply for USDA grants to investigate new markets
 - f. Determine funding needs to grow segments of the industry
 - g. Increase processing capacity at meat slaughter and processing facilities by 5%
 - h. Increase VT milk production 2% to meet dairy processing needs
 - i. Web marketing platforms -Work with Food Hubs to determine connections between individual marketing platforms to facilitate distribution in Vermont
5. Increase access to local foods to support healthy communities (Safe Communities/Strong Schools)
- a. 5 articles on seasonal produce availability, recipes and storage will be placed in Agriview
 - b. Utilize funding from USDA Specialty Crop Block grants to continue Electronic Benefit Transfer card reader program for farmers markets – expand to 3 more markets in 2012
 - c. Partner with Vermont Food Education EveryDay (FEED) to expand educational program to 3 schools in 2012
6. Improve the economy of the state and competitive position of the dairy industry by increasing the consumption of dairy products. Continue the Keep Local Farms program that has the following goals:
- a. Increase the sale of dairy products
 - b. Tell the story of the activities on dairy farms and the importance in the rural economy
 - c. Provide grants to dairy farmers in Vermont and New England
7. Promote the development of innovative energy and nutrient management business through leadership and recruitment. Provide technical assistance and grant support for ag businesses to explore renewable energy projects. Grow the number of renewable energy projects on farms by 1% per year.

Number Served

Program	FY 12	FY 13 YTD
Agri-business development	Skilled Meat Cutter Training Program: The 2011 Jobs Bill also provided \$25,000 for the development of a Skilled Meat Cutter Training Program. Hannaford Career Center was selected to take the lead on the development of this important statewide program, in partnership with Vermont Technical College. An advisory board (composed of representatives from processing facilities, regional economic development organizations, the Department of Labor and the Agency of Agriculture), met monthly to consult on curriculum development. The program was launched in September 2012 (see 6-month update).	9 students enrolled in the meat cutting program at Hannaford Career Center. 3 have found jobs (Shaw's, Price Chopper, Vermont Livestock) and there are an additional 2-3 prospects (Vermont Salumi). Students will continue to work through the program as they start their new jobs.
Agri-Business Development	2011 Milk production for VT – 2.5412 billion lbs.	2012 milk production for VT – 2.569 billion lbs
Education/Workforce Development	Farm Safety Program to reduce workers compensation costs – enrollment 5 farms in 2012 Roll Over Protective Structures ROPS Program partnership with UVM Extension – cost share over 300 calls – available funds limit number of installations	Program launch ~1.5 years ago: 300 + calls to the hotline, 100 ROPS installed and 214K funds raised for the 70% rebate cost share for each ROPS installed
Ag Marketing and Education	Vermont products are known and respected nationally and internationally for their quality and the Vermont brand sells products all over the world. To capitalize on that brand, we worked with export organizations such as FoodExport, USA and U.S. Livestock Genetics Export Program to support Vermont producers looking to expand markets for their products. These organizations provide financial and technical assistance through state departments of agriculture to optimize	66 Vermont companies have participated in Food Export Northeast related activities, specifically: *15 participated in Webinars *4 attended the Summer Fancy Food Buyers Mission *2 attended the Food Export Marketing Forum *11 used the Food Export Helpline

	export opportunities that small producers may not be able to access on their own. – Re-launched in 2011	<p>*20 attended the Preparing for Export Success for Food and Farm Businesses Seminar</p> <p>*2 participated in Market Builders</p> <p>*2 attended the Winter Fancy Food Show Buyers Mission</p> <p>*5 attended the North East Buyers Mission</p> <p>*2 attended the Sweets and Snacks Buyers Mission</p> <p>*2 participated in the Food Show PLUS! At SIAL Canada</p> <p>*1 attended the Food Ingredients Buyers Mission</p>
Food Access, direct to consumer & Farm to Institution – CSA for State Employees	Did not Exist in 2011	<p>State Employee CSA - Pilot Program for 3 sites in 2012.</p> <p>28 State employees participated & 4 CSA farms delivered fresh produce, eggs, meat, breads, & other value-added products from Vermont producers to employees' workplaces. 75% of 2012 participating employees had never previously joined a CSA & 90% plan to participate again in 2013.</p>
Food Access, direct to consumer & Farm to Institution – Farm to School	In 2011 the Farm to School Grant Program funded 4 schools with implementation grants (\$15,000 each) and 4 schools with planning grants (\$1,500 each). The grant funds also supported 4 regional trainings throughout the state conducted by Vermont FEED and other organizational partners.	The grant program funded 6 schools with implementation grants (\$20,000 each), 6 schools with planning grants (\$5,000 each), and 4 regional groups with network development grants (\$10,000 each).
Food Access, direct to consumer & Farm to Institution – Farm to School		<p>Applied for and received USDA grant.</p> <p>*Strengthen Regional support structures for farmers and food service to provide locally grown food in schools.</p> <p>*Create a community of practice among regional food hubs focused on school food procurement</p> <p>*Demonstrate models of how food hubs support FTS programs and increase purchasing of local foods by schools</p> <p>*Partners include ACORN, Green Mountain Farm to School, Mad River Food Hub, RAFFL, UVM Extension and VT FEED Was not approved by JFO in time for budget submission.</p>

Success Story

Food Access – Farm to School - An intensive summer institute for 10 teams from around the state in partnership with the VT Food Education Every Day partnership, VT Dept. of Education and 2012 National Farm to Cafeteria Conference held in Burlington, Vermont. 800 participants attended this annual conference including 200 Vermonters.

Agri-Business Development - Educational offerings included producer-processor workshops

- 1) value-added pork at VT Smoke & Cure

2) custom slaughter & regulatory literacy at Full Circle Farm. Developed a brochure with easy-to-read flow chart of meat regulations to better help livestock producers navigate the complex regulatory structure around meat processing & marketing. Aims to reduce regulatory confusion that can become a barrier to market development.

Land Use/Access Working Lands Initiative - Act 142, created the Working Lands Enterprise Fund (WLEF) & the Working Lands Enterprise Board (WLEB). Three Areas for investment; 1. Enterprise Investments; 2. Service Provider Grants and 3. Capital & Infrastructure Investments. Enterprise Grants: 187 applications; Service Provider Grants – Letters of Intent: \$3,240,229 in total requests from 84 applications with 27 from forestry, 57 from agriculture. Capital & Infrastructure Investments – Letters of Intent: \$6,562,077 in total requests, 111 applications with 22 from forestry, 89 from agriculture.

Potential Improvements

Farm to School Grant Program gained additional funding annually until 2016 due to the CDC Community Transformation Grant secured by the Department of Health. Funding from this grant will focus on expanding regional support for Farm to School programming, technical assistance and evaluation.

Working Lands Initiative - Unable to invite all Letter of Intent applicants to submit a full proposal & adjustments have been made to the LOI response timeline. All LOI applicants will be provided feedback from the Board. Concern for many unhappy constituents.

The Labs, Agricultural Resource Management & Environmental Stewardship Division

Programs in Agricultural Resource Management meet the mission: Protecting the Working Landscape, Plant Health and the environment.

Performance Measures

1. Implementing the agricultural provisions of the Ecosystem Restoration Initiative to improve statewide water quality to meet the EPA approved clean-up plan to limit the Phosphorus Total Maximum Daily Load in Vermont's waterways:
 - a. Offering financial incentives to farmers to protect waterways by establishing and maintaining vegetated buffers along Vermont's waterways. Agency will increase the participation in the Conservation Reserve Incentive Program to 300 acres by end of FY 2012.
 - b. Continue to offer 90% cost share for BMP projects in order to expedite completed water quality projects.
2. Protecting groundwater and surface water from agricultural non-point source pollution by enforcing accepted agricultural practices (AAP), medium and large farm rules and pesticide regulations, providing technical and financial assistance to the farm community, participating in the watershed planning process on behalf of farmers and administering the permit process for large farms.
 - a. Implement a database which allows universal tracking for all financial and technical assistance programs provided to individual farms.
 - b. Continue to increase the number of farm investigations for AAP complaints by performing at least 120 investigations per year.

- c. Maintain the Large Farm Operation Permits and keep violations of these permits under 5% per year.
 - d. Continue to implement conservation practices on medium farms to ensure compliance. Our goal is to have provided adequate technical assistance to all medium farms that have an identified permit deficiency by the end of 2012 in an effort to have less than a 10% non-compliance rate.
3. Assure Vermont crops are free of injurious pests by providing technical assistance, quarantine activities, field and shipping point inspections and crop and pest monitoring activities.
- a. Increase the number of nursery inspections as part of our ongoing effort to maximize plant quality and limit the impact of injurious plant pests by 5% in 2011. Through inspections the Agency expects to provide technical assistance with pest issues and to ensure compliance with state, federal and international quarantine rules to 5% more nurseries.
 - b. Utilize quarantine practices only when necessary to protect the health and viability of VT crops, environment, and horticultural economy.
 - c. Work with the Department of Forest, Parks & Recreation to monitor the movement of firewood into Vermont to reduce the risk of injurious pest introductions without negatively impacting the firewood industry. The Agency is currently implementing a certification program to allow movement of kiln-dried firewood out of state. This will maintain and expand markets in states where firewood is already regulated.
3. Protecting public health and the environment from adverse affects of pesticide products through training, licensing, monitoring, disposal grants, enforcement, education and product registration for pesticide applicators, dealers, manufacturers and general public.
- a. Oversee at least 4 training activities in Vermont in FY 2012.
 - b. Increase the number of disposal grants by 2% per year.
 - c. Keep the percent of regulated entities receiving enforcement actions in the current fiscal year that **also** received one or more enforcement actions during the current fiscal year or the previous two fiscal years under 20%.
 - d. Verify 100% compliance on enforcement actions taken as a result of grantee compliance monitoring.
 - e. Improve the efficiency of conducting inspections that identify violations, report as cost/enforcement action.
 - f. Reducing the amount of acreage where pesticides are used through education and outreach and thorough permit review to ensure compliance.
 - g. Reducing the risks associated with the use of pesticides by providing product selection technical assistance for permittees. Work with DEC and DOH to ensure the product selection ensures maximum environmental and human health protection.
 - h. Increasing the acreage managed by integrated pest management techniques by providing technical assistance and permit review.
4. Continue to expand the seed potato quality certification program ensuring farmers and consumers are selling/receiving seeds that meet quality requirements.
- a. Service all new program participants by providing on-farm inspections to certify seed quality. The Agency has seen an 8 fold increase in potato acres seeking seed certification since 2007.
5. Continue to limit the risk of invasive weed and exotic plant species entering and spreading in Vermont by upholding the Amended Noxious Weed rule and invasive plant committee.

- a. In 2012, the Agency will continue to perform outreach and enforcement activities to limit the sale and use of listed weed species, and provide viable, non-invasive alternatives to the nursery and landscaping industries.
 - b. The Agency will also work to increase public understanding of the threats posed to our economy and environment by invasive plant species, through increased public information and outreach activities, and will promote available opportunities to individuals and businesses in managing these species.
6. Providing Mosquito districts or municipalities with financial and technical assistance, such as larval surveys and assistance for control programs in order to reduce mosquito populations below nuisance population levels or levels capable of vectoring disease.
- a. Conduct a minimum of two surveys per district for larval mosquitoes.
 - b. Ensure the mosquito district aerial application permits are developed and implemented to protect human health and the environment.
 - c. Continue to monitor mosquitoes as arbor viral vectors.
7. Mosquito Control – allocate funds for insecticide and larvicide to control mosquito populations in critical areas of Vermont. Traps are placed each summer to determine mosquito populations with regard to EEE/West Nile Virus and numbers of mosquitoes will be gathered from these traps. Reduction in mosquitoes will be tracked through traps – goal to reduce mosquito population in critical areas in Vermont.

Number Served

Program	FY 12	FY13
Water Quality – CREP	Total enrollment - 2,313 acres new 318 acres	Total Enrollment 2,585 acres New 94.5 acres – to date
Water Quality – Inspections and Technical Assistance for SFO, MFO and LFO	SFO – 139 inspections MFO – 63 inspections LFO – 78 inspections Technical Assistance Visits SFO – 273 MFO – 177 LFO - 31	SFO – 128 inspections MFO – 106 inspections LFO – 44 inspections Technical Assistance Visits SFO – 194 MFO – 134 LFO - 25
Water Quality – Nutrient Management Plan	50 Farms 26,800 acres \$107,200	20 Farms, 16,853 acres \$68,019
Water Quality – Farm Agronomic Practices	FAP practices 7,300 acres \$207,661	FAP practices 22,985 acres \$468,922
Plant Industry – Nursery Inspections	470 Nurseries Inspected	477 Nurseries Inspected
Plant Industry – Injurious Pests	Placed 6 firewood heat treatment facilities under compliance agreement to export Vermont firewood to New York, New Hampshire, and Maine, labeled as pest-free firewood	Hemlock Woolly Adelgid Quarantine – 1200 (approximately) trees inspected and released for sale, no illegal or condemned stock in 2012
Plant Industry – Seed Potato Certification	Inspected and certified 40 acres of potatoes for Vermont Certification as Certified Seed Potatoes	Inspected and certified 35 acres of potatoes for Vermont Certification as Certified Seed Potatoes
Pesticide – Training & Certification	certified 1,503 pesticide applicators	Certified 1,604 pesticide applicators
Pesticide – Mosquitoes	700 mosquito pools sampled Identified over 100,000 mosquitoes as to species	251 mosquito pool samples were tested, representing 4676 mosquitoes and 13 species. DRY YEAR fewer mosquito sampling pools available

Success Story

FAP Program: The FAP program provides financial assistance for the implementation of soil-based practices that improve soil quality, increase crop production, and reduce erosion. Eligible practices include: cover cropping, strip cropping, conservation crop rotation, cross-slope tillage, conservation tillage, and alternative manure incorporation as well as education and outreach grants. This program also helps partner with USDA to support higher cost-share rates on identified critical source areas through a multi-partner effort.

FAP Program Eligible Practices	Requested Totals		Accepted Totals		Implemented Totals	
	Acres	Funding	Acres	Funding	Acres	Funding
Cover Cropping	11,560	\$ 346,800.00	9,028	\$ 270,840.01	7,964	\$ 238,910.00
Conservation Crop Rotation	4,211	\$ 105,262.50	3,487	\$ 87,173.07	3,394	\$ 84,857.72
Cross-Slope Tillage	202	\$ 2,020.00	202	\$ 2,020.00	202	\$ 2,020.00
Nurse Crop Cover Cropping	3,091	\$ 30,905.00	2,446	\$ 24,461.43	2,403	\$ 24,031.28

CREP program:

- To date more than 2,600 acres have been enrolled in the program.
- Most of the acreage is enrolled as riparian forested buffers (2,374.4 acres) and 82% of the contracts are in the Lake Champlain Basin.
- The success of this program can be credited to the 4:1 federal to state match in financial assistance that pays 90% of the installation costs and all of the rental payments for the land during the length of the contract, typically 15 years.
- There are four partner agencies cooperating on this program: VT Agency of Agriculture, USDA Natural Resource Conservation Service, USDA Farm Service Agency, and the US Fish & Wildlife Service's Partners for Fish and Wildlife program.

AGO Edge of Field Monitoring:

- Some of the practices being evaluated as part of this water quality monitoring initiative are cover cropping, aeration tillage prior to liquid manure application and manure injection.
- Total cost of this project is \$1,020,841.72, \$573,055.00 of which is provided by the NRCS, \$349,999.72 provided by the LCBP, \$1,410.00 provided by the AAFM, and \$96,377.00 of in-kind laboratory services provided by the DEC.
- Six farms currently have seven established sampling sites.

Flooded Forage Aflatoxin Survey:

In the wake of tropical storm Irene many farmers found the field corn inundated with flood waters creating conditions that support the growth of mycotoxin contamination. The Agency in cooperation with the US FDA developed a plan to mitigate risks associated with flooded animal feeds. Due to severe flooding of standing corn

and other crops in Vermont in August of 2011 questions rose regarding the suitability of these crops for animal feeding purposes. The purpose of this program was to determine if contaminants were present in flooded feeds, at what levels and to assist Vermont farmers in the appropriate use of available feed crop resources to accomplish the State's goal of protecting human and animal health from the potential impacts associated with the use of flooded silage corn by Vermont's livestock producers. Testing revealed that heavy metals were not a concern and mycotoxin levels were elevated but could be managed by farmers by feed additives that bind toxins.

Formaldehyde in Dairy Foot Bath Exposure Investigation:

The Agency for Toxic Substances and Disease Registry, in cooperation with the Vermont Department of Health (VDH) and the Vermont Agency of Agriculture, Food and Markets (VAAF), conducted this Exposure Investigation (EI). Some dairy farm owners in Vermont use solutions of formaldehyde to treat hairy heel wart disease in their cows. To investigate these concerns, we measured indoor and outdoor air concentrations of formaldehyde at two dairy farms in Franklin County, Vermont. Air sampling was conducted from May 1 through June 1, 2012. We collected a total of 41 indoor air samples and 45 outdoor air samples at farm houses located on or near dairy farms that used formaldehyde footbaths or spread manure containing waste formaldehyde solutions on farm fields. The results from this investigation did not indicate that formaldehyde concentrations in outdoor air were increased on days when manure containing waste formaldehyde from footbaths was spread on fields.

Persistent Herbicide Contaminated Compost:

In late June, 2012, Green Mountain Compost (GMC) and the Vermont Agency of Agriculture received a series of calls from people who reported symptoms indicative of persistent herbicide damage in gardens containing Green Mountain Compost products. Lab results confirmed the presence of trace amounts of persistent herbicides in some samples of compost and compost-based products produced at the GMC facility. We are currently working with Dow and other States and EPA labs to develop methods labs can use to detect these compounds.

Federal Relationships – The section, through our cooperative relationship with USDA APHIS PPQ is authorized to provide Federal Phytosanitary Certification services to Vermont producers wishing to ship plant products internationally. Without this arrangement, these producers would be compelled to go directly to the Federal government for their inspection and certification needs, at increased cost and time to these producers. Phytosanitary Certification – 15 Federal PCs issued, 5 State PCs issued

Potential Improvements or in process

Fiscal year 2012 was an extremely challenging year for the Agency's Laboratory Programs. In October 2011, the Waterbury Laboratory Building sustained extensive flood damage caused by Tropical Storm Irene permanently closing the facility. The Pesticide Laboratory housed on the 1st floor lost almost everything: analytical instrumentation, equipment and supplies. In October, the Lab staff moved to temporary lab space at the University of Vermont's Terrill Hall. The Dairy, Animal Health and Mastitis Labs were able to setup quickly and become operational within a month. However, due to lack of space and necessary equipment service utilities, the Feed/Fertilizer lab was re-established in 3 different locations throughout campus where University owned equipment and instrumentation was available to perform testing. The Pesticide Analytical Lab was able to have the LCMS system repaired and operational by November to do some flood remediation

work on corn silage. The Agency needed to show the FDA the silage was safe to use as cattle feed. New lab equipment, analytical instrumentation and supplies were ordered to begin the process of rebuilding the pesticide lab analytical capabilities. Mosquito testing for West Nile Virus was not able to be performed due to a lack of space to perform this type of testing safely. In May, the Lab staff participated in a 1 month planning/2 month renovation project on UVM's Hills Science Building for a lab move on August 1st. The VAAFMs Labs will be located in the UVM Hills Science Building for the next 3 – 5 years until a permanent home is found.

Laboratory Sample through-put challenges.

The loss of the Vermont Agency of Agriculture facility in Waterbury from Tropical Storm Irene Flood waters had a tremendous impact on all of the programs in the Agrichemical Management section. From loss of response time on pesticide enforcement cases to being able to adequately survey feeds and fertilizers during the 2012 season.

Certainty: The Agency received a Conservation Innovations grant (CIG) from the USDA Natural Resources Conservation Service Vermont office to develop a water quality “Certainty” program in Vermont. This program will be designed to encourage increased participation in the implementation of agricultural best management practices by both allowing farmers to have an incremental implementation plan and giving them a level of “Certainty” that their implementation plan will hold under possible regulatory changes in the future. The total for this grant is \$150,000.00, half of which is provided by the NRCS and the other half by the AAFM.

Certainty Enhancement: The Agency received an additional \$50,000.00 from the USDA Natural Resources Conservation Service (NRCS) to expand the aforementioned Certainty program. These additional funds will focus on encouraging small farmers to participate in a Certainty program. AAFM is matching these funds with \$25,000.00 to give a total of \$75,000.00 for Certainty Enhancement.

Lake Champlain TMDL and Stakeholder Process: The Agency has been working closely with the Environmental Protection Agency (EPA) and ANR to develop the model inputs for the revised Lake Champlain Total Maximum Daily Load (TMDL) for phosphorus inputs. The draft TMDL is expected to be released in the summer of 2013, with a final draft in December 2013. The Agency has been engaged in an agricultural stakeholder public process to develop information that will help promote accelerated conservation practice implementation and enhanced regulatory systems that are more appropriate for improved water quality and provide reasonable assurances for the TMDL.

Use of AAP's for zoning in Vermont: ARMs division works with Ag operations with applicable regulations & by assisting farmers in navigating the ag exemption to local zoning outlined in 24 V.S.A. Work related to the “farming & farm structure exemption” from local & municipal zoning provided for under Title 24, Chapter 117, Section 4413(d) uses the Acceptable Ag Practices rules to assist in defining farming. Current definition of farming in AAP's does not meet the needs of Value-added activities that are occurring on farms.