I. Plan Overview

1. Brief Summary about Plan Of Work

Extension Faculty and staff at the University of Vermont Extension and Agricultural Experiment Station (VT-AES) are focused on meeting the needs of the state's citizens. These experienced and innovative professionals continually work to integrate higher education, research and outreach services to protect and enhance a quality of life characterized by a thriving natural environment, a strong sense of community, and a deeply rooted connection to agriculture. Though our research conclusions offer lessons nationwide, even globally, Extension and the VT-AES apply the results closer to home, in our own communities, helping people where they live, cultivating healthy communities. Today, VT-AES and UVM Extension address issues ranging from farm profitability, water and soil quality, and dairy herd disease resistance and health, to global climate change, renewable energy, youth life skills education, community development and planning, and obesity, nutrition and health. Together we concentrate on relevant research that helps our diverse audience—including farmers, forest and land stewards, children and families, rural community members—improve business profitability, environment, economics, nutrition, food safety, and youth and adult life-skills development. Our work is guided and evaluated by dedicated citizen advisors with whom we meet regularly to review priorities, spending, and program impact. We seek additional feedback from those attending Extension events, an annual state-wide poll, and we meet with university, local, state and national opinion leaders, and policymakers to review our research and outreach portfolio and direction. Research and outreach efforts are enhanced through active partnerships, and volunteer workers.

The goal of UVM Extension and VT-AES is to put our health, environment, and agricultural research into action resulting in improved agriculture and environmental sustainability, community development, human health, and the personal and intellectual development of youth.

Estimated Number of Professional FTEs/SYs total in the State.

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II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle

   - External University Panel
   - Expert Peer Review

2. Brief Explanation

The University of Vermont Extension and AES has entered into a formal agreement with Extension in Maine, New Hampshire, and Massachusetts to develop and implement a four-state planning and reporting system. Working in collaboration with three other states in developing our system has also resulted in discussions around state and regional programs, opportunities for multistate work, sharing staff resources and a much better understanding of how each of our unique programs are similar and different than others in New England. As a result, the four states have agreed to provide merit review for each state as part of our formal partnership. The new system provides access to each state plan of work for all four states, allowing for easy sharing of ideas and opportunities for further collaboration. Further, we've agreed to set up a rotating system of more comprehensive merit review by selecting a different state plan each year for in-depth review by Extension staff from the other three states. With this system, we
will be sharing plans with one another continuously, and every four years every state’s plan will go through a more rigorous review process by the other three states.

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

In Vermont, our issues of strategic importance include agricultural profitability and diversity; developing rural economics, niche product development; environmental quality, and a healthy and productive population.
We work to help people understand the range of programs we provide and our connection to the knowledge-base of UVM faculty. It is a priority to focus on addressing selected critical problems in Vermont, so VT-AES research and UVM Extension programs yield the greatest impact.
More than 100 citizens serve in advisory capacities to ensure that educational programming is targeted and relevant to areas that are important to Vermonters. Working collaboratively, and with other departments of the University, UVM Extension and AES strive to strengthen efforts to ensure that research results, and educational resources remain accessible and relevant to the state’s citizens. Advisors are the organizations continual check-in to aid us in focusing our work on the relevant problems. They serve on state, programmatic and project based committees. Further input is garnered from program participants and other stakeholders giving immediate feedback to a projects focus.
Additionally, UVM’s Centers of Excellence help to coordinate, conduct and promote much of the research that is supported by AES funds, competitive private and public grants, sponsorships, and donations. These centers also utilize citizen advisory boards to inform and guide a research and outreach agenda that is responsive to local, state, and national needs and priorities. The Centers of Excellence include:
• Center for Sustainable Agriculture—an interdisciplinary approach to integrating university and community expertise to promote sustainable farming systems throughout Vermont and the region.
• Center for Rural Studies—connecting information and technical expertise with communities, businesses and policy makers in researching rural issues and information dissemination.
• Proctor Maple Research Center—applied research in the production of maple sap and syrup.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

Health: focuses on food security for limited resource children, families and seniors. Examples of programs follow:
• Community Farm Partners: enhance the amount of locally grown produce that is consumed by Vermonters with limited resources and sold by small scale Vermont producers
• EFNEP (Expanded Food and Nutrition Education Program): designed specifically to meet the needs of limited resource families. These families face many barriers to healthful eating. These include limited access to healthy foods, low literacy and education levels, limited income to purchase healthy foods, and living in an environmental that promotes poor nutrition and physical inactivity
• Growing Connections: a program for at-risk youth that teaches nutrition, food safety, and food security issues through gardening
• Healthy Eating: targeted at increasing the amount of fruits and vegetable offered to toddlers by parents enrolled in WIC (Women, Infants, Children)
• Senior Farm Share Nutrition Programs: nutrition workshop for low-income seniors to increase their consumption of local, fresh produce by enhancing participants skills to prepare fresh fruits and vegetables and gain nutritional knowledge based on the Dietary Guidelines

Youth & community development: addresses community strengths and challenges, focusing programs to build assets through its citizens who may be of limited resources, a community struggling to thrive, migrant workers and disabled workers wanting to stay in the workforce. Program examples follow:
• Migrant Education Recruitment Program (MEP): ensure that children of migrant farm workers, and qualifying youth under age 22, are aware of the educational support services available to them
• Northern New England AgrAbility Project: make recommendations that can be used by farmers with disabilities to maintain employment, through development of accommodations in support of recommendations made
• Rural and Agricultural VocRehab Program: assist individuals with disabilities living in rural areas and those in agricultural professions or self-employment, by providing them with a variety of services tailored to their needs in order to maintain or obtain their selected employment outcome
• 4-H: delivers educational programs to all youth developing life skills, with extra effort in place to target urban cities and activities for the teen audience as well as limited resource families and youth who are at-risk

Agriculture & Environmental Sustainability:

• Women’s Agricultural Network: provide educational and technical assistance to individuals starting or expanding agricultural businesses; targeted primarily at women
• Migrant Ed, AgrAbility, and Rural and Agricultural VocRehab: address the need of the audiences as identified in each of these programs
In addition scholarships are available to those wishing to participate in
Extension programs, but do not have necessary resources.

3. How will the planned programs describe the expected outcomes and impacts?

Planned programs are developed using the Logic Model, defining outcomes and impacts and the associated indicators of change. Outcomes are written to reflect the ultimate results desired, are achievable by the program, and will usually require multiple years to come to fruition. Intermediate indicators will serve as benchmarks of progress over the duration of the program, and will be reported annually.

In the ultimate goals section of One Solution the outcome statements for the Planned program are listed. Each of these has outcome indicators defined and associated within the Vermont on-line reporting system, Albert. These outcome indicators are listed as an Outcome Target in One Solution. In the Albert system each Output (output measure) has outcome indicators associated, tying the activity with the desired results.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

Beginning with the identification of a situation and the clear articulation of a problem or issue that needs addressing, planned programs set a course of action. Through the use of both process and summative evaluation, the focus shifts from determining activities and inputs, to improving the learning environment and opportunities for our clientele, and measuring actual achievement of impacts. Tracking program costs will provide additional criterion in determining the efficiency of the program, enabling us to further promote programming that works.

Each planned program is built from organizationally defined outcomes and outcome indicators. In the 07-11 submission of the One Solution report, planned programs were completed using group level plans. Group level plans are logic models of the defined problems using the defined outcomes and outcome indicators and draft outlines of individual logic models which address the defined problems or group level plans. In 08-12 submission and subsequent submissions of the One Solution report, planned programs will be completed using individual logic models grouped by the problems defined in the group level plans. This results in programming being focused because it is problem driven and results focused as a result of clearly defined outcomes and measurable indicators which are used by all the individuals as they construct individual logic models. The One Solution report is reflective of the sum of the actual planned effort of individuals in the organization. This evolution of planning will refine the indicators and outputs, resulting in fewer indicators giving more focus to our evaluation efforts.

IV. Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation

- Targeted invitation to selected individuals from general public
- Survey of the general public
- Targeted invitation to traditional stakeholder individuals
- Use of media to announce public meetings and listening sessions

Brief explanation.

Stakeholders are part of a 100 member citizen advisory board system who meet regularly to review program priorities and to review progress towards addressing the states identified problems. The Center for Rural Studies conducts an annual Vermonter Poll, an phone survey of 600 Vermonters. Faculty and staff work with many partners and program participants who offer input on present and future programming to address identified needs.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Surveys
- Use Internal Focus Groups
- Use Advisory Committees
- Use External Focus Groups

Brief explanation.

(NO DATA ENTERED)
2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Survey of the general public
- Survey of traditional Stakeholder groups
- Survey of traditional Stakeholder individuals
- Survey specifically with non-traditional groups
- Survey of selected individuals from the general public
- Meeting with invited selected individuals from the general public
- Meeting with traditional Stakeholder groups
- Meeting specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Meeting with traditional Stakeholder individuals
- Survey specifically with non-traditional individuals

Brief explanation

Annually the Vermonter Poll surveys Vermont citizens on relevant issues. Program participants are surveyed to measure how we are or can better meet their needs, and research and extension programs identify users and partners from whom to solicit input. Input is gathered by survey, interview, group meetings and individual contact.

3. A statement of how the input will be considered

- To Identify Emerging Issues
- In the Action Plans
- Redirect Extension Programs
- In the Budget Process
- Redirect Research Programs
- In the Staff Hiring Process
- To Set Priorities

Brief explanation.

(NO DATA ENTERED)
V. Planned Program Table of Content

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<tr>
<td>2</td>
<td>Community Development and the Personal and Intellectual Development of Youth</td>
</tr>
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<td>3</td>
<td>Health</td>
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</table>
1. Name of the Planned Program

Agriculture and Environmental Sustainability

2. Brief summary about Planned Program

Agriculture and Environmental Sustainability is a broad programmatic area which addresses various problems focusing on agricultural profitability; marketing and tourism opportunities; knowledge and skills to raise healthy animals; biosecurity issues; energy costs and stewardship of the environment. Identified by Extension and AES faculty, with stakeholder input, as basic to our research and outreach, it is the largest program area being addressed.

3. Program existence: Mature (More than five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 102 4% Soil, Plant, Water, Nutrient Relationships
- 104 2% Protect Soil from Harmful Effects of Natural Elements
- 112 10% Watershed Protection and Management
- 133 6% Pollution Prevention and Mitigation
- 201 2% Plant Genome, Genetics, and Genetic Mechanisms
- 203 1% Plant Biological Efficiency and Abiotic Stresses Affecting Plants
- 204 4% Plant Product Quality and Utility (Preharvest)
- 205 2% Plant Management Systems
- 206 2% Basic Plant Biology
- 216 8% Integrated Pest Management Systems
- 301 2% Reproductive Performance of Animals
- 302 2% Nutrient Utilization in Animals
- 305 2% Animal Physiological Processes
- 307 7% Animal Management Systems
- 315 3% Animal Welfare/Well-Being and Protection
- 601 18% Economics of Agricultural Production and Farm Management
- 602 14% Business Management, Finance, and Taxation
- 605 3% Natural Resource and Environmental Economics
- 723 4% Hazards to Human Health and Safety
- 801 4% Individual and Family Resource Management

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

For many decades, Vermont's landscape has been a strong allure to visitors and residents alike. In many ways, tourism and quality of community life have become inextricably tied to agriculture, particularly dairying.

Change within the agricultural sector creates opportunities for Extension to affect the present and future well-being of Vermont's farmers. As farms expand, diversify and/or consolidate, farmers must master new skills such as capital and human resource management.

Vermont's agriculture is dependent on the state's agricultural industry. The historical instability in farm milk prices has left Vermont's dairy farmers in a vulnerable position. Regardless of length of time or experience in farming, or the size of the farm, today's farmers are searching for opportunities to improve their income-producing capacity.

The traditional mainstay, dairy, is undergoing many changes as producers strive to compete in national and global markets and adjust to market-based raw milk pricing. Many farms have increased cow numbers in an attempt to realize economies of scale.
while others have gone out of business. Although dairy cow numbers and milk production remain stable, the number of dairy farms in Vermont continues to decline, and the loss of farms has created concern about conversion of farmland to forest and development. Farmers face many challenges; a primary challenge is their inability to clearly articulate their business idea to themselves and lenders or other sources of capital. Agricultural entrepreneurs may not be able to get a loan, may not be successful, and may be disenfranchised with Vermont agriculture. They often do not understand the financial limits (carrying loads) of their operations, are not able to communicate with lenders, or know how to read, understand, and interpret financial statements. Farmers who have not been saving for their retirement need to sell farm assets for retirement income.

Vermont farmers want to participate in the fastest growing area of dairy - organic milk production - but don't know if it's profitable, sustainable, or a viable option for them. There is a vacuum of any rigorous, quantified studies on the costs of producing organic milk in the United States despite growth and interest in the farming activity. The situation is particularly acute in the Northeast and upper Midwest where there is a small but rapidly growing organic dairy sector. Organic milk production has been the fastest growing agricultural sector in New England, with Vermont experiencing growth from just 2 certified organic farms in 1993 to more than 70 today. Although the total number of farms in the U.S. declined by more than 86,000 between 1997 and 2002 the number of farms owned and operated by women increased by nearly 30,000 during that same period. Since the 1978 Census of Agriculture, when the gender of the operator was first recorded, until the most recent Census of Agriculture in 1997, the number of women farm owners/operators increased from 5.2% to 11.1% of total farm ownership (USDA 2002 Census data). The demographic, social, and economic factors contributing to this increase in woman-owned/operated farms suggest that this growth trend will persist, gaining momentum, in all regions of the country. Among non-white farmers, women represent 10% of the farm owners/operators. The profile of women-owned farms indicates that many are small, diversified and financially at-risk.

Other challenges face agricultural producers affecting their ability to reach their marketing and profit potential. Farmers must reduce surface water pollution while maintaining profitability. Intensive crop production has often resulted in soil degradation, contributing to reduced crop yield, increased production inputs and lower farm profitability. Growers need to improve practices and/or maintain knowledge and skills related to IPM tools and methods, and the safe and judicious use of pesticides and alternatives, including organic options. Federal and State Tax laws and regulations keep changing each year, making it difficult for tax practitioners to keep up with those changes. Errors in tax returns resulting in lost revenue and increased costs to practitioners, government, and taxpayers. The Vermont and Federal legislature change tax law on a yearly basis to address state and national issues as they develop. In addition, part-time and rural tax practitioners are not able to attend professional tax schools that are within a reasonable driving distance, reasonably priced, and which offer several certification programs.

Problems being addressed:
Ag producers reaching their profit potential through marketing and management practices
Community Water Quality
Decrease in profitability on some organic dairy farms.
IPM tools, methods and safe and judicious use of pesticides & alternatives
Knowledge and skills to raise healthy animals
Lack of understanding of biosecurity issues
Price and supply of fuel poses economic risk to farmers.
Reducing surface water pollution while maintaining profitability
Soil degradation lowering farm profitability
Tax preparers are challenged to maintain competency with tax laws
Threatened financial security and business viability for farm and forest land owners
Tourism's social & environmental impacts and econmic benefits.

2. Scope of the Program

- Multistate Extension
- In-State Extension
- In-State Research
- Integrated Research and Extension

(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Differences between low-yielding and high-yielding sap collection systems can often be attributed to education
A maple producer who may have purchased the necessary equipment often does not understand the steps necessary for its proper installation and maintenance
The character of Vermont makes an ideal location to raise sheep and with the development of two lamb marketing organizations, there is now a reliable market available in which to sell lamb.

Education & research in organics will help farmers improve profitability. There still is a trend and place in Vermont for large dairy farm operations annual conference. Environmental regulations are only getting tighter, therefore making it increasingly difficult for all dairy operations. Each year, there is a new wave of people that are interested in raising sheep. For the most part, these people have no farming experience.

Biosecurity training is required yet at this time few are actually trained. Price of fuel will remain unstable in the future and will continue to pose an economic risk to farmers. Economic advantages of on-farm biodiesel production will increase. Citizens are concerned about poor water quality of Lake Champlain. Farmer's can reduce pollution and still remain profitable especially at low milk prices. The rate of adoption of dairy farm practice changes are influenced by farm profitability and personal beliefs in the value of any proposed changes in farm management. State and federal tax laws and regulations will continue to change, and practitioners will continue to need good information that is reasonably-priced. Usually farmers start-up with no business plan.

Continued funding from USDA/RMA, Farm Viability, and Andrew Sigler Foundation is needed to support certain projects as is continued need and demand from producers for Farm Advisory Boards and technical assistance with ag. engineering projects. Extra mural funds are available to leverage federal allocation.

2. Ultimate goal(s) of this Program

Improve agricultural and environmental sustainability (condition)
Improve community collaboration to address issues and build community assets. (condition)
Improve individual and family health. (condition)
Community members determine feasible solutions to watershed problems (Action)
Create on-farm vegetable oil and/or biodiesel production facilities (Action)
Decrease in phosphorus from urban sources entering Lake Champlain (Action)
Decrease in urban storm water runoff and associated non-point source pollution (Action)
Improve coordination of Vermont agricultural agencies and organizations with regard to training, information dissemination and emergency preparedness. (Action)
Improved access to private land (Action)
Improved biosecurity and safety measures at fairs, field days and on farms. (Action)
Improved profitability, stewardship, and/or management on Vermont farms (Action)
Improved soil health (Action)
Improved teaching by Extension and agency personnel around tourism and the environment (Action)
Increase accuracy of tax returns (Action)
Increase adoption of practices that improve economic status, stewardship and/or management practices for Vermont landowners. (Action)
Increase adoption of practices that improve sap production and boiling efficiency. (Action)
Increase the number of communities implementing agriculture-oriented safety drills, equipment and response-oriented tools (Action)
Increase the number of farms that implement one or more changes in nutrient management practices (Action)
Increase the number of growers, facility managers and home gardeners who implement IPM strategies (Action)
Increase the number of sheep producers who meet the market expectations for lean meat (Action)
Increased application of management skills that optimize health, nutritional status, and productivity of animals. (Action)
Increased profitability of businesses related directly to tourism. (Action)
Increased successful production of organic grains in Vermont (Action)
Increased use of business analysis tools to improve agricultural business management decision-making. (Action)
Maple producers meet Vermont quality standards (Action)
Maintain healthy and productive forests (Action)
Increase knowledge of organic apple production (Learning)
Increase knowledge of water shed and water quality among middle school and high school youth. (Learning)
V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

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V(F). Planned Program (Activity)

1. Activity for the Program

Project listed in bold followed by delivery methods:
Ag Business Management. Conferences, courses, consultations and farm visits.
Agricultural safety. Courses, consultations and farm visits.
Beef Program. Conferences, workshops, discussion groups, individual consultations, articles, web site.
Bio-security Education. Workshops, discussion groups.
Calf and heifer program. Workshops, discussion groups.
Dairy Management. Conference.
Equine program. Annual equine event, publications, workshops.
Farm and Forest Transfers. Workshops, consultations, farm visits
Farm Viability. Farm visits, consultations.
Farming Alternatives. Workshops, consultations, farm visits.
Forage and Pasture Management Education. Conference, farm visits, consultations.
Germ City. Demonstration.
Maple Program. Conference, workshops, newsletter.
Nutrient Management Program. Farm visits, consultations.
Addison County Agriculture Legislative Farm Tour. Tour.
Farm Assessments. Develop assessments.
Growing by Design. On-farm research and demonstration.
Farmer Nutrient Management. Training for dairy farmers, consultations.
On-farm vegetable and biodiesel. On farm demonstration sites.
Organic Grain Project. Demonstrations, data gathering.
Pest Management Education. IPM and Pesticide Education and Safety Program (PESP) training.
Sheep program. Hands-on workshop, applied research, newsletter.
Healthy soil. Workshops and various media.
UVM Extension emergency management plan. Personnel training via workshops, mock disaster drill.
Vegetable and Berry Growers. Consultations, farm visits, meetings, various media, presentations, website.
Vermont Pasture Network. Pasture walks, demonstrations and trials, conference, consultations, various media.
Vermont Tourism and Recreation. Research, conference.
Women's Agricultural Network. Newsletters, website, classes, workshops, individual and small group consultations.
Master Gardener. Course, train the trainer.
Private/commercial Landowner and Industry Professional Education: Consultations, media
Small Ruminant Dairy Project. Conference, newsletter, workshops, consultations.
Sustainable Forests. Workshops, newsletter, consultations
Urban Watershed and Water Quality. Presentations, demonstrations, media, in-school program
Emergency Management Plan. Workshops, mock drill
UVM Tax School. conference, tax book
Watershed & Water Quality Education. In-school program, curriculum development, presentations
AES efforts. Animal Manure Treatment Systems• Storm and Wastewater Management Systems• Perturbation of soil ecosystems by anthropomorphic interventions• Soil nutrient effect on forest ecosystem productivity and lake water quality• Soil fertility/chemistry/physical problems associated with waste disposal and bioremediation• Economics of organic dairy, crop management and alternative energy• Heifer nutrition, rearing and management• Dairy nutritional immunology• Small ruminant production and management systems• Development of strategies to address applied equine issues• Biofuels from coconuts and other energy sources• Identification of genetic traits that make species invasive• Surveillance and prevention of spread of Asian Longhorned Beetle• Management of thrips pests in forests and greenhouses• Identification/control of fungal propagation• Fungal biological plant protection, collection and management• Explore microbial pesticides and fungal components as IPM strategies• Innate immunity, DNA-based vaccines and mastitis prevention• Hormonal regulation of glucose synthesis and milk production• Functional genomics and photoperiod effects on hormonal cycles/milk production• Explore ruminant lipid metabolism• Impact of global climate change on forest species diversity• Genetic diversity among new world ferns and geographic distribution• Cold hardiness of horticultural perennials

2. Type(s) of methods to be used to reach direct and indirect contacts

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<td>Education Class</td>
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<td>Group Discussion</td>
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3. Description of targeted audience

Adults
Age 25 - 45 Adult
Age 25 - 60 Adult
Agriculture: Apple Growers
Agriculture: Beef Producers
Agriculture: CCA & Crop Consultants
Agriculture: Crop Producers
Agriculture: Dairy Producers
Agriculture: Farm Families
Agriculture: Farm Managers
Agriculture: Farmers
Agriculture: Goat & Sheep Producers
Agriculture: Greenhouse Ornamental Growers
Agriculture: Home Gardeners
Agriculture: Industry Professionals
Agriculture: Maple Industry
Agriculture: Maple Sugar Producers
Agriculture: Ornamentals Industry Professionals
Agriculture: Service Providers
Agriculture: Small Fruit & Vegetable Growers
Agriculture: Veterinarians
Agriculture: Dairy Goat, Meat Goat and Dairy Sheep Producers
Agriculture: Government Agency Personnel
Communities: Cities and Towns
Communities: Educators
Communities: Local Officials/Leaders
Communities: Non-Governmental Organizations
Communities: Schools
Communities: Town Health Officers
Community leaders and citizens
Extension: Faculty/Staff
Forestry: Woodland Managers/Foresters
Forestry: Woodland Owners
Master Gardeners
Policy Makers: Legislators
Public: College Students
Public: Families
Public: General
Public: Homeowners
Public: Small Business Owners/Entrepreneurs
Public: Volunteers
Train-the-Trainer recipients: adults
4-H: Youth
Age 13 - 18 Youth
Age 6 - 12 School Age
Age 8 - 18 Youth
Youth

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

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2. (Standard Research Target) Number of Patents

Expected Patents


3. Expected Peer Review Publications
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<thead>
<tr>
<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
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<tbody>
<tr>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
<td>1</td>
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<tr>
<td>2011</td>
<td>1</td>
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</tr>
<tr>
<td>2012</td>
<td>1</td>
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</table>

Y(H). State Defined Outputs

1. Output Target

- 4-H biosecurity program
  
  2008:0  2009:0  2010:0  2011:0  2012:0

- Addison County Agriculture Legislative Farm Tour
  

- Ag Business Management Course
  
  2008:0  2009:0  2010:0  2011:0  2012:0

- Ag Engineering farm visits
  

- Agricultural Profitability Team meetings
  

- Asian Longhorned beetle (ALB) information distribution
  

- Asian Longhorned beetle website
  
  2008:0  2009:0  2010:0  2011:0  2012:0

- Avian influenza - ATF-television
  

- Avian influenza drill
  
  2008:0  2009:0  2010:0  2011:0  2012:0

- Balance Sheet/Budgeting Clinics
  

- Beef - print media
<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td></td>
<td>Beef Conference</td>
<td>52</td>
<td>52</td>
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<td>52</td>
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<tr>
<td></td>
<td>Beef consultations</td>
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<td></td>
<td>Beef factsheets</td>
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<td></td>
<td>Bio-security recommendations for farm visits</td>
<td>1</td>
<td>1</td>
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<td></td>
<td>Bio-security training communication</td>
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<td></td>
<td>Business plan implementation</td>
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<td></td>
<td>Business plans completed</td>
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<td></td>
<td>Calf and Heifer Conference</td>
<td>1</td>
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<td></td>
<td>Classes for Master Gardener and Master Composter</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<td></td>
<td>Completed soil health database</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td></td>
<td>Crop Insurance workshop</td>
<td>6</td>
<td>6</td>
<td>6</td>
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<tr>
<td></td>
<td>Forage and Pasture Consultations</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Crop Insurance articles</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
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<tr>
<td></td>
<td>Dairy Reproduction and Forage Quality on-line</td>
<td></td>
<td></td>
<td></td>
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</table>
2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy Stewardship Alliance article
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy Stewardship Alliance data summarization
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy Stewardship Alliance farm visits
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy Stewardship Assessment
  2008 : 54  2009 : 54  2010 : 54  2011 : 54  2012 : 54

- Dairy commodity grant articles
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy price education articles
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy price education newsletter
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Dairy/Forage Research Day
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Development of Farm Assessments
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Economic Analysis of Northern Forest Canoe Trail
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Edit State Support Function 11

- Fair & Field Day staff education

- Farm Management plans - APT

- Farm Safety Task Force

- Financial Security/business Farm visits
  2008:30  2009:30  2010:30  2011:30  2012:30

- Farmed class
  2008:0  2009:0  2010:0  2011:0  2012:0

- Farmer consults
  2008:0  2009:0  2010:0  2011:0  2012:0

- Farmer Nutrient Management Training presentation

- Farmers Market training
  2008:0  2009:0  2010:0  2011:0  2012:0

- Farming Alternatives presentations

- Feeder sales

- Forage and Pasture Mgt education presentation

- Germ City at Sheep Camp

- Germ City train the trainer

- Grain Growing workshops
  2008:3  2009:3  2010:3  2011:3  2012:3

- Grain Research project

- Greenhouse IPM workshop
  2008:3  2009:3  2010:3  2011:3  2012:3

- Greenhouse IPM handouts
<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2008</td>
<td>Greenhouse IPM manual</td>
</tr>
<tr>
<td>2009</td>
<td>Growing Places II course</td>
</tr>
<tr>
<td>2010</td>
<td>Grow Your Business consultations</td>
</tr>
<tr>
<td>2011</td>
<td>Growing Places course</td>
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<tr>
<td>2012</td>
<td>Incident Command System training workshop</td>
</tr>
<tr>
<td>2008</td>
<td>Growing Places on-line class</td>
</tr>
<tr>
<td>2009</td>
<td>Growing by Design cropping systems trial</td>
</tr>
<tr>
<td>2010</td>
<td>Growing by Design field day</td>
</tr>
<tr>
<td>2011</td>
<td>IPM/PESP (for farmers and Certified Private Applicators)</td>
</tr>
<tr>
<td>2012</td>
<td>IPM/PESP for Certified Commercial Applicators</td>
</tr>
<tr>
<td>2008</td>
<td>Introduction to Sheep Management workshop</td>
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<tr>
<td>2009</td>
<td>Lamb feeding trial</td>
</tr>
<tr>
<td>2010</td>
<td>Lambing Clinic</td>
</tr>
<tr>
<td>2011</td>
<td>Live Lamb Grading Workshop</td>
</tr>
</tbody>
</table>

Report Date: 04/02/2007
Livestock discussion group

ME/Vermont Organic Dairy Analysis consultations

Medium Farm Operation Nutrient Management Assessment tool

Medium Farm Operation Nutrient Management Survey-BMP field site visit
2008:0  2009:0  2010:0  2011:0  2012:0

Medium Farm Operation Nutrient Management Survey-NRCS field site visit
2008:0  2009:0  2010:0  2011:0  2012:0

Managed Intensive Grazing Pasture workshop
2008:0  2009:0  2010:0  2011:0  2012:0

Maine/Vt. Organic Milk Research Study Field visit

Maple - ATF- television

Maple Mainline newsletter

Maple research web material
2008:0  2009:0  2010:0  2011:0  2012:0

Maple Syrup Digest article
2008:0  2009:0  2010:0  2011:0  2012:0

Maple consultations

Nutrient Management Plan (NMP) training course for farmers

NRCS co-facilitated workshops

- National Extension Tourism Conference
2008 : 0 2009 : 0 2010 : 0 2011 : 0 2012 : 0

- National Extension Tourism Conference presentation
2008 : 0 2009 : 0 2010 : 0 2011 : 0 2012 : 0

- National Income Tax Book

- New England Agro-Security manual
2008 : 0 2009 : 0 2010 : 0 2011 : 0 2012 : 0

- NxLevel Course

- On-farm biodiesel results publication

- On-farm vegetable oil/biodiesel project demonstration

- Organic apple production presentation/workshop

- P-Reducing Slag Barrier field day

- P-Reducing Slag Barriers research site

- PESP - Initial Certification for Pesticide Applicators workshop

- PESP Program School IPM Award of Achievement

- PESP newsletter

- PESP website

- Parasite fields study sites
  2008:0 2009:0 2010:0 2011:0 2012:0

- Parasite workshops
  2008:0 2009:0 2010:0 2011:0 2012:0

- Participatory Modeling workshop

- Pasture Walks
  2008:30 2009:30 2010:30 2011:30 2012:30

- Plant Diagnostic Clinic email/phone consultations

- Plant Diagnostic Clinic website

- Plant Insect Pest Diagnostic inquiries email/phone

- Plant Insect Pest Diagnostic identification and recommendations

- Poultry biosecurity workshop
  2008:3 2009:3 2010:3 2011:3 2012:3

- Poultry production conference

- Public Access for Tourism and Recreation on Private Lands web page

- Sheep communication inquiries (electronic; email / phone)

- Soil Health Assessment - field site visits

- Soil Health Assessment - orchards

- Soil Health Field days/workshops
  
  2008 : 3  2009 : 3  2010 : 3  2011 : 3  2012 : 3

- State Animal Response Team newsletter
  
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Maple Survey of sap collection methods and outcome
  

- Tractor safety course
  
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Transferring the Farm program
  

- UVM Tax Schools
  

- VT Large Farm Dairy Conference
  

- Veg. & Berry radio commentaries
  
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Veg. & Berry magazine columns
  
  2008 : 0  2009 : 0  2010 : 0  2011 : 0  2012 : 0

- Veg. & Berry technical publications
  
  2008 : 30  2009 : 30  2010 : 30  2011 : 30  2012 : 30

- Veg & Berry farmer consultations
  

- Vermont Grass Farmer's Association newsletter
  

- Vermont Maple conferences
  

- Vermont Maplerama conference
2008 :1  
2009 :1  
2010 :1  
2011:1  
2012 :1

- Vermont New Farmer Network development training

2008 :4  
2009 :4  
2010 :4  
2011:4  
2012 :4

- Vermont Tourism Data Center

2008 :1  
2009 :1  
2010 :1  
2011:1  
2012 :1

- Vermont Travel Industry Conference

2008 :1  
2009 :1  
2010 :1  
2011:1  
2012 :1

- Vermont vegetable and berry web site articles

2008 :0  
2009 :0  
2010 :0  
2011:0  
2012 :0

- Womens Ag Network (WAgN) Newsletter

2008 :4  
2009 :4  
2010 :4  
2011:4  
2012 :4

- Womens Ag Network (WAgN) website updates

2008 :24  
2009 :24  
2010 :24  
2011:24  
2012 :24

- Womens Ag Network (WAgN) workshops, learning circles, etc.

2008 :6  
2009 :6  
2010 :6  
2011:6  
2012 :6

- Winter Dairy Herd Mgmt meeting

2008 :1  
2009 :1  
2010 :1  
2011:1  
2012 :1

- Conflict resolution in the Green Mtn Forest Canoe Trail - refereed journal article

2008 :0  
2009 :0  
2010 :0  
2011:0  
2012 :0

- Municipal level Water Quality Protection Workshops

2008 :2  
2009 :2  
2010 :2  
2011:2  
2012 :2

- "Harvest To Table" outreach education

2008 :8  
2009 :8  
2010 :8  
2011:8  
2012 :8

- Starting a Goat Dairy Workshop(s)

2008 :2  
2009 :2  
2010 :2  
2011:2  
2012 :2


2008 :1  
2009 :0  
2010 :0  
2011:0  
2012 :0

- AgTerror Responder Training
2008 University of Vermont Combined Research and Extension Plan of Work


- America in Bloom judging

2008:3 2009:3 2010:3 2011:3 2012:3

- An article describing research results collected from the Cover Cropping Trial


- Apple IPM Newsletter


- Apple IPM Presentation

2008:3 2009:3 2010:3 2011:3 2012:3

- Apple IPM Website


- Apple IPM one-on-one Education


- Biofuel workshops to teach farmers how to grow, process, and produce biofuel.

2008:3 2009:3 2010:3 2011:3 2012:3

- Business plan applications


- Clean beaches Program workshops


- Develop an Organic Dairy Website as part of the eXtension eOrganic project


- Farm Evaluation/Technical Assistance to current and new farmers


- Farm Transfer Workshop

2008:3 2009:3 2010:3 2011:3 2012:3

- Farm Safety educational programs


- Farm Transfer farm visits
Goat Dairy Farmer Discussion Groups


Farmers: A New Generation


Flower Trials


Forage adn Pasture Data Collectoin and analysis


GAP "From Garden to Table"


GIS Workshops for Municipal Officials


GIS curriculum for teachers and for municapal officials prepared for VCGI use

2008:0  2009:0  2010:0  2011:0  2012:0

GIS training guidebook for teacher and municipal officials prepared for Vermont Center for Geographic information

2008:0  2009:0  2010:0  2011:0  2012:0

Germ City Educational leadership


Germ City: revise evaluation


Grape IPM Newsletter


Grape IPM Presentations


Grape IPM website


Grape IPM one-on-one education
<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Farms - Healthy Agriculture video distribution</td>
<td>5</td>
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<td>5</td>
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<tr>
<td>Horse Owner Technical Assistance</td>
<td>1</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Household Property management workshop</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
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<tr>
<td>IPM/PESP for home gardeners</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Lake Champlain Live program: a unique science opportunity for students in grades 8-12 on UVM's Research Vessel Melosira</td>
<td>4</td>
<td>4</td>
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<td>Land Link Vermont Matching Service</td>
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<td>Low Impact Development Workshop</td>
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<td>Low Input Landscape management training</td>
<td>20</td>
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<td>0</td>
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<tr>
<td>Maine/Vermont Organic Dairy Analysis</td>
<td>30</td>
<td>30</td>
<td>30</td>
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<tr>
<td>Maintaining and providing articles and excel template programs for The Vermont Crops and Soils Homepage</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Maple electronic/email consultations</td>
<td>600</td>
<td>600</td>
<td>600</td>
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<tr>
<td>Master Composter Course</td>
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<tr>
<td>Master Composter Outreach</td>
<td>10</td>
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<tr>
<td>Master Gardener Outreach</td>
<td></td>
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</tbody>
</table>
● Montreal Gardens Tour
● NPS pollution prevention training
● New England Greenhouse Conference
● New England Grows workshop
● Nutrient Management consultation
● Organic Apple Website
● Pest management presentations
2008:3  2009:3  2010:3  2011:3  2012:3
● Producer/exhibitor education fact sheet publication
● Professional Development workshop - single session
● Public education display/exhibit
2008:3  2009:3  2010:3  2011:3  2012:3
● Rain Garden demonstrations
● Rain Garden installation
● Rain Garden workshops
● Ration balancing for goat dairies consultation

- Reduced P on Lawns presentations

2008:3  2009:0  2010:0  2011:0  2012:0

- Scoop on Poop internal parasite workshops


- Sheep newsletter


- Sheep Nutrition Workshop with Sheep Ruminant Nutritionist


- Sheep Parasite Workshops

2008:3  2009:0  2010:0  2011:0  2012:0

- Small Ruminant Dairy Newsletter and Calendar of Events


- Pasture / grazing technical assistance consultations


- Pasture / grazing workshop, single session on the farm

2008:3  2009:3  2010:3  2011:3  2012:3

- Town residential surveys workshop series


- Maple Treenet: web page demonstrating sap flow physiology


- Urban Watershed Education curricula


- Vermont Master Gardener Basic Course


- Vermont Master Gardener Helpline (electronic/phone)


- Vermont Water Quality Gateway
V(I). State Defined Outcome

1. Outcome Target
   beef producers report information and services improved their profitability, stewardship and/or management

2. Outcome Type : Change in Action Outcome Measure
   2008 : 100  2009 : 0  2010 : 0  2011 :0  2012 : 0

3. Associated Knowledge Area(s)
   ● 601 - Economics of Agricultural Production and Farm Management
1. **Outcome Target**
customers that receive organic grain production research data will integrate results into production systems

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>50</td>
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<td>50</td>
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</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**
extension employees will know what is expected from them in a disaster

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>90</td>
<td>95</td>
<td>96</td>
<td>95</td>
<td>95</td>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**
farmers will make a change by: growing oil seed crops, using local on-farm vegetable oil or biodiesel, and/or planning an individual or cooperative on-farm vegetable oil or biodiesel facility.

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>50</td>
<td>75</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**
extension and agency personnel gain new skills that can be applied in their work

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**
number of businesses or organizations who report better decision making

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
number of dairy farmers who adopt a best management practice they learned from another farmer participant

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>3</td>
<td>3</td>
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<td>0</td>
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</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 112 - Watershed Protection and Management
1. **Outcome Target**
number of dairy farmers who adopt best management practices to improve weak areas of the farming operation

2. **Outcome Type**: Change in Action Outcome Measure

```
2008 : 3  
2009 : 0  
2010 : 0  
2011 : 0  
2012 : 0
```

3. **Associated Knowledge Area(s)**
- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
number of dairy farmers who indicate intent to make at least 1 change

2. **Outcome Type**: Change in Knowledge Outcome Measure

```
2008 : 0  
2009 : 0  
2010 : 0  
2011 : 0  
2012 : 0
```

3. **Associated Knowledge Area(s)**
- 112 - Watershed Protection and Management
- 216 - Integrated Pest Management Systems
- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
Increase in number of dairy farms increasing forage quality as measured by ADF, NDF, Protein, and NEL

2. **Outcome Type**: Change in Action Outcome Measure

```
2008 : 45  
2009 : 55  
2010 : 55  
2011 : 55  
2012 : 55
```

3. **Associated Knowledge Area(s)**
- 133 - Pollution Prevention and Mitigation
- 204 - Plant Product Quality and Utility (Preharvest)
- 307 - Animal Management Systems

1. **Outcome Target**
Increase in number of dairy farms that increase pregnancy/fertility rates
2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</thead>
<tbody>
<tr>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**

   - 307 - Animal Management Systems
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**

   Number of farm families who take action on a recommendation made by an Extension team after the APT plan is developed.

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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<th>2011</th>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**

   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

   Increase in number of farmers having a greater understanding of the costs associated with organic farming.

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</table>

3. **Associated Knowledge Area(s)**

   - 112 - Watershed Protection and Management
   - 133 - Pollution Prevention and Mitigation
   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

   Increase in number of farms completing Dairy Stewardship assessment who adopt at least two sustainable practices.

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</table>

3. **Associated Knowledge Area(s)**

   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

   Increase in number of maple producers who adopt recommended practices that increase overall system efficiency and syrup quality.
1. **Outcome Target**
Increase in number of producers who have increased understanding of avian influenza risk, signs of disease, and who to contact

2. **Outcome Type** : Change in Knowledge Outcome Measure
   
<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</table>

3. **Associated Knowledge Area(s)**
   - 307 - Animal Management Systems
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**
Increase in number of sheep farmers demonstrating better livestock management skills who report an increase in the number of healthy sheep

2. **Outcome Type** : Change in Action Outcome Measure
   
<table>
<thead>
<tr>
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3. **Associated Knowledge Area(s)**
   - 307 - Animal Management Systems
   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
Increase in number of sheep producers who report a reduced parasite load in animals

2. **Outcome Type** : Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 307 - Animal Management Systems
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**
Increase in number of sheep farms who report decreased lamb mortality

2. **Outcome Type** : Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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3. **Associated Knowledge Area(s)**
   - 307 - Animal Management Systems
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**
Increase in the number of communities that integrate the participatory modeling tool into long-term town planning

2. **Outcome Type** : Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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3. **Associated Knowledge Area(s)**
   - 123 - Management and Sustainability of Forest Resources
   - 602 - Business Management, Finance, and Taxation
1. **Outcome Target**

Increase in the number of vegetable and berry growers who implement changes in production, pest control, and/or management practice resulting in the desired outcome

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. **Associated Knowledge Area(s)**

   - 112 - Watershed Protection and Management
   - 204 - Plant Product Quality and Utility (Preharvest)
   - 216 - Integrated Pest Management Systems

---

1. **Outcome Target**

   number of growers implementing IPM practices reducing reliance on pesticides

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</table>

3. **Associated Knowledge Area(s)**

   - 112 - Watershed Protection and Management
   - 133 - Pollution Prevention and Mitigation
   - 216 - Integrated Pest Management Systems
   - 601 - Economics of Agricultural Production and Farm Management

---

1. **Outcome Target**

   Increase the number of commercial applicators implementing IPM practices

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. **Associated Knowledge Area(s)**

   - 112 - Watershed Protection and Management
   - 133 - Pollution Prevention and Mitigation
   - 216 - Integrated Pest Management Systems
   - 602 - Business Management, Finance, and Taxation

---

1. **Outcome Target**

   Increase in number of farm and forest landowners who report greater understanding of farm and/or forest transfer issues and options

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**

   - 123 - Management and Sustainability of Forest Resources
   - 602 - Business Management, Finance, and Taxation

---

1. **Outcome Target**

   Increase the number of farm and forest landowners who implement or change their estate plan and/or transfer plan
2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome</th>
<th>Change in Action Outcome Measure</th>
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<tbody>
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</table>

3. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 602 - Business Management, Finance, and Taxation

1. Outcome Target

number of farmers selling directly to consumers implementing marketing, production and record keeping skills

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome</th>
<th>Change in Action Outcome Measure</th>
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<tbody>
<tr>
<td>2008</td>
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<td>2012</td>
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</tr>
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</table>

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target

Increase the number of farmers who implement at least one cropping practice to improve productivity, forage quality and profitability

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome</th>
<th>Change in Action Outcome Measure</th>
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<td>2010</td>
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</table>

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 204 - Plant Product Quality and Utility (Preharvest)
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

number of farmers with business plans who use financial statements to address management problems in farm operation increasing farm profitability

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome</th>
<th>Change in Action Outcome Measure</th>
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<tbody>
<tr>
<td>2008</td>
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<td>2012</td>
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3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target

Increase the number of maple producers adopting a recommended practice increasing their sap yields by 5%

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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<th>Change in Action Outcome Measure</th>
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</table>

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management
1. **Outcome Target**
Increase the number of maple producers making use of research findings to better estimate best tapping date

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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</table>

3. **Associated Knowledge Area(s)**
- 123 - Management and Sustainability of Forest Resources
- 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**
Number of participants who maintain direct involvement in promoting the importance of Vermont Agriculture

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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</table>

3. **Associated Knowledge Area(s)**
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
Increase the number of participants passing the required applicators licensing test

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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3. **Associated Knowledge Area(s)**
- 112 - Watershed Protection and Management
- 216 - Integrated Pest Management Systems
- 723 - Hazards to Human Health and Safety

1. **Outcome Target**
Increase the number of planners reporting increased feelings of competency in understanding requirements in NMP and assisting farmers in implementation of Nutrient Management Plans

2. **Outcome Type**: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
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3. **Associated Knowledge Area(s)**
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
Increase the number of maple producers adopting most effective sap collection techniques
2. **Outcome Type:** Change in Action Outcome Measure  
   - **2008:** 60  
   - **2009:** 60  
   - **2010:** 60  
   - **2011:** 60  
   - **2012:** 60

3. **Associated Knowledge Area(s)**  
   - 601 - Economics of Agricultural Production and Farm Management  
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
   number of forest owners who plan for long term disposition of woodlands

2. **Outcome Type:** Change in Action Outcome Measure  
   - **2008:** 0  
   - **2009:** 0  
   - **2010:** 0  
   - **2011:** 0  
   - **2012:** 0

3. **Associated Knowledge Area(s)**  
   - 112 - Watershed Protection and Management  
   - 123 - Management and Sustainability of Forest Resources

1. **Outcome Target**  
   participants will begin growing organic grains as a part of their farming operation

2. **Outcome Type:** Change in Action Outcome Measure  
   - **2008:** 20  
   - **2009:** 20  
   - **2010:** 20  
   - **2011:** 20  
   - **2012:** 20

3. **Associated Knowledge Area(s)**  
   - 204 - Plant Product Quality and Utility (Preharvest)  
   - 601 - Economics of Agricultural Production and Farm Management  
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
   participants will have gained knowledge on how to grow organic grains

2. **Outcome Type:** Change in Knowledge Outcome Measure  
   - **2008:** 120  
   - **2009:** 120  
   - **2010:** 120  
   - **2011:** 120  
   - **2012:** 120

3. **Associated Knowledge Area(s)**  
   - 204 - Plant Product Quality and Utility (Preharvest)  
   - 601 - Economics of Agricultural Production and Farm Management  
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
   acres of forest land will be opened for tourism and recreation access

2. **Outcome Type:** Change in Action Outcome Measure  
   - **2008:** 0  
   - **2009:** 100000  
   - **2010:** 0  
   - **2011:** 0  
   - **2012:** 0

3. **Associated Knowledge Area(s)**  
   - 123 - Management and Sustainability of Forest Resources  
   - 602 - Business Management, Finance, and Taxation
1. **Outcome Target**

Participants will implement information learned from Grain Growing workshops.

2. **Outcome Type** : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
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3. **Associated Knowledge Area(s)**

   - 204 - Plant Product Quality and Utility (Preharvest)
   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Equine facilities incorporate biosecurity, safety and preventative measures.

2. **Outcome Type** : Change in Action Outcome Measure

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<th>Year</th>
<th>2008</th>
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3. **Associated Knowledge Area(s)**

   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**

Increase in collaboration with agency and industry personnel to address farm safety.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
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3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**

Increase in number of Growing Places graduates who make an intentional, informed decision not to start a business after completing the course.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
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3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Increase in number of Growing Places graduates who go on to start a business within 18 months of course completion.

2. **Outcome Type** : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Number of fair and field days, and similar events that incorporate assessment and implementation of practical safeguards.
2. **Outcome Type**: Change in Action Outcome Measure
   
   2008 : 5  
   2009 : 3  
   2010 : 0  
   2011 : 0  
   2012 : 0

3. **Associated Knowledge Area(s)**
   - 307 - Animal Management Systems
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**
   
   Number of fair, field days or event attendees who demonstrate an increased understanding of the health risks associated with the failure to wash hands by using safeguards provided (such as hand sanitation stations)

2. **Outcome Type**: Change in Knowledge Outcome Measure
   
   2008 : 1039  
   2009 : 1039  
   2010 : 1039  
   2011 : 1039  
   2012 : 1039

3. **Associated Knowledge Area(s)**
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**
   
   Increase in number of farmers who develop water quality protection plans

2. **Outcome Type**: Change in Action Outcome Measure
   
   2008 : 0  
   2009 : 0  
   2010 : 0  
   2011 : 0  
   2012 : 0

3. **Associated Knowledge Area(s)**
   - 112 - Watershed Protection and Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
   
   Increase in number of farmers who indicate increased knowledge about forage and grazing practices

2. **Outcome Type**: Change in Knowledge Outcome Measure
   
   2008 : 175  
   2009 : 175  
   2010 : 175  
   2011 : 175  
   2012 : 175

3. **Associated Knowledge Area(s)**
   - 204 - Plant Product Quality and Utility (Preharvest)
   - 307 - Animal Management Systems
   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
   
   Increase in number of farmers who create and implement business plans

2. **Outcome Type**: Change in Action Outcome Measure
   
   2008 : 10  
   2009 : 8  
   2010 : 9  
   2011 : 8  
   2012 : 8

3. **Associated Knowledge Area(s)**
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
   
   Increase in number of farmers who use financial statements to identify farm management problems
2. **Outcome Type**: Change in Action Outcome Measure

   

3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

   number of farms that have current plans for use by emergency first responders

2. **Outcome Type**: Change in Action Outcome Measure

   2008 :0  |  2009 : 0  |  2010 : 0  |  2011 :0  |  2012 : 0

3. **Associated Knowledge Area(s)**

   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**

   Increase in number of farms that incorporate biosecurity, safety and preventative measures

2. **Outcome Type**: Change in Action Outcome Measure


3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**

   Increase in number of new/aspiring farmers who have a completed goal statement and an action plan for a new agricultural business

2. **Outcome Type**: Change in Action Outcome Measure


3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

   number of new/aspiring farmers who have a completed goal statement and an action plan for a new agricultural business

2. **Outcome Type**: Change in Knowledge Outcome Measure

   2008 :60  |  2009 : 60 |  2010 : 60 |  2011 :60 |  2012 : 0

3. **Associated Knowledge Area(s)**

   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

   Increase in number of participants who have a greater understanding of their expenses and profit centers

2. **Outcome Type**: Change in Action Outcome Measure


3. **Associated Knowledge Area(s)**

   - 602 - Business Management, Finance, and Taxation
1. Outcome Target
Increase in number of participants who show a 5% or more increase in farm profitability after implementing recommended management changes

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</tbody>
</table>

3. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of participants who will understand what pieces are in a plan, and will have a better focus for their farm business

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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</table>

3. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of participating service providers report increased understanding of services provided by other agencies and organizations

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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3. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of program participants who make informed decisions about crop insurance

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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3. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of service providers who use the legal guide as a reference

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tr>
</tbody>
</table>

3. Associated Knowledge Area(s)
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of tax school participants stating improved accuracy of tax reporting for their clients

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
</table>

3. Associated Knowledge Area(s)
1. **Outcome Target**

Increase in number of farmers who identify and use a tool (such as Quicken) for farm financial records

2. **Outcome Type** : Change in Action Outcome Measure

   2008 : 30  
   2009 : 30  
   2010 : 30  
   2011 : 30  
   2012 : 30

3. **Associated Knowledge Area(s)**

   ● 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Increase in number of tax schools participants understanding federal and state tax laws and requirements

2. **Outcome Type** : Change in Knowledge Outcome Measure

   2008 : 680  
   2009 : 680  
   2010 : 680  
   2011 : 680  
   2012 : 680

3. **Associated Knowledge Area(s)**

   ● 601 - Economics of Agricultural Production and Farm Management  
   ● 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Increase in number of farmers who use financial reports with another person for business purposes

2. **Outcome Type** : Change in Action Outcome Measure

   2008 : 15  
   2009 : 15  
   2010 : 15  
   2011 : 15  
   2012 : 15

3. **Associated Knowledge Area(s)**

   ● 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Increase in number of farmers who implement a practice that improves soil quality resulting in improved crop yield and quality

2. **Outcome Type** : Change in Action Outcome Measure

   2008 : 45  
   2009 : 45  
   2010 : 45  
   2011 : 45  
   2012 : 45

3. **Associated Knowledge Area(s)**

   ● 204 - Plant Product Quality and Utility (Preharvest)  
   ● 601 - Economics of Agricultural Production and Farm Management  
   ● 602 - Business Management, Finance, and Taxation

1. **Outcome Target**

Increase in number of farmers who implement at least one change as outlined in the water quality protection plan

2. **Outcome Type** : Change in Action Outcome Measure

   2008 : 0  
   2009 : 0  
   2010 : 0  
   2011 : 0  
   2012 : 0

3. **Associated Knowledge Area(s)**

   ● 112 - Watershed Protection and Management  
   ● 133 - Pollution Prevention and Mitigation
1. Outcome Target
Increase the number of businesses who expand as a result of canoe trail recreation

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tr>
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</tr>
</tbody>
</table>

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
number of beef farmers participating in consignment sales and value added beef markets who report an increased net profit

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</tr>
</tbody>
</table>

3. Associated Knowledge Area(s)

- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
number of businesses who report expected increases in profitability directly related to tourism

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. Associated Knowledge Area(s)

- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of farmers that develop a nutrient management plan for their farm

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase the number of farmers who implement at least one change in nutrient management plan practices

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</table>

3. Associated Knowledge Area(s)
1. Outcome Target
Increase the number of farmers who implement grazing plans

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
- 133 - Pollution Prevention and Mitigation
- 204 - Plant Product Quality and Utility (Preharvest)
- 307 - Animal Management Systems
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase the number of farmers who increase their knowledge of slag barrier technology

2. Outcome Type: Change in Knowledge Outcome Measure
2008 : 30  2009 : 0  2010 : 0  2011 : 0  2012 : 0

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase the number of farmers who increase their understanding of current requirements for planning and implementation of nutrient management plans for farm compliance with the Vermont medium farm operation permit

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase the number of legislators and key decision makers who increase understanding of current local agricultural issues

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
- 601 - Economics of Agricultural Production and Farm Management
1. **Outcome Target**  
Increase the number of school facilities that implement IPM strategies

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. **Associated Knowledge Area(s)**
   - 216 - Integrated Pest Management Systems
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
Increase the number of sheep producers who supply lamb to Vermont Quality Meats

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</table>

3. **Associated Knowledge Area(s)**
   - 307 - Animal Management Systems
   - 601 - Economics of Agricultural Production and Farm Management
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
Decrease in number of days of beach closures in pilot areas.

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</table>

3. **Associated Knowledge Area(s)**
   - 112 - Watershed Protection and Management
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**  
Farmers will make a change by learning how to: grow oil seed crops, harvest oil seed crops, process oil seed crops into oil, produce biofuel, and plan a cooperative on-farm biofuel facility

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tr>
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</table>

3. **Associated Knowledge Area(s)**
   - 204 - Plant Product Quality and Utility (Preharvest)
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**  
Increase growers who will save time (therefore money from labor savings) as a result of learning how to access information they need more readily, and from new knowledge of pest-control sites, be able to provide better, more cost effective, and least toxic controls.

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
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</tbody>
</table>
216 - Integrated Pest Management Systems

1. Outcome Target
Increase in number of dairy/diverse livestock farmers who indicate intent to make at least 1 change

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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3. Associated Knowledge Area(s)
- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in number of tour leaders and organizers that enforce biosecurity measures when visiting farms

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase in small ruminant dairy farmers who will use information to make decisions, change management or purchases to improve animal health/production and farm profitability.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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</table>

3. Associated Knowledge Area(s)
- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in small ruminant farmers who intend to use information to make decisions, change management or purchases to improve animal health/production and farm profitability.

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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3. Associated Knowledge Area(s)
- 307 - Animal Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase in the number of Extension Nonprofit organizations who express an interest in the manual implement programming for women farmers.
2. **Outcome Type**: Change in Action Outcome Measure  

3. **Associated Knowledge Area(s)**  
   - 307 - Animal Management Systems  
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
   Increase in the number of Watershed Alliance (WSA) interns who report increased knowledge and skills related to environmental education and watersheds.

2. **Outcome Type**: Change in Knowledge Outcome Measure  

3. **Associated Knowledge Area(s)**  
   - 112 - Watershed Protection and Management  
   - 723 - Hazards to Human Health and Safety

1. **Outcome Target**  
   Increase the number of Vermont Maple Producers who have improved knowledge about how to meet Vermont Maple Quality Standards.

2. **Outcome Type**: Change in Knowledge Outcome Measure  
   2008 :30  2009 :30  2010 :30  2011 :30  2012 :30

3. **Associated Knowledge Area(s)**  
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
   Increase in number of farms that implement business plans resulting in increased profitability.

2. **Outcome Type**: Change in Action Outcome Measure  

3. **Associated Knowledge Area(s)**  
   - 602 - Business Management, Finance, and Taxation

1. **Outcome Target**  
   Increase number of gardeners and growers provided results will change knowledge, grow new crops.

2. **Outcome Type**: Change in Action Outcome Measure  

3. **Associated Knowledge Area(s)**  
   - 112 - Watershed Protection and Management  
   - 204 - Plant Product Quality and Utility (Preharvest)  
   - 216 - Integrated Pest Management Systems  
   - 601 - Economics of Agricultural Production and Farm Management

1. **Outcome Target**  
   Increase number of towns using stormwater management and non-point source pollution prevention/ best management practices.
2. Outcome Type: Change in Action Outcome Measure
   2008: 3  2009: 3  2010: 3  2011: 3  2012: 3

3. Associated Knowledge Area(s)
   • 112 - Watershed Protection and Management
   • 133 - Pollution Prevention and Mitigation
   • 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase the knowledge and skills of youth to raise healthy animals. (Action)

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
   • 307 - Animal Management Systems

1. Outcome Target
Increase the number of growers implementing Integrated Pest Management (IPM) practices reducing reliance on pesticides.

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
   • 112 - Watershed Protection and Management
   • 216 - Integrated Pest Management Systems
   • 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase the number of participants who understand current local agricultural issues related to dairy farming and environmental protection.

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
   • 112 - Watershed Protection and Management
   • 307 - Animal Management Systems
   • 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target
Increase the number of participants who average 8 hours each in seminars who will change business practices

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
   • 602 - Business Management, Finance, and Taxation

1. Outcome Target
Increase the number of participants who maintain direct involvement in promoting the importance of Vermont agriculture

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2. Outcome Type : Change in Action Outcome Measure

2008 : 28  
2009 : 28  
2010 : 28  
2011 : 28  
2012 : 28

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management

1. Outcome Target

Increase the number of private landowners who will change their gardening practices to save money, be more environmentally sustainable as a result of education provided.

2. Outcome Type : Change in Action Outcome Measure

2008 : 300  
2009 : 300  
2010 : 300  
2011 : 300  
2012 : 300

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 601 - Economics of Agricultural Production and Farm Management

1. Outcome Target

Increase the number of private landowners who will change gardening practices

2. Outcome Type : Change in Action Outcome Measure

2008 : 40  
2009 : 40  
2010 : 40  
2011 : 40  
2012 : 40

3. Associated Knowledge Area(s)

- 204 - Plant Product Quality and Utility (Preharvest)

1. Outcome Target

Increase the public's awareness of the threat of ALB

2. Outcome Type : Change in Knowledge Outcome Measure

2008 : 2000  
2009 : 0  
2010 : 0  
2011 : 0  
2012 : 0

3. Associated Knowledge Area(s)

- 216 - Integrated Pest Management Systems
- 723 - Hazards to Human Health and Safety

1. Outcome Target

Increased towns use of geospatial data relating to water resource protection

2. Outcome Type : Change in Action Outcome Measure

2008 : 10  
2009 : 10  
2010 : 0  
2011 : 0  
2012 : 0

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management

1. Outcome Target

Increase/maintain the USDA NRCS support for Sustainable Ag practices

2. Outcome Type : Change in Action Outcome Measure

2008 : 85000  
2009 : 85000  
2010 : 85000  
2011 : 85000  
2012 : 85000

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
133 - Pollution Prevention and Mitigation  
204 - Plant Product Quality and Utility (Preharvest)  
216 - Integrated Pest Management Systems  
307 - Animal Management Systems  
601 - Economics of Agricultural Production and Farm Management  
602 - Business Management, Finance, and Taxation  
723 - Hazards to Human Health and Safety

1. Outcome Target
Increased delivery of organic dairy information to dairy farmers across the nation that is accessible, reliable, credible and up-to-date.

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
   ● 112 - Watershed Protection and Management  
   ● 307 - Animal Management Systems  
   ● 602 - Business Management, Finance, and Taxation

1. Outcome Target
Local retail lawn and garden centers are sources of information about low input lawn care options

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
   ● 112 - Watershed Protection and Management  
   ● 204 - Plant Product Quality and Utility (Preharvest)  
   ● 723 - Hazards to Human Health and Safety

1. Outcome Target
Growers increase knowledge of IPM strategies and techniques and how to prevent pest management problems.

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
   ● 216 - Integrated Pest Management Systems

1. Outcome Target
Increase in number of Master Gardener participants earning certification

2. Outcome Type: Change in Action Outcome Measure
   2008 : 100  2009 : 100  2010 : 100  2011 : 100  2012 : 100

3. Associated Knowledge Area(s)
   ● 112 - Watershed Protection and Management
- 204 - Plant Product Quality and Utility (Preharvest)
- 216 - Integrated Pest Management Systems

1. Outcome Target
Increase in number of community watershed organizations developing pollution prevention outreach effort

2. Outcome Type: Change in Action Outcome Measure

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\begin{array}{cccccc}
\text{2008} & \text{2009} & \text{2010} & \text{2011} & \text{2012} \\
5 & 0 & 0 & 0 & 0 \\
\end{array}
\]

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase in number of educators in Watershed Alliance Program increasing knowledge and use of new teaching tools and techniques

2. Outcome Type: Change in Knowledge Outcome Measure

\[
\begin{array}{cccccc}
\text{2008} & \text{2009} & \text{2010} & \text{2011} & \text{2012} \\
21 & 21 & 21 & 21 & 21 \\
\end{array}
\]

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation

1. Outcome Target
Increase in number of growers intending to use biorational pesticides

2. Outcome Type: Change in Knowledge Outcome Measure

\[
\begin{array}{cccccc}
\text{2008} & \text{2009} & \text{2010} & \text{2011} & \text{2012} \\
30 & 0 & 0 & 0 & 0 \\
\end{array}
\]

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase in number of households adopting low input lawn/garden care practices

2. Outcome Type: Change in Action Outcome Measure

\[
\begin{array}{cccccc}
\text{2008} & \text{2009} & \text{2010} & \text{2011} & \text{2012} \\
150 & 75 & 100 & 150 & 150 \\
\end{array}
\]

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase in number of lakeshore households aware of link between residential practices and coastal water quality
2. **Outcome Type:** Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
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3. **Associated Knowledge Area(s)**
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 723 - Hazards to Human Health and Safety

1. **Outcome Target**
Increase in number of middle school students demonstrating increased awareness of the importance of urban watersheds

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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3. **Associated Knowledge Area(s)**
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation
- 723 - Hazards to Human Health and Safety

1. **Outcome Target**
Increase in number of participants who report making a change in on-farm production, marketing, financial management, legal or human resource aspects of their business

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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3. **Associated Knowledge Area(s)**
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation

1. **Outcome Target**
Increase in number of schools that continue to participate in Watershed Alliance (WSA) Program in subsequent years

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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</table>

3. **Associated Knowledge Area(s)**
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation

1. **Outcome Target**
Increase in number of sheep farmers who increase knowledge about grazing practices

2. **Outcome Type:** Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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3. **Associated Knowledge Area(s)**
- 302 - Nutrient Utilization in Animals
- 307 - Animal Management Systems
- 315 - Animal Welfare/Well-Being and Protection
1. Outcome Target
Increase in number of students demonstrating increased knowledge of watersheds

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
- 112 - Watershed Protection and Management
- 133 - Pollution Prevention and Mitigation

1. Outcome Target
Increase in number of towns adopting residential domestic NPS surveys to develop pollution prevention education

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
- 133 - Pollution Prevention and Mitigation
- 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase in the number of horse owners who improve pasture management practices

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
- 102 - Soil, Plant, Water, Nutrient Relationships
- 104 - Protect Soil from Harmful Effects of Natural Elements
- 205 - Plant Management Systems
- 315 - Animal Welfare/Well-Being and Protection

1. Outcome Target
Increase in the number of horse owners with increased knowledge of pasture management as it relates to surface water runoff

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
- 102 - Soil, Plant, Water, Nutrient Relationships
- 104 - Protect Soil from Harmful Effects of Natural Elements
- 112 - Watershed Protection and Management
- 315 - Animal Welfare/Well-Being and Protection

1. Outcome Target
Increase in the number of student led community service watershed/water quality outreach projects

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
Increase knowledge of organic apple production techniques

1. Outcome Target
Increase or maintain the number of growers who will make informed decisions regarding best integrated pest management (IPM) options to reduce economic, health and/or environmental risks

2. Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
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3. Associated Knowledge Area(s)
- 102 - Soil, Plant, Water, Nutrient Relationships
- 204 - Plant Product Quality and Utility (Preharvest)
- 216 - Integrated Pest Management Systems

Increase the number of home gardeners who implement Integrated Pest Management (IPM) practices

1. Outcome Target
Increase the number of commercial properties reducing landscape inputs

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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3. Associated Knowledge Area(s)
- 102 - Soil, Plant, Water, Nutrient Relationships
- 133 - Pollution Prevention and Mitigation
- 205 - Plant Management Systems
● 133 - Pollution Prevention and Mitigation
● 216 - Integrated Pest Management Systems

1. Outcome Target
Increase the number of home gardeners who increase their knowledge of Integrated Pest Management (IPM) practices

2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
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</table>

3. Associated Knowledge Area(s)
● 133 - Pollution Prevention and Mitigation
● 216 - Integrated Pest Management Systems

1. Outcome Target
Increase the number of people who show improvement in food safety and preservation practices

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
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<th>2010</th>
<th>2011</th>
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</table>

3. Associated Knowledge Area(s)
● 723 - Hazards to Human Health and Safety

1. Outcome Target
Increase the number of sheep farmers who implement grazing plans

2. Outcome Type : Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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</table>

3. Associated Knowledge Area(s)
● 102 - Soil, Plant, Water, Nutrient Relationships
● 104 - Protect Soil from Harmful Effects of Natural Elements
● 204 - Plant Product Quality and Utility (Preharvest)
● 205 - Plant Management Systems
● 302 - Nutrient Utilization in Animals
● 315 - Animal Welfare/Well-Being and Protection

1. Outcome Target
Increase the number of sheep producers who increase knowledge and skills in Managed Intensive Grazing

2. Outcome Type : Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
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<th>2010</th>
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</table>

3. Associated Knowledge Area(s)
● 102 - Soil, Plant, Water, Nutrient Relationships
● 104 - Protect Soil from Harmful Effects of Natural Elements
● 204 - Plant Product Quality and Utility (Preharvest)
● 205 - Plant Management Systems
● 302 - Nutrient Utilization in Animals
● 315 - Animal Welfare/Well-Being and Protection
1. **Outcome Target**

Increase the number of student interns teaching backyard composting

2. **Outcome Type**: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
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</table>

3. **Associated Knowledge Area(s)**

- 102 - Soil, Plant, Water, Nutrient Relationships
- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems

V(J). **Planned Program (External Factors)**

1. **External Factors which may affect Outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Economy
- Government Regulations
- Competing Public priorities
- Public Policy changes

**Description**

Weather can affect sap and syrup quality
High cost of gas may hinder travel to workshops
Some sugarmakers may not have access to forest land with the proper species density or topography that permits efficient sap collection
Newer and more efficient technologies for both sap collecting and syrup making may be too expensive for some sugarmakers
Price of organic grain stays high
Sponsors of on-farm field days have become lax about practicing biosecurity, and many ag service providers bend to the culture of not inconveniencing hosts and attendees
Regulations for fuel production
Dairy farm profitability is currently influenced by decreasing price received for milk and meat products sold, coupled with increasing costs of production inputs including fuel, taxes, feed, fertilizer and labor
State and Federal water quality regulations require dairy farmers to implement management changes that may not be economically feasible or personally valued
There is money available to farmers to fund on-farm projects that improve water quality
Soil Building takes time and on some farms investments in soil quality will take more than the duration of the project to show results
If funds go away, so will the programs. If milk prices continue to be low, we may see a rise or fall in the demand for these programs
Farmers are generally producers of commodities of which they have no control of the price. They are also subject to biological and natural processes which affect their financial security and profitability
New farmers interested in sheep and market for lamb stays consistent
More tax practitioners need to be licensed

V(K). **Planned Program (Evaluation Studies and Data Collection)**

1. **Evaluation Studies Planned**
Other (other data sources)
Before-After (before and after program)
After Only (post program)
Retrospective (post program)
Case Study

Description
Beef producers report information and services improved their profitability, stewardship and/or management.: Survey random sample of readers
Customers that receive organic grain production research data will integrate results into production systems: Follow-up workshop and surveys
- Decrease in number of days of beach closures in pilot areas: 1. Annual (Sept.) survey of local health officials, volunteer monitors for number of days of beach closures in selected lake beaches and river swimming holes; 2. Review of records at VT Dept. of Health for confirmation and for comparison to previous data
- Extension employees will know what is expected from them in a disaster: Email/we-based survey, Pass ICS 100 certification test
Farmers will make a change by learning how to: grow oil seed crops, harvest oilseed crops, process oil seed crops into oil, produce biofuel, and plan a cooperative on-farm biofuel facility: Farmers will be surveyed after attending workshops to evaluate if they learned how to grow, process, and produce biofuel.
- Farmers will make a change by: growing oil seed crops, using local on-farm vegetable oil or biodiesel, and/or planning an individual or cooperative on-farm vegetable oil or biodiesel facility.: Networking, observation, and post workshop evaluations, Summer 07 & 08
Increase growers who will save time (therefore money from labor savings) as a result of learning how to access information they need more readily, and from new knowledge of pest-control sites be able to provide better, more cost effective, and least toxic controls:
board evaluation
Increase in number of dairy farmers who adopt a best management practice they learned from another farmer participant: Farm visits and/or telephone survey and post-meeting written evaluation
- Increase in number of dairy farmers who adopt best management practices to improve their weak areas of the farming operation: Farm visits and/or telephone survey and post-meeting written evaluation
- Increase in number of dairy farms increasing forage quality as measured by ADF, NDF, Protein, and NEL: On-line survey and/or telephone survey
- Increase in number of dairy farms which increase pregnancy/fertility rate: On-line survey and/or telephone survey
Increase in number of dairy/diverse livestock farmers who indicate intent to make at least 1 change: End of conference survey Report within 3 months to begin planning for next conference
- Increase in number of farm families who take action on a recommendation made by an Extension team after the APT plan is developed: Individual review of 10 APT plans or other referrals in 2006, plus 30 farmer evaluation surveys concerning impact of technical assistance. Reviews of APT plans and farmer evaluation surveys will be completed quarterly by Guillette and PI by 6/30/07. Increase in number of farmers having a greater understanding of the costs associated with organic farming: Survey and financial data collection forms; data collection in Spring months. Analysis during summer. Results published in articles and presented at workshops. first study of this scale in the US to date
Increase in number of farms completing Dairy Stewardship assessment who adopt at least two sustainab

2. Data Collection Methods
- Observation
- Telephone
- Case Study
- Structured
- Mail
- Portfolio Reviews
- Unstructured
- Sampling

Description
(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
Community Development and the Personal and Intellectual Development of Youth

2. Brief summary about Planned Program
Extension and AES address community engagement, economic development, the identification of community assets and challenges to create sustainable and viable communities. Programming focuses on engaging youth in communities through service, building skills of business and community leaders, and building supports to meet the needs of the communities underserved or with at-risk populations. AES’s work with rural communications, market development and public land management support Extension’s programs with research based information. The University of Vermont Extension 4-H program has been teaching youth leadership, citizenship and life skills, operating in all fourteen counties in Vermont through a variety of well-tested delivery modes. All programs are based on learning-by-doing approaches—the experiential model—that allow youth to experience mastery in subject matter, a sense of belonging to a group, a sense of generosity to those around them, and a sense of independence, with opportunities to take on leadership and make important decisions. Projects under this planned program are designed to bring together people with diverse interests to share perceived problems, find common ground, and identify resources and tools for prioritizing and solving those problems through a cooperative, collaborative effort. The 4-H program is project-based curriculum focused on life skills education over 6-8 hours of sequential learning and perhaps years of contact with a trained leader. Two-thirds of participants live in towns with fewer than 10,000 people, and an additional 12% live on farms, reflecting the rural and small-town audiences primarily served. Over half of all youth served live in racially and ethnically mixed communities. 4-H serves youth in both traditional 4-H subjects and in new and growing area of interests, such as technology, through 4-H clubs, afterschool programs and other innovative venues.

3. Program existence: Mature (More then five years)
4. Program duration: Long-Term (More than five years)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
- 124 4% Urban Forestry
- 601 1% Economics of Agricultural Production and Farm Management
- 603 1% Market Economics
- 604 1% Marketing and Distribution Practices
- 605 1% Natural Resource and Environmental Economics
- 608 5% Community Resource Planning and Development
- 609 1% Economic Theory and Methods
- 723 9% Hazards to Human Health and Safety
- 724 9% Healthy Lifestyle
- 801 1% Individual and Family Resource Management
- 805 15% Community Institutions, Health, and Social Services
- 806 50% Youth Development
- 903 2% Communication, Education, and Information Delivery

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
Vermont is largely comprised of small rural communities where infrastructure is limited and a relatively low level of technology is available. Process and manufacturing businesses are limited and leaving the state. Transportation is an issue, and costs of living and doing business are rising. There is a growing divide between economic classes. Each community, however defined, has a unique set of challenges to address, from participation in local and state governance, to land use to support for new populations, and engagement of our youth.

Studies indicate a number of problems ranging from declining levels of voter participation and public apathy toward elections to decreasing interest in volunteer activities and community groups. They also document the younger generation's apparent disinterest in public affairs and lack of knowledge about our political system. There is a decline in civic engagement.
Woodruff, in First Democracy: The challenge of an ancient idea (2005), presents significant challenges for our current educational system, which focuses on preparing our young people for jobs, but fails in teaching good citizenship. And there continues to be a need to serve children and youth who move with family member(s) or guardian(s) in search of temporary or seasonal work in agriculture or logging. A positive relationship between parents and school is essential to the success of their children's academic life. Issues around land use are abundant, including our urban and community forests. These assets provide ecological services that benefit the environmental, economic and social conditions of Vermont communities. This resource, which includes trees in our backyards, along our streets, in parks and town greens and in municipal forests can directly enhance the atmosphere and transform the surrounding environment through atmospheric carbon dioxide (CO2) reduction and energy conservation, airborne pollutant absorption and interception, and microclimate modifications. They protect and enhance water quality and supply by filtering out pollutants, controlling storm water runoff, enabling water infiltration and reducing erosion. They can help offset the high costs of fossil fuel consumption by reducing dependence on summer air conditioning and winter heating. They improve the economic development through increases in property values, rental occupancy rates, consumer patronage and expenditure, and job market. When urban and community forests are well planned and managed, communities can begin to reap the many benefits they provide. While Vermont is approximately 78% forested, 38% of Vermont's residents live in urban areas and with the increasing urbanization of Vermont, up 22% from 1990, the canopy cover over Vermont communities is decreasing and in many cases the resource is in poor health. As the state continues to develop and we strive to keep our downtowns vibrant our urban and community forests become more important. As we view our agricultural foundation and the people who live and work in Vermont, we find farm and rural residents with disabilities face challenges maintaining and securing employment. Agriculture, related industries, and rural residents of Vermont have a high rate of injuries and other disabling conditions. Individuals with disabilities experience a high rate of unemployment; however, individuals with disabilities can and want to work.

Problems being addressed:
Community Engagement
Farm and rural residents with disabilities face challenges
Life Skills for Youth

2. Scope of the Program

- In-State Extension
- In-State Research
- Integrated Research and Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Youth want to engage with community organizations and agencies to address issues of the youth population. It is believed that participants will gain leadership skills and develop successful projects that will enable them to move their communities forward. Individuals living in rural areas have difficulty accessing services. An aging population combined with an increase in youth leaving the state for jobs leaves community human assets strained. Home grown entrepreneurship and recruiting will attract businesses to the state. Vermont products seen as valued added, as are the communities in which they are produced. Community planning leads to a more desirable living environment. Vermont prides itself on a tradition of local control and relies heavily on volunteers to staff the hundreds of local boards, commissions, and committees that keep local municipalities running. Materials included in the 4-H National Curriculum address Life Skills education. More hours of programming with a caring adult carries a greater benefit. Youth in limited resources families have fewer options for opportunities to gain mastery of life skills.

2. Ultimate goal(s) of this Program

- Improve personal and intellectual development of Vermont youth
- Youth gain mastery of life skills
- Individuals and families have greater financial security
- Improve community collaboration to address issues and build community assets
- Citizens of target communities actively participate in local government and/or community groups where policy decisions are made.
Community members will mobilize more effectively to better understand and solve community problems
Farm and rural residents with disabilities secure and maintain gainful employment
Youth are involved in communities as active, productive citizens
Economic development and maintenance of the state is improved
Local production and consumption are linked
Vermont communities are seen as desirable places to live and work

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

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<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
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V(F). Planned Program (Activity)

1. Activity for the Program

4-H Lifeskills Development Program: Help youth acquire Life Skills in the following areas: Decision Making; Critical Thinking; Problem-Solving; Communication; Goal-Setting; and Skills for Everyday Living to succeed as adults. Delivery Methods: 6-8 sequential learning hours using experiential learning techniques for in-school, afterschool, or out-of-school settings.

Downtown Business District Analysis: This program provides the community with analytical techniques that can be put to work immediately in economic revitalization efforts. The process requires input from local residents so that recommendations reflect both market conditions as well as the preferences of the community. Delivery Methods: Group meetings and discussion groups in community.

EnviroQuest: Help youth acquire Life Skills in the following areas: Decision Making; Critical Thinking; Problem-Solving; Communication; Goal-Setting; and Skills for Everyday Living to succeed as adults. Delivery Methods: 6-8 sequential learning hours using experiential learning techniques for in-school, afterschool, or out-of-school settings.

Financial Literacy: 1) Project Name: Personal Financial Literacy Purpose: Promote, teach and support personal financial literacy education for youth. Delivery Methods: Exhibit at professional development meetings and public events to promote and teach the use of the free curriculum and support materials from the National Endowment for Financial Education (NEFE), Service and teaching in partnership with the VT affiliate of the national Jumpstart Coalition, Personal finance information distributed through radio, electronic newsletters, team building and creation of unbiased information resource through eXtension Financial Security for AllCommunity of Practice (CoP). Presentations and exhibits at national conferences. Audience: Teachers, Extension and other organizations program staff, community volunteers working with youth, and community leaders affecting educational policies. Youth in 4H and UVM Continuing Education Summer programs. Duration: Long 3+ years (NEFE offers free curriculum materials and monetary support for expenses, eXtension CoP for Youth Financial Literacy contributes @ $3,000.

2) Project Name: Youth Educator Support Purpose: Collaboration with 4H Youth Development State Director and Regional Youth Educators and volunteer leaders in creating opportunities for youth to develop life skills such as: decision making, critical thinking, solving problems, goal setting, communication, leadership and financial literacy. Delivery Methods: Participation and presentations at Vermont Extension Youth Development training events, 4-H Youth Central Region events, VT State 4H Day, VT Teen Congress, etc. Exhibits at professional development meetings and public events in VT and at national Conferences. Electronic curriculum development and review. Audience: 4-H Youth Development Educators, volunteers and youth. Other organizations program staff, community volunteers and leaders affecting educational policies in Vermont and other states. Duration: medium 1-3 years.

Growing Connections: supported by base and EFNEP funds, this youth focused program teaches that nutrition, food safety, and food security issues through gardening.
Migrant Education Recruitment Program (MEP): To ensure that children of migrant farm workers, and qualifying youth under age 22, are aware of the educational support services available to them.

Delivery Methods: Outreach to schools, agricultural employers, and social service agencies throughout the state.

Northern New England AgrAbility Project: To make recommendations that can be used by farmers with disabilities to maintain employment, through development of accommodations.

Delivery Methods: Process involves recruitment of eligible individuals through referrals. Intake information is recorded on farms provided by the National AgrAbility Project. Site visits are the primary means of contact.

Rural and Agricultural VocRehab Program: To assist individuals with disabilities living in rural areas and those in agricultural professions or self-employment by providing them with a variety of services tailored to their needs in order to maintain or obtain their selected employment outcome.

Delivery Methods: Process involves recruitment of eligible individuals through referrals, assessment, writing up a plan of action, and providing services for eligible individuals. Printed materials and individual technical assistance are offered to strengthen the capacity of individuals to maintain or to prepare for meaningful work.

Take Charge (TC/RC): Helping community adult members to gain the skills necessary to be confident enough to take part in town government by ultimately competing for town government leadership positions.

Delivery Methods: Meetings, discussion groups.

Town Officers Education Conference & Municipal Officers Management (TOEC/MOMS): Local town officers, decisionmakers and officials receive education and tools to improve job performance and management, addressing topics from new legislation to handling difficult customers.

Delivery methods: Each one-day conference is held annually, at multiple sites.

Vermont Urban and Community Forestry program: A joint initiative between the University of Vermont Extension and the Department of Forests, Parks and Recreation. The mission of the program is to promote the stewardship of the urban and rural landscapes to enhance the quality of life in Vermont communities. The program provides educational, technical and financial assistance in the management of trees and forests, in and around the built landscape.

Delivery Methods: Classes, meetings, various media, community volunteer projects.

AES efforts:
- Community Development and planning
- On farm/community energy generation and secondary revenue generation
- Community and technology for rural community development
- Community market development and local foods distribution
- Communication methods and research studies for non-profit and profit organizations
- Agritourism
- Public land management
- Development of environmentally safe, non food product development (adhesives, plastics and road deicer) from whey
- Development of Artisan cheese markets
- Distinctiveness/marketing of regional foods
- Food by-product development
- Transportation initiatives

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
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<tbody>
<tr>
<td>- Other 2 (4-H Afterschool, club)</td>
<td>- Other 1 (school enrichment)</td>
</tr>
<tr>
<td>- Group Discussion</td>
<td>- Newsletters</td>
</tr>
<tr>
<td>- One-on-One Intervention</td>
<td>- Web sites</td>
</tr>
<tr>
<td>- Other 1 (Train the Trainer)</td>
<td>- TV Media Programs</td>
</tr>
<tr>
<td>- Workshop</td>
<td>- Other 2 (radio ed. spots)</td>
</tr>
</tbody>
</table>

3. Description of targeted audience

4-H: Adult Volunteers
4-H: Youth Volunteers
Adults
Age 19 - 24 Young Adult
Age 25 - 60 Adult
Agriculture: Farmers
Communities: Educators
Communities: Local Officials/Leaders
Communities: Non-Governmental Organizations
Community leaders and citizens
Extension: Faculty/Staff
Public: Families
Public: General
Public: Nonprofit Organizations
4-H: Youth
Age 13 - 18 Youth  
Age 8 - 18 Youth  
Youth

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
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<td>2300</td>
<td>3800</td>
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2. (Standard Research Target) Number of Patents

Expected Patents

2008: 1  
2009: 1  
2010: 1  
2011: 1  
2012: 1

3. Expected Peer Review Publications

<table>
<thead>
<tr>
<th>Year</th>
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<th>Extension Target</th>
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<tr>
<td>2012</td>
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</tbody>
</table>

V(H). State Defined Outputs

1. Output Target

- AgrAbility - on-farm assessments
  
2008: 0  
2009: 0  
2010: 0  
2011: 0  
2012: 0

- AgrAbility - peer support groups
  
2008: 0  
2009: 0  
2010: 0  
2011: 0  
2012: 0

- AgrAbility - public presentations
  
2008: 0  
2009: 0  
2010: 0  
2011: 0  
2012: 0

- AgrAbility-identify prospective consumers
<table>
<thead>
<tr>
<th>Year</th>
<th>Club service projects</th>
<th>Committee projects implemented</th>
<th>Community Assistance and Support</th>
<th>Foundation trustees trainings</th>
<th>Journal of Extension Article</th>
<th>Migrant Education Program Identification and Recruitment Certificate of Eligibility review</th>
<th>Migrant Education Program Identification and Recruitment Certificate of Eligibility print materials</th>
<th>Migrant Education Program Recruiter Training &amp; Support</th>
<th>Migrant Education Program Web Page</th>
<th>Marketing Study report</th>
<th>Migrant Education Program Public Relations articles</th>
<th>Rural and Ag VocRehab assessments</th>
<th>Rural and Ag VocRehab service plans</th>
<th>Rural and Ag VocRehab services delivered</th>
</tr>
</thead>
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Site project programs

- 2008:15
- 2009:15
- 2010:15
- 2011:15
- 2012:15

State Council meetings

- 2008:0
- 2009:0
- 2010:0
- 2011:0
- 2012:0

Stewardship of the Urban Landscape class

- 2008:5
- 2009:5
- 2010:5
- 2011:5
- 2012:5

Study Committee Research Tool Dev meetings

- 2008:6
- 2009:6
- 2010:6
- 2011:6
- 2012:6

Take Charge/ReCharge Steering Committee members

- 2008:6
- 2009:6
- 2010:6
- 2011:6
- 2012:6

Take Charge/ReCharge committee teaching

- 2008:6
- 2009:6
- 2010:6
- 2011:6
- 2012:6

Take Charge/ReCharge presentations - National Extension Tourism conference

- 2008:0
- 2009:0
- 2010:0
- 2011:0
- 2012:0

Take Charge/ReCharge workshops

- 2008:3
- 2009:3
- 2010:3
- 2011:3
- 2012:3

Teen board for Teen congress meetings

- 2008:0
- 2009:0
- 2010:0
- 2011:0
- 2012:0

Tree Warden training

- 2008:1
- 2009:1
- 2010:1
- 2011:1
- 2012:1

Voter responsibility and public policy training in 36 towns

- 2008:0
- 2009:0
- 2010:0
- 2011:0
- 2012:0

Town Officers Education Conference and Municipal Officers Management Seminars conferences

- 2008:1
- 2009:1
- 2010:1
- 2011:1
- 2012:1

Advanced Stewardship of the Urban Landscape Training

- 2008:2
- 2009:2
- 2010:2
- 2011:2
- 2012:2

SOUL website

- 4-H Adult New Volunteer training

- 4-H Adult Volunteer training

- 4-H Adult Volunteer Contest Implementation training

- 4-H Educator training

- 4-H Lifeskill programming in clubs, afterschool, in-school and out of school

- Academic Year Program

- Afterschool site program

- Arbor Day Programming

- Citizen Pruner Program
  2008: 3 2009: 3 2010: 3 2011: 3 2012: 3

- Citizen Educational Opportunity

- Community and Urban Forestry Newsletter Article

- Deliver Natural Resources Track for Town Officials

- ECC Annual Report

- ECC close out report
  ● Evaluation of beginner record book

  ● High School Financial Planning Program Train the Trainner

  ● Livestock contest evaluation

  ● Personal Financial Literacy - youth

  ● RAVR Program Administration

  ● Rural and Ag VocRehab outreach efforts

  ● Small Steps for Health and Wealth Program

  ● Summer Work and Learn program

  ● Technical Community Workshops

  ● Tree Care Public Service Announcements

  ● Urban Community Forestry AFT Program

  ● Volunteer Training Manual (SOUL)

  ● Working Steer project book evaluation

  ● Youth doing club service project
2008 University of Vermont Combined Research and Extension Plan of Work


- Youth educator support

- Youth event presentations

V(I). State Defined Outcome

1. Outcome Target
   number of Certificates of Eligibility reviewed by the Dept. of Education that will be 100% accurate and reflect eligible migrant students

2. Outcome Type: Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)
   - 608 - Community Resource Planning and Development
   - 805 - Community Institutions, Health, and Social Services
   - 806 - Youth Development

1. Outcome Target
   number of community level town government positions that are contested on town ballot

2. Outcome Type: Change in Action Outcome Measure
   2008:0  2009:0  2010:0  2011:0  2012:0

3. Associated Knowledge Area(s)
   - 608 - Community Resource Planning and Development

1. Outcome Target
   Increase number of hours contributed by trained adult volunteer Site Staff

2. Outcome Type: Change in Action Outcome Measure

3. Associated Knowledge Area(s)
   - 608 - Community Resource Planning and Development
   - 806 - Youth Development

1. Outcome Target
   number of hours of community service received by community organizations by youth involved in club programs

2. Outcome Type: Change in Knowledge Outcome Measure
   2008:0  2009:0  2010:0  2011:0  2012:0

3. Associated Knowledge Area(s)
   - 608 - Community Resource Planning and Development
   - 805 - Community Institutions, Health, and Social Services
1. **Outcome Target**

Increase number of programs led or supported by trained volunteer Site Staff

2. **Outcome Type**: Change in Knowledge Outcome Measure

   2008: 12  
   2009: 12  
   2010: 12  
   2011: 12  
   2012: 12

3. **Associated Knowledge Area(s)**
   - 608 - Community Resource Planning and Development
   - 806 - Youth Development

1. **Outcome Target**

Increase number of youth serving as Foundation trustees who indicate a positive experience

2. **Outcome Type**: Change in Action Outcome Measure

   2008: 30  
   2009: 30  
   2010: 30  
   2011: 30  
   2012: 30

3. **Associated Knowledge Area(s)**
   - 806 - Youth Development

1. **Outcome Target**

number of youth serving on Boards

2. **Outcome Type**: Change in Action Outcome Measure

   2008: 0  
   2009: 0  
   2010: 0  
   2011: 0  
   2012: 0

3. **Associated Knowledge Area(s)**
   - 806 - Youth Development

1. **Outcome Target**

increase in number of Rural and Ag VocRehab consumers who report increased satisfaction with actual or potential employment

2. **Outcome Type**: Change in Knowledge Outcome Measure

   2008: 27  
   2009: 27  
   2010: 27  
   2011: 27  
   2012: 27

3. **Associated Knowledge Area(s)**
   - 724 - Healthy Lifestyle
   - 805 - Community Institutions, Health, and Social Services

1. **Outcome Target**

increase in number of Rural and Ag VocRehab consumers who have maintained or increased income, or decreased monetary losses

2. **Outcome Type**: Change in Knowledge Outcome Measure

   2008: 27  
   2009: 27  
   2010: 27  
   2011: 27  
   2012: 27

3. **Associated Knowledge Area(s)**
   - 724 - Healthy Lifestyle
   - 805 - Community Institutions, Health, and Social Services

1. **Outcome Target**

increase in number of Stewardship Of the Urban Landscapes participants who advocate for their communities' public tree resources
2. **Outcome Type**: Change in Action Outcome Measure  
   
   2008 : 20  
   2009 : 20  
   2010 : 20  
   2011 : 20  
   2012 : 20

3. **Associated Knowledge Area(s)**  
   - 124 - Urban Forestry  
   - 805 - Community Institutions, Health, and Social Services  
   - 903 - Communication, Education, and Information Delivery

1. **Outcome Target**  
   Increase number of Take Charge/ReCharge participants are satisfied with the process used as a means meeting community planning needs

2. **Outcome Type**: Change in Action Outcome Measure  
   
   2008 : 54  
   2009 : 54  
   2010 : 54  
   2011 : 54  
   2012 : 54

3. **Associated Knowledge Area(s)**  
   - 608 - Community Resource Planning and Development

1. **Outcome Target**  
   Increase in number of Tree Warden and Tree Board members proactive in management of their urban forest

2. **Outcome Type**: Change in Action Outcome Measure  
   
   2008 : 20  
   2009 : 20  
   2010 : 20  
   2011 : 20  
   2012 : 20

3. **Associated Knowledge Area(s)**  
   - 124 - Urban Forestry  
   - 805 - Community Institutions, Health, and Social Services  
   - 903 - Communication, Education, and Information Delivery

1. **Outcome Target**  
   Increase number of communities establishing or expanding community tree program

2. **Outcome Type**: Change in Action Outcome Measure  
   
   2008 : 10  
   2009 : 10  
   2010 : 10  
   2011 : 10  
   2012 : 10

3. **Associated Knowledge Area(s)**  
   - 124 - Urban Forestry  
   - 608 - Community Resource Planning and Development

1. **Outcome Target**  
   Increase in number of farm and rural residents with disabilities successfully served (ie case is closed)

2. **Outcome Type**: Change in Action Outcome Measure  
   
   2008 : 76  
   2009 : 76  
   2010 : 76  
   2011 : 76  
   2012 : 76

3. **Associated Knowledge Area(s)**  
   - 724 - Healthy Lifestyle  
   - 805 - Community Institutions, Health, and Social Services

1. **Outcome Target**  
   number of farmers with disabilities maintaining employment
2. Outcome Type: Change in Action Outcome Measure

2008: 0  2009: 0  2010: 0  2011: 0  2012: 0

3. Associated Knowledge Area(s)

- 723 - Hazards to Human Health and Safety

1. Outcome Target

Increase the number of 4-H club youth doing at least 6 hours of community service.

2. Outcome Type: Change in Action Outcome Measure


3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Increase number of 4-H club members who participate as pages in state level government, as a result of their 4-H experiences.

2. Outcome Type: Change in Action Outcome Measure


3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

Increase knowledge of forest ecosystems and initiation of management opportunities related to small acreage woodlands.

2. Outcome Type: Change in Action Outcome Measure


3. Associated Knowledge Area(s)

- 124 - Urban Forestry
- 605 - Natural Resource and Environmental Economics

1. Outcome Target

85% of Certificate of Eligibility reviewed by the Dept. of Education will be 100% accurate and reflect eligible migrant students.

2. Outcome Type: Change in Action Outcome Measure


3. Associated Knowledge Area(s)

- 805 - Community Institutions, Health, and Social Services

1. Outcome Target

Increase in number of MOMS participants who report increased skills in leadership and decision making.

2. Outcome Type: Change in Knowledge Outcome Measure


3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

1. Outcome Target

Increase in number of TOEC participants who report increased skills in leadership and decision making.
2. **Outcome Type**: Change in Knowledge Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
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<td>2011</td>
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<tr>
<td>2012</td>
<td>400</td>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 608 - Community Resource Planning and Development
   - 805 - Community Institutions, Health, and Social Services
   - 903 - Communication, Education, and Information Delivery

1. **Outcome Target**
   
   Increase number of 4-H staff self-reporting an increase in their ability to work with youth and adults to implement 4-H lifeskill development opportunities

2. **Outcome Type**: Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
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<td>2011</td>
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<tr>
<td>2012</td>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 806 - Youth Development

1. **Outcome Target**
   
   Increase student enrollment in the Vermont Migrant Education Program

2. **Outcome Type**: Change in Action Outcome Measure
   
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<th>Year</th>
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</table>

3. **Associated Knowledge Area(s)**
   - 604 - Marketing and Distribution Practices
   - 903 - Communication, Education, and Information Delivery

1. **Outcome Target**
   
   Increase the number of committee members implementing or enhancing broad-based decision-making skills

2. **Outcome Type**: Change in Action Outcome Measure
   
<table>
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<tr>
<th>Year</th>
<th>Target</th>
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<td>2011</td>
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<tr>
<td>2012</td>
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3. **Associated Knowledge Area(s)**
   - 604 - Marketing and Distribution Practices
   - 903 - Communication, Education, and Information Delivery

1. **Outcome Target**
   
   Increase the number of program participants serving as leaders on Committees

2. **Outcome Type**: Change in Action Outcome Measure
   
<table>
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<th>Year</th>
<th>Target</th>
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<td>2011</td>
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<tr>
<td>2012</td>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 604 - Marketing and Distribution Practices
   - 903 - Communication, Education, and Information Delivery

1. **Outcome Target**
   
   Increase the number of schools that offer financial literacy education
2. **Outcome Type**: Change in Action Outcome Measure
   - 2008: 25  
   - 2009: 25  
   - 2010: 25  
   - 2011: 25  
   - 2012: 25

3. **Associated Knowledge Area(s)**
   - 604 - Marketing and Distribution Practices
   - 903 - Communication, Education, and Information Delivery

**1. Outcome Target**
Increase the number of volunteers self reporting an increase in their ability to implement a 4-H lifeskill development for youth

2. **Outcome Type**: Change in Action Outcome Measure
   - 2008: 586  
   - 2009: 614  
   - 2010: 617  
   - 2011: 622  
   - 2012: 622

3. **Associated Knowledge Area(s)**
   - 806 - Youth Development

**1. Outcome Target**
Increase the number of youth who set and reach goals identified at the beginning of the 4-H year

2. **Outcome Type**: Change in Action Outcome Measure
   - 2008: 1622  
   - 2009: 1622  
   - 2010: 1622  
   - 2011: 1622  
   - 2012: 1622

3. **Associated Knowledge Area(s)**
   - 806 - Youth Development

**1. Outcome Target**
4-H club youth doing at least 6 hours of community service

2. **Outcome Type**: Change in Action Outcome Measure
   - 2008: 30  
   - 2009: 60  
   - 2010: 80  
   - 2011: 120  
   - 2012: 120

3. **Associated Knowledge Area(s)**
   - 805 - Community Institutions, Health, and Social Services
   - 806 - Youth Development

**1. Outcome Target**
Youth have greater opportunities to access and learn financial planning skills

2. **Outcome Type**: Change in Knowledge Outcome Measure
   - 2008: 1000  
   - 2009: 1000  
   - 2010: 1000  
   - 2011: 1000  
   - 2012: 1000

3. **Associated Knowledge Area(s)**
   - 806 - Youth Development

**1. Outcome Target**
Increase in number of individuals who implement financial security and health strategies

2. **Outcome Type**: Change in Action Outcome Measure
   - 2008: 50  
   - 2009: 50  
   - 2010: 50  
   - 2011: 50  
   - 2012: 50

3. **Associated Knowledge Area(s)**
   - 603 - Market Economics
   - 801 - Individual and Family Resource Management
1. **Outcome Target**

Increase in number of youth reached with lifeskills development programming self-report an increase in mastery for targeted life skill area: Decision making: critical thinking; problem solving; communication; goal setting or skills for everyday living.

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
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</table>

3. **Associated Knowledge Area(s)**

- 806 - Youth Development

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1. **Outcome Target**

Increase in number of youths involved in Urban Community Forestry

2. **Outcome Type:** Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</table>

3. **Associated Knowledge Area(s)**

- 124 - Urban Forestry
- 605 - Natural Resource and Environmental Economics
- 806 - Youth Development

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**V(J). Planned Program (External Factors)**

1. **External Factors which may affect Outcomes**

- Public Policy changes
- Competing Programatic Challenges
- Appropriations changes
- Competing Public priorities
- Economy

**Description**

Transportation is often an issue for rural youth to participate in out of school hours programming. Apathy is learned from community environment. Transportation, time off from work for medical appointments, minimal to no services offered in rural areas, and lack of health insurance are some of the many barriers to employment that individuals with disabilities face every day. Lack of expertise and experience in New England by public and private agencies to make site visits and recommendations of accommodations to continue employment of farmers with disabilities, represents major barriers for farmers in achieving vocational goals. Youth financial literacy is not a required curriculum in Vermont public schools.

---

**V(K). Planned Program (Evaluation Studies and Data Collection)**

1. **Evaluation Studies Planned**

- Before-After (before and after program)
- Case Study
- During (during program)
- Time series (multiple points before and after program)
- Retrospective (post program)
- After Only (post program)
Description

Evaluation Studies Planned per outcome indicator:
- Increased knowledge of forest ecosystems and initiation of management opportunities related to small acreage woodlands: End of session evaluation and follow-up mailed evaluation in six months.
- 85% of Certificate of Eligibility reviewed by the Dept. of Education will be 100% accurate and reflect eligible migrant students: Program review by Dept. of Education
- Increase in number of MOMS participants who report increased skills in leadership and decision making: Post conference evaluations
- Increase in number of TOEC participants who report increased skills in leadership and decision making: Post conference evaluations
- Increase number of 4-H club members who participate as pages in state level government, as a result of their 4-H experiences: Record books
- Increase number of 4-H staff self-reporting an increase in their ability to work with youth and adults to implement 4-H lifeskill development opportunities: Interviews and survey
- Increase student enrollment in the Vermont Migrant Education Program: Annual review of total student enrollment June 30th.
- Increase the number of committee members implementing or enhancing broad-based decision-making skills: Interviews with program committee members will take place at the end of the project (1 year)
- Increase the number of hours contributed by trained adult volunteers Site Staff: Site records keep for Annual reporting of this indicator
- Increase the number of program participants serving as leaders on Committees: Interviews with program committee members will take place at the end of the project (1 year) and reported by William McMaster at the end of the program year
- Increase the number of programs led or supported by trained volunteers Site Staff: Site record keep for Annual reporting of this indicator
- Increase the number of schools that offer financial literacy education: Collecting data with the National Foundation for Financial Education (NEFE)
- Increase the number of volunteers self-reporting an increase in their ability to implement a 4-H lifeskill development opportunity for youth: End of event surveys will be used to collect feedback in ability increase or decrease
- Increase the number of youth serving as Foundation trustees indicating a positive experience: Interviews and record books
- Increase the number of youth who set and reach goals identified at the beginning of the 4-H year: Record books or recognition application.
- Increase the number of 4-H club youth doing at least 6 hours of community service: Record books and club reports
- Trainers self report increased confidence and efficacy in setting and achieving personal goals for health and financial security: Pre-test and post test during course
- Youth have greater opportunities to access and learn financial planning skills: Presently, approximately 50 VT high school teachers order the HSFPP materials. Usage of the N4HCCS financial curricula has not been tracked in VT. The April launch of the newly revised HSFPP materials will target all secondary teachers, parents of home schooled youth, and 4H leaders. Survey results of teacher responses to training sessions, electronic support and marketing as to intentions to use the materials

2. Data Collection Methods

- Other (record books, recognition applic)
- Sampling
- Portfolio Reviews
- Structured
- Unstructured
- Observation
- Journals

Description

(NO DATA ENTERED)
V(A). Planned Program (Summary)

1. Name of the Planned Program
   Health

2. Brief summary about Planned Program
   The subject of health covers a myriad of topics from food and nutrition, physical activity, mental and emotional wellbeing, to interpersonal relationships, and social skills and responsibility. While all of these are valid areas for research and outreach, in Vermont we have chosen to focus our programming efforts around nutrition, obesity prevention, food safety, and health management as well as a small effort towards individuals and families with regard to social and interpersonal health with efforts in children in family transitions and understanding personal financial matters.

3. Program existence: Mature (More than five years)
4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds: Yes
6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage
   - 501 1% New and Improved Food Processing Technologies
   - 502 1% New and Improved Food Products
   - 503 3% Quality Maintenance in Storing and Marketing Food Products
   - 511 2% New and Improved Non-Food Products and Processes
   - 512 1% Quality Maintenance in Storing and Marketing Non-Food Products
   - 703 46% Nutrition Education and Behavior
   - 704 39% Nutrition and Hunger in the Population
   - 711 1% Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources.
   - 712 1% Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
   - 802 4% Human Development and Family Well-Being
   - 903 1% Communication, Education, and Information Delivery

V(C). Planned Program (Situation and Scope)

1. Situation and priorities
   Overweight and sedentary lifestyles lead to or exacerbate many chronic diseases including cardiovascular disease, hypertension, diabetes, asthma, cancer, liver disease, and osteoporosis. The number of Vermont adults reporting chronic conditions increases with age; in a recent survey, 88 percent of those age 65 and older reported having one or more chronic conditions and 20 percent reported having four or more. One out of four Vermonter’s is believed to have diabetes or pre-diabetes and many cases of diabetes remain undiagnosed. Type 2 diabetes is increasing considerably in children and adolescents. Currently 56 percent of Vermont adults are overweight or obese with an increase in the rate of obesity among Vermont adults of 77 percent from 1990 to 2002. The prevalence of obesity among youth is high as well, with 24 percent of Vermont students in grades 8-12 overweight or at risk of becoming overweight as measured by age and gender specific body mass index. Overweight among young children is increasing at an alarming rate, more than doubling in the last 20 years. Currently, 29 percent of low-income children between two and five years of age in Vermont who are part of the Women Infants and Children (WIC) program are overweight or at risk of becoming overweight. By being overweight, children are at risk for chronic conditions at an earlier age.
   Lifestyle changes that include more healthful eating (consumption of whole grains, vegetables, and fruits - especially those locally grown; portion control, fewer sweetened beverages), practicing good food safety skills, and increasing physical activity while reducing sedentary time can have a positive influence on reducing and managing chronic conditions to increase a person’s chance for a longer life. These lifestyle changes are sometimes complicated by the greater, though not necessarily better, food choices for consumers, and heightened awareness about dieting, food safety, nutraceutical and functional foods that lead to complex and potentially less than healthy choices.
   In January of 2005, a federal mandate was issued requiring school food authorities to implement food safety programs based on Hazard Analysis Critical Control Point (HACCP). Section 111 of the Child Nutrition and WIC reauthorization Act of 2004 amended section 9 of the Richard B. Russell National School Lunch Act by requiring school food...
authorities to implement a food safety program for the preparation and service of school meals served to children in the school year beginning July 1, 2005. The program must be based on HACCP principles and conform to guidance issued by the Department of Agriculture (USDA). Vermont School Food Service operations vary considerably in size and sophistication and production methods vary from "conventional" where ingredients are purchased fresh and products are made from scratch to "assembly service" where products are purchased already prepared. The physical plants range from full service commercial kitchens to very small kitchens that might lack commercial dishwashers, hand washing sinks, adequate storage areas, or commercial ovens. The educational level of staff ranges from college level to less than grade 8 and employee turnover is high. When families under-go major transitions, parents benefit from ideas and strategies to lesson the impact of the changes on their children. Vermonters filing bankruptcy under the bankruptcy abuse prevention and consumer protection act require opportunities for debt management and repayment education. Teaching broad based decision-making skills is a key part of the strategy for improving financial security.

Problems being addressed:

- Food and Lifestyle Choices
- School compliance with food safety requirements
- Parents are not aware; do not have skills to address needs of children

2. Scope of the Program

- In-State Extension
- Multistate Extension
- Integrated Research and Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- Preventing or managing chronic diseases can lower health care costs
- Most chronic diseases can be prevented or mitigated through better lifestyle choices
- Individuals practicing positive lifestyle changes will feel better about themselves, their families, and their communities and ultimately improve the quality of life of Vermonters
- Particular methods of nutrition education with the public will influence behavior
- Parental attitudes toward nutrition affect lifelong eating patterns of children
- We have a global food supply, leading to many choices and an increase risk of foodborne illness
- All HACCP programs are based on the assumption that the food service operation has in place a Food Safety and Sanitation program with all staff trained/certified
- Pending bankruptcy presents a "teachable moment" for learning strategies for increasing financial security
- The county courts will continue to mandate parent participation in the COPE program

2. Ultimate goal(s) of this Program

- Improve individual and family health.
- Increase in the number of people who show an improvement in healthful eating practices
- Increase in number of people who have knowledge and skills for management of diabetes
- Increase production and/or access to safe, nutritious food
- Decrease in chronic illness and associated costs
- Child/adult care center managers are certified in food safety and sanitation
- Food safety 'best practices' are implemented in schools
- School food services implement HACCP plans
- Reduce or eliminate impact of foodborne illness incidents
- School food managers are certified in food safety and sanitation
- Increase the number of participants repaying debts that cannot be wiped out under new bankruptcy law
- Families under transition lessen the impact of changes on their children.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program
V(F). Planned Program (Activity)

1. Activity for the Program

Diabetes Education: Dining with Diabetes (DWD) This class, designed for diabetics or those preparing food for diabetics, provides practical nutrition information and skills development on how to prepare healthy foods. Delivery methods: four-part series of classes.

Coping with Separation and Divorce (COPE): Parent education for parents of minor children who have filed for separation, divorce, dissolving of a civil union, parental, changes in rights and responsibilities concerning their children. This is a court mandated program.

Community Farm Partners: To enhance the amount of locally grown produce that is consumed by Vermonters with limited resources and sold by small scale Vermont producers.

EFNEP(Expanded Food and Nutrition Education Program): Is designed specifically to meet the nutritional education needs of limited resource families. Delivery methods: multi-session individual consultations, single and multi-session group classes.

Food Safety and Sanitation Certification Program: Food safety and sanitation course targeted at institutional food service managers and workers with the goal to increase knowledge of food safety and improve food handling practices in school foodservice operations. This course is a prerequisite for Hazard Analysis Critical Control Point (HACCP) program implementation. Delivery methods: Ten hour course with certification exam.

Food, Culture, and Reading (FCR): A train-the-trainer session for volunteers/teachers to implement the 6 lesson curriculum for pre-kindergarten through grade 2. Delivery methods: 1 3 hour class.

Growing Connections: A program for youth that teaches nutrition, food safety, and food security issues through gardening. Delivery methods: group workshops, individual instruction, various media, demonstrations, experiential learning.

GAP: Home owners good agricultural practices


Healthy Eating: Nutrition classes designed for a wide range of people, with an emphasis on national Dietary Guidelines. Participants learn the latest information about how to choose a healthy diet, practice food safety and incorporate physical activity into their day. Delivery methods: Classes, ranging from one to six sessions.

Restaurant Food Labeling: To test the effect of labeling food (with nutrient analysis) in a dining hall on the choices of consumers (in this case, students)

Senior Farm Share Nutrition: Nutrition education for low-income Senior Farm Share participants aimed at increasing their consumption of local, fresh produce by enhancing participants skills to prepare fresh fruits and vegetables and gain nutritional knowledge based on the Dietary Guidelines. Delivery methods: Single or multi-session workshop.

Bankruptcy education curriculum: Apply for federal recognition for UVM Extension to be a provider for bankruptcy education. Delivery Methods: Research project.

Food Safety and Sanitation Certification: Food Safety and Sanitation Certification Program - A ten-hour food safety and sanitation course targeted to institutional food service managers and workers with the goal to increase knowledge of food safety and improve food handling practices in school foodservice operations. This course is a prerequisite for Hazard Analysis Critical Control Point (HACCP) program implementation.

AES efforts:
- Internet based and telecommunication methods for weight control
- Development and evaluation of web-based instructional material for college-level teaching and delivery of such for nutritional education/management
- Nutritional management: increasing
fruit/vegetable consumption and enhancing understanding of consumer food choices • Childhood nutrition and obesity control research • Detection and elimination of Listeria monocytogenes, E. coli and other pathogens in dairy products including raw milk cheeses • Production methods to eliminate pathogen risk in raw milk cheeses • Elimination of lactate crystals and other flaws from cheese production • Elimination of pathogens in food production systems

2. Type(s) of methods to be used to reach direct and indirect contacts

<table>
<thead>
<tr>
<th>Extension</th>
<th>Direct Methods</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Education Class</td>
<td>● Other 1 (radio - educational)</td>
</tr>
<tr>
<td></td>
<td>● Workshop</td>
<td>● Web sites</td>
</tr>
<tr>
<td></td>
<td>● Other 1 (Train the Trainer)</td>
<td>● Newsletters</td>
</tr>
<tr>
<td></td>
<td>● One-on-One Intervention</td>
<td>● TV Media Programs</td>
</tr>
<tr>
<td></td>
<td>● Demonstrations</td>
<td>● Other 2 (professional pubs)</td>
</tr>
<tr>
<td></td>
<td>● Group Discussion</td>
<td></td>
</tr>
</tbody>
</table>

3. Description of targeted audience

• Adults • Age 25 - 60 Adult • Age 46 - 65 Adult • Age 60 - Senior • Communities: Educators • Communities: Schools • Extension: Faculty/Staff • Food Industry: Food Service Workers • Public: Age 55+ • Public: Daycare Providers • Public: Families with Limited Resources • Public: Food Stamp Recipients • Public: General • Public: Homeowners • Public: People with Limited Resources • Public: Volunteers • Train-the-Trainer recipients: adults • WIC Staff • Youth

Y(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) to be reached through direct and indirect contact methods

<table>
<thead>
<tr>
<th></th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>2012</td>
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<td>1100</td>
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</tr>
</tbody>
</table>

2. (Standard Research Target) Number of Patents

Expected Patents


3. Expected Peer Review Publications
<table>
<thead>
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<th>Year</th>
<th>Research Target</th>
<th>Extension Target</th>
</tr>
</thead>
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<td>2011</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Y(H). State Defined Outputs

1. Output Target

- Bankruptcy ATF TV program
  2008:0 2009:0 2010:0 2011:0 2012:0

- Bankruptcy article
  2008:0 2009:0 2010:0 2011:0 2012:0

- Bankruptcy education planning discussion group
  2008:0 2009:0 2010:0 2011:0 2012:0

- Bankruptcy education: curriculum & application
  2008:0 2009:0 2010:0 2011:0 2012:0

- Bankruptcy radio
  2008:0 2009:0 2010:0 2011:0 2012:0

- Bankruptcy web articles
  2008:0 2009:0 2010:0 2011:0 2012:0

- Dining With Diabetes Workshop Series

- Dining With Diabetes website development
  2008:0 2009:0 2010:0 2011:0 2012:0

- Diabetes Education news columns
  2008:0 2009:0 2010:0 2011:0 2012:0

- Diabetes Education news radio shows
  2008:0 2009:0 2010:0 2011:0 2012:0

- Food, Culture, and Reading curriculum
2008 University of Vermont Combined Research and Extension Plan of Work

Food, Culture, and Reading training
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

Five hour food safety and certification training
- 2008: 4
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

Growing Connections training
- 2008: 2
- 2009: 2
- 2010: 0
- 2011: 0
- 2012: 0

Healthy Eating consultation
- 2008: 50
- 2009: 50
- 2010: 50
- 2011: 50
- 2012: 50

Expanded Food and Nutrition Program (EFNEP) home visits/small groups
- 2008: 222
- 2009: 222
- 2010: 222
- 2011: 222
- 2012: 222

Nutrition and food safety news
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

Pre diabetes workshops
- 2008: 12
- 2009: 14
- 2010: 14
- 2011: 14
- 2012: 0

Revise evaluation instruments for certification training
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

Senior Farm Share (SFS) workshops
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

School preparation and implementation of Hazard Analysis Critical Control Points
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

Serve New England newsletter
- 2008: 0
- 2009: 0
- 2010: 0
- 2011: 0
- 2012: 0

Ten hour food safety and sanitation training
- 2008: 4
- 2009: 4
- 2010: 0
- 2011: 0
- 2012: 0

Two hour food safety and sanitation training
- 2008: 2
- 2009: 2
- 2010: 0
- 2011: 0
- 2012: 0

Food Safety Information consultation

- COPE Administrative Meetings

- Diabetes news articles
  2008:3  2009:0  2010:0  2011:0  2012:0

- Diabetes Education Training for lay leaders

- Diabetes Education website development
  2008:0  2009:0  2010:0  2011:0  2012:0

- Expanded Food and Nutrition Education Program (EFNEP) Administration

- GAP Master Gardeners train Vermont home gardeners

- GAP Master Gardeners training workshop series (2-2hr)

- Healthy Eating news articles

- Healthy Eating workshops (single session)

- Overweight Youth Community Engagement
  2008:0  2009:0  2010:0  2011:0  2012:0

- Expanded Food and Nutrition Education Program (EFNEP) youth groups

- Food Stamp Grant - youth groups workshop series
  2008:0  2009:0  2010:0  2011:0  2012:0

- Women, Infants & Children (WIC) Program - Analyze surveys by staff and families
  2008:3  2009:0  2010:0  2011:0  2012:0

- COPE Program curriculum update
COPE Program instructor observation (field visit)

2008 : 10
2009 : 10
2010 : 10
2011 : 10
2012 : 10

COPE Program instructor trainings

2008 : 1
2009 : 1
2010 : 1
2011 : 1
2012 : 1

Senior Farm Share (SFS) conduct and analyze pre and post evaluations

2008 : 1
2009 : 0
2010 : 0
2011 : 0
2012 : 0

V(I). State Defined Outcome

1. Outcome Target
number of faculty who have materials to provide bankruptcy education

2. Outcome Type: Change in Knowledge Outcome Measure

2008 : 0
2009 : 0
2010 : 0
2011 : 0
2012 : 0

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target
number of media providing information to the public regarding opportunities for bankruptcy education

2. Outcome Type: Change in Knowledge Outcome Measure

2008 : 0
2009 : 0
2010 : 0
2011 : 0
2012 : 0

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

Increase in number of child/adult care center managers passing food safety certification exam

2. Outcome Type: Change in Knowledge Outcome Measure

2008 : 35
2009 : 35
2010 : 35
2011 : 35
2012 : 35

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

Increase in number of participants who adopt at least three new dietary practices from US Dietary Guidelines. (Action)

2. Outcome Type: Change in Action Outcome Measure

2008 : 0
2009 : 0
2010 : 0
2011 : 0
2012 : 0

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior

Increase in number of participants who have blood sugar tested. (Action)
### Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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</thead>
<tbody>
<tr>
<td>Change in Action Outcome Measure</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
</tr>
</tbody>
</table>

### Associated Knowledge Area(s)
- 703 - Nutrition Education and Behavior

#### Outcome Target
Increase the number of participants who increase the quality and/or quantity of fruits and vegetables.

### Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in number of people who expand or change their preferences for or attitudes about healthy foods</td>
<td>1310</td>
<td>1310</td>
<td>1310</td>
<td>1310</td>
<td>1310</td>
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</tbody>
</table>

### Associated Knowledge Area(s)
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population

#### Outcome Target
Increase in number of people who follow recommended portion size and number of servings.

### Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in number of people who improve food planning and shopping behaviors. (Action)</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
</tbody>
</table>

### Associated Knowledge Area(s)
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population

#### Outcome Target
Increase in number of people who increase their knowledge about the US Dietary Guidelines. (Action)

### Outcome Type: Change in Knowledge Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in number of people who increase their knowledge about the US Dietary Guidelines. (Action)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
1. **Outcome Target**
   Increase in number of people who increase their physical activity. (Action)

2. **Outcome Type:** Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>389</td>
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<tr>
<td>2009</td>
<td>389</td>
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<tr>
<td>2010</td>
<td>389</td>
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<tr>
<td>2011</td>
<td>389</td>
</tr>
<tr>
<td>2012</td>
<td>389</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 703 - Nutrition Education and Behavior

1. **Outcome Target**
   number of people with knowledge and skills to read labels and select good food

2. **Outcome Type:** Change in Knowledge Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
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<tr>
<td>2009</td>
<td>0</td>
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<td>2010</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 703 - Nutrition Education and Behavior

1. **Outcome Target**
   Increase in number of school food managers certified in food safety and sanitation (Action)

2. **Outcome Type:** Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>75</td>
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<tr>
<td>2009</td>
<td>75</td>
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<tr>
<td>2010</td>
<td>75</td>
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<tr>
<td>2011</td>
<td>75</td>
</tr>
<tr>
<td>2012</td>
<td>75</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 703 - Nutrition Education and Behavior
   - 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. **Outcome Target**
   Increase in number of school food service workers using food safety 'best practices' when receiving, storing, handling, preparing and serving food

2. **Outcome Type:** Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>50</td>
</tr>
<tr>
<td>2009</td>
<td>50</td>
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<td>2010</td>
<td>50</td>
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<tr>
<td>2011</td>
<td>50</td>
</tr>
<tr>
<td>2012</td>
<td>50</td>
</tr>
</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 503 - Quality Maintenance in Storing and Marketing Food Products
   - 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. **Outcome Target**
   Increase in number of schools implementing Hazard Analysis Critical Control Point based food safety programs

2. **Outcome Type:** Change in Action Outcome Measure
   
<table>
<thead>
<tr>
<th>Year</th>
<th>Outcome Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
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<td>2009</td>
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<td>2011</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>2</td>
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</tbody>
</table>

3. **Associated Knowledge Area(s)**
   - 503 - Quality Maintenance in Storing and Marketing Food Products
   - 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. **Outcome Target**
   Increase in number of people who show an improvement in healthful eating practices. (Action)
2. Outcome Type: Change in Action Outcome Measure
   

3. Associated Knowledge Area(s)
   
   ● 703 - Nutrition Education and Behavior
   ● 704 - Nutrition and Hunger in the Population

1. Outcome Target

Increase the number of people who show improvement in food safety and preservation practices. (Action)

2. Outcome Type: Change in Action Outcome Measure
   

3. Associated Knowledge Area(s)
   
   ● 703 - Nutrition Education and Behavior
   ● 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

1. Outcome Target

Number of previously food-insecure people who eat adequate and balanced meals on a regular basis

2. Outcome Type: Change in Action Outcome Measure
   
   2008 : 0  2009 : 0  2010 : 0  2011 :0  2012 : 0

3. Associated Knowledge Area(s)
   
   ● 703 - Nutrition Education and Behavior

1. Outcome Target

Increase in number of people who develop a plan to improve dietary practices. (Action)

2. Outcome Type: Change in Knowledge Outcome Measure
   

3. Associated Knowledge Area(s)
   
   ● 703 - Nutrition Education and Behavior

1. Outcome Target

A greater variety of produce available at home. (Action)

2. Outcome Type: Change in Action Outcome Measure
   

3. Associated Knowledge Area(s)
   
   ● 703 - Nutrition Education and Behavior
   ● 704 - Nutrition and Hunger in the Population

1. Outcome Target

Adopt at least one new practice related to a family meals approach. (Action)

2. Outcome Type: Change in Action Outcome Measure
   

3. Associated Knowledge Area(s)
   
   ● 703 - Nutrition Education and Behavior
● 704 - Nutrition and Hunger in the Population

1. Outcome Target
An increased preference for at least one fruit or vegetable. (Action)

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>Value</td>
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</tbody>
</table>

3. Associated Knowledge Area(s)
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population

1. Outcome Target
Increase in number of parents/caregivers who have more positive feelings about feeding their toddlers than they did prior to the intervention. (Action)

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>Value</td>
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</table>

3. Associated Knowledge Area(s)
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population

1. Outcome Target
Increase the number of home gardeners who implement one or more good agricultural practices to minimize microbial food safety hazards such as using potable water and composted manure. (Action)

2. Outcome Type: Change in Action Outcome Measure

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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3. Associated Knowledge Area(s)
- 703 - Nutrition Education and Behavior
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

1. Outcome Target
Increase the number of parents undergoing family transition through parentage, divorce or separation who understand the impact of these changes on their children. (Action)

2. Outcome Type: Change in Knowledge Outcome Measure

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3. Associated Knowledge Area(s)
- 802 - Human Development and Family Well-Being

1. Outcome Target
Increase the number of parents who intend to apply knowledge and skills learned to influence their behavior with their children. (Action)

2. Outcome Type: Change in Knowledge Outcome Measure

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3. Associated Knowledge Area(s)
- 802 - Human Development and Family Well-Being
V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Public priorities
- Economy
- Populations changes (immigration, new cultural groupings, etc.)
- Appropriations changes

Description
Overweight and sedentary lifestyles lead to or exacerbate many chronic diseases including cardiovascular disease, hypertension, diabetes, asthma, cancer, liver disease, and osteoporosis
Vermont School Food Service operations vary considerably in size and sophistication, and the educational level of staff employed
Participants will have to repay debts that cannot be wiped out under the new bankruptcy law (600 declared bankruptcies in VT in 2005.)
Courts will continue to mandate COPE program

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Comparisons between different groups of individuals or program participants experiencing different levels of program

Description
Evaluation Studies Planned per outcome indicator:
increased knowledge of forest ecosystems and initiation of management opportunities related to small acreage woodlands:
End of session evaluation and follow-up mailed evaluation in six months.
85% of Certificate of Eligibility reviewed by the Dept. of Education will be 100% accurate and reflect eligible migrant students: Program review by Dept. of Education
Increase in number of MOMS participants who report increased skills in leadership and decision making.: Post conference evaluations
Increase in number of TOEC participants who report increased skills in leadership and decision making.: Post conference evaluations
Increase number of 4-H club members who participate as pages in state level government, as a result of their 4-H experiences.: Record books
Increase number of 4-H staff self-reporting an increase in their ability to work with youth and adults to implement 4-H lifeskill development opportunities.: interviews and survey
Increase student enrollment in the Vermont Migrant Education Program: Annual review of total student enrollment June 30th.
Increase the number of committee members implementing or enhancing broad-based decision-making skills.: Interviews with program committee members will take place at the end of the project (1 year)
Increase the number of hours contributed by trained adult volunteers Site Staff: Site records keep for Annual reporting of this indicator
Increase the number of programs led or supported by trained volunteers Site Staff: Site record keep for Annual reporting of this indicator
Increase the number of schools that offer financial literacy education.: Collecting data with the National Foundation for Financial Education (NEFE)
Increase the number of volunteers self reporting an increase in their ability to implement a 4-H lifeskill development opportunity for youth: End of event surveys will be used to collect feedback in ability increase or decrease
Increase the number of youth serving as Foundation trustees indicating a positive experience: Interviews and record books
Increase the number of youth who set and reach goals identified at the beginning of the 4-H year: Record books or recognition application.
Increase the number of 4-H club youth doing at least 6 hours of community service: Record books and club reports
Trainers self report increased confidence and efficacy in setting and achieving personal goals for health and financial security:
Pre-test and post test during course
Youth have greater opportunities to access and learn financial planning skills: Presently, approximately 50 VT high school teachers order the HSFPP materials. Usage of the 4HCCS financial curricula has not been tracked in VT. The April launch of the newly revised HSFPP materials will target all secondary teachers, parents of home schooled youth, and 4H leaders. Survey results of teacher responses to traini

2. Data Collection Methods

- Other (records)
- Sampling
- Tests
- Structured
- Observation

Description
(NO DATA ENTERED)