

# 2011 University of New Hampshire Extension Plan of Work

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## I. Plan Overview

### 1. Brief Summary about Plan Of Work

The University of New Hampshire Cooperative Extension (UNHCE) provides New Hampshire residents with research-based information, enhancing their ability to make informed decisions that strengthen youth, families and communities, sustain natural resources, and improve the economy. As a University outreach program, the network of professional Extension staff resides in all ten New Hampshire counties. County staff work with local volunteers and specialists on the University of New Hampshire (UNH) campus to design and conduct educational programs that meet societal, environmental, and economic needs. While many of our programs are conducted locally, we also use current communication technologies including computer networking, computer-based course ware, web, and interactive video conferencing. As part of the national land-grant university system, we also access the knowledge and expertise of other state land-grant universities throughout the United States. The University of New Hampshire serves the state as the principle land-grant university charged by Congress to conduct resident instruction, research, and outreach to people beyond the formal classroom.

With a total state population of 1.3 million people, Extension reaches a quarter of these individuals through educational programs. UNH Cooperative Extension employs approximately eighty Extension Educators and additional program staff who plan, conduct and evaluate educational programs. Programs are categorized into two general areas - Youth, Families and Communities, and Natural Resources. These categories are supported by staff in five program areas: 4-H Youth Development, Family and Consumer Resources, Agricultural Resources, Forestry and Wildlife, and Sea Grant and Water Resources. State Program Leaders manage each program area. The uncertainty and reduction of traditional funding sources is a major challenge in developing this UNHCE statewide plan of work. In response to receiving less public funding, UNHCE diversified its revenue portfolio by aggressively pursuing grants, contracts and gifts. This change in practice changes the focus of programming and the relationships with our programming partners. In addition, new programmatic staffing arrangements may take place to respond to the current fiscal context.

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	85.0	0.0	0.0	0.0
2012	85.0	0.0	0.0	0.0
2013	85.0	0.0	0.0	0.0
2014	85.0	0.0	0.0	0.0
2015	85.0	0.0	0.0	0.0

## II. Merit Review Process

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

- External Non-University Panel
- Expert Peer Review

## 2. Brief Explanation

The University of New Hampshire Cooperative Extension has entered into a formal agreement with Extension in Maine, Vermont, 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 reporting 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. In addition, county and state advisory committees are asked annually to review updates to county and state plans as part of their role in the process. Integrated research efforts that involve Extension are peer reviewed by appropriate scientific panels based on the project and funding source. For example, all integrated Agriculture Experiment Station research projects at the University of New Hampshire (UNH) go through external peer review (two faculty members from outside of UNH) and internal review via the Research Advisory Committee (RAC) composed of five faculty members within the College of Life Sciences and Agriculture.

## 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?

UNH Cooperative Extension's program plan of work addresses high priority needs in New Hampshire identified through on-going counsel with local and a state-wide advisory councils. In addition, Advisory Council members, county and state staff, faculty, and other stakeholders took part in a key issues identification process in 2008.

Further, all Extension staff and many of our volunteer advisory council members received training and practice in developing public value statements for Extension programs. Each county office and traditional Extension program area (4-H, Agriculture, Family and Consumer Resources, Forestry and Wildlife, and Sea Grant and Water Resources) then developed key issue statements (in conjunction with county stakeholders and campus-based colleagues) that described the key issue, what public value Extension would contribute by addressing the issue, supporting data (such as demographics, needs assessments, and other agencies), ties to our mission, potential partners, and existing Extension programs that already address the issue. Extension specialists, our State Advisory Council, and Extension administration then reviewed the list and began narrowing it to the most significant issues.

Three proposals were funded by UNH Cooperative Extension in early 2008 to address significant issues. Funding was awarded in a competitive process where we funded a small number of priority issues that were high quality, outcome-driven projects that address complex and significant issues for the people of New Hampshire. Teams of Extension staff and UNH faculty submitted proposals that addressed expressed and felt needs of the people of New Hampshire. Further funding for additional significant issue proposals will depend greatly on state and county funding levels for 2009 and beyond, but each program area is using the identified issues to plan programs and make strategic hiring decisions.

### 2. How will the planned programs address the needs of under-served and under-represented populations of the

UNH Cooperative Extension staff are committed to increased programming for under-served and under-represented audiences in New Hampshire. These individuals participate mainly through program efforts in Nutrition Connections, part of the state's welfare reform effort and through state CYFAR (Children Youth and Families at Risk) projects. 4-H after school programs also involve a significant number of under-served families. Forestry and Wildlife staff target women who work in the logging industry through Women in the Woods programs. Staff working in these programs build trust and rapport with under-represented audiences, and help Extension advisory councils understand the audiences' needs and circumstances.

Over the past decade, more than 10,000 refugees and immigrants, speaking more than 72 languages, have settled in Manchester, New Hampshire's largest city. Extension staff have made tremendous efforts to identify, understand, develop relationships with, and help members of these populations through non-formal education. Family & Consumer Resources, 4-H Youth Development and Horticulture Educators in the two New Hampshire counties with the highest immigrant populations are delivering programs for refugee families aimed at helping families understand

American culture and providing the necessary support for them to transition successfully to life in New Hampshire. Parenting and life skill programs are providing information as basic as US currency and how to enroll children in school and community gardening programs for youth and adults not only provide fresh produce and help lower the cost of weekly grocery bills, but also helps the new arrivals connect with each other and their new homeland.

UNH Cooperative Extension completed a successful Civil Rights Compliance Review in August, 2008. This review provided important feedback to staff on their current efforts to reach diverse audiences: the efficacy of our reporting system to capture efforts; our ability to reach non-native speaking audiences; and the identification of areas we can improve our outreach to diverse audiences.

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

The NH 2011-2015 Plan of Work is built around a well-researched and popular model for educational program development called the logic model. Logic models have been used by many organizations as a framework for planning, implementing, evaluating, and communicating results of educational programs. UNHCE staff have been trained to develop educational programs using a logic model framework and have been submitting individual and team logic models in New Hampshire since 2004. Each program logic model is updated annually. The plan is designed to articulate long- (condition change), medium- (action) and short-term (learning) outcomes and planned outputs (activities) that lead to these outcomes. In order to provide clear target performance measures for each outcome, impact indicators for most action and learning outcomes have been articulated and evaluation plans have been developed. Impact indicators are written similar to SMAART objectives (specific, measurable, audience-directed/ambitious, realistic, and time-bound) and will provide a clear measure of associated outcomes. Impact indicators in this plan provide the link between each outcome and associated outputs and will be the basis of our impact reporting system. Detailed logic models that articulate all of the expected outcomes of New Hampshire's Extension programs have been developed, however it is not realistic to evaluate each and every outcome in each plan. The planned programs submitted here represent only targeted, focused outcomes we expect to measure and report on over the next five years.

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

Program development using the logic model requires the planner to closely examine the relationship between outputs and desired outcomes of a program. In doing so, extraneous activities that do not lead to desired outcomes can be revised, eliminated, or spun off to another organization more appropriate to be conducting the activity. Formative evaluation plays a key role in determining whether or not a program is being implemented effectively and how it might be improved and on-going evaluation of this type will enable Extension staff to make modifications to their programs on a regular basis, constantly improving program effectiveness. UNH Cooperative Extension Interdisciplinary teams bring expertise together to work on critical issues that require multiple perspectives and innovative teaching methods. Programs that have a multidisciplinary scope are expected to be more effective and make a more efficient use of staff time and resources because they will make better use of existing staff expertise to solve the problems and address challenges of the people of New Hampshire. A web-based planning and reporting system has been developed to integrate disciplinary and interdisciplinary outcomes, insuring a comprehensive and efficient system to meet the most critical issues identified by stakeholders and staff.

## **IV. Stakeholder Input**

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

- Targeted invitation to traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Other (Advisory Council Meetings)

#### **Brief explanation.**

Stakeholders were encouraged to provide input to UNH Cooperative Extension in a variety of ways and in a variety of locations. Each county meets regularly with their County Advisory Council and the State Advisory Council (made up of members from each county, and representatives from various partner organizations) meets quarterly.

In 2008, each county office and traditional Extension program area (4-H, Agriculture, Family and Consumer Resources, Forestry and Wildlife, and Sea Grant and Water Resources) developed key issue statements (in conjunction with county stakeholders and campus-based colleagues) that described the key issue, what public value Extension would contribute by addressing the issue, supporting data (such as demographics, needs

assessments, and other agencies), ties to our mission, potential partners, and existing Extension programs that already address the issue. Extension specialists, our State Advisory Council, and Extension administration then reviewed the list and began narrowing it to the most significant issues.

In addition, county advisory council members served on search committees for staff hires in county and state level positions.

**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 Advisory Committees
- Needs Assessments

**Brief explanation.**

Identification of stakeholders and groups is accomplished primarily through local and state-wide advisory committees. Care is taken to recruit advisory committee members that represent a broad array of interests, background, and residency, including youth and under served audiences.

**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**

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

**Brief explanation.**

Advisory Council members, county and state staff, faculty, and other stakeholders took part in a key issues identification process in 2008. Further, all Extension staff and many of our volunteer advisory council members received training and practice in developing public value statements for Extension programs. Each county office and traditional Extension program area (4-H, Agriculture, Family and Consumer Resources, Forestry and Wildlife, and Sea Grant and Water Resources) then developed key issue statements (in conjunction with county stakeholders and campus-based colleagues) that described the key issue, what public value Extension would contribute by addressing the issue, supporting data (such as demographics, needs assessments, and other agencies), ties to our mission, potential partners, and existing Extension programs that already address the issue. Extension specialists, our State Advisory Council, and Extension administration then reviewed the list and began narrowing it to the most significant issues.

**3. A statement of how the input will be considered**

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

**Brief explanation.**

Funding was awarded in a competitive process where we funded a small number of high priority issues that were high quality, outcome-driven projects that address complex and significant issues for the people of New Hampshire. Teams of Extension staff and UNH faculty submitted proposals that addressed expressed and felt needs of the people of New Hampshire. Further funding for additional significant issue proposals will depend greatly on state and county funding levels for 2009 and beyond, but each program area is using the identified issues to plan programs and make strategic hiring decisions. Given the increase in expectations for Extension staff to look for grant funding to supplement existing budgets, data from this process will be especially important in setting priorities for grant development and pursuing new partnerships for educational programming.

**V. Planned Program Table of Content**

<b>S. No.</b>	<b>PROGRAM NAME</b>
1	Forestry and Wildlife
2	Agricultural Resources
3	4-H Youth Development
4	Strengthening New Hampshire Communities through Civic Participation and Leadership
5	Family and Consumer Resources
6	Natural Resource Business Institute
7	Sea Grant and Water Resources
8	Food Safety
9	Childhood Obesity

**V(A). Planned Program (Summary)**

**Program # 1**

**1. Name of the Planned Program**

Forestry and Wildlife

**2. Brief summary about Planned Program**

The University of New Hampshire Cooperative Extension Forestry and Wildlife Program has been caring for New Hampshire's Forests since 1925 through a joint program with the New Hampshire State Forester's office. Our mission is to "...provide New Hampshire citizens with research-based education and information, enhancing their ability to make informed decisions that strengthen youth and families, sustain natural resources, and improve the economy."

Since 1985, UNH Cooperative Extension has had a commitment to the NH Department of Fish and Game to lead efforts in wildlife habitat protection and enhancement in all parts of the state. Twelve county-based Extension Educators in Forest Resources and three statewide Extension Specialists in forestry, forest industry and wildlife provide research-based educational programs and assistance to an array of audiences. This effective statewide and local delivery system provides ready access to constituents.

**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

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	60%			
124	Urban Forestry	20%			
135	Aquatic and Terrestrial Wildlife	20%			
	<b>Total</b>	100%			

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

**1. Situation and priorities**

UNH Cooperative Extension motivates private landowners to actively manage their land for long-term stewardship of natural resources. Extension programs in forestry and wildlife, agriculture, and water resources bring a comprehensive approach to solving problems and protecting resources through an extensive network of partners within the natural resources community. Long-term memoranda with the NH Division of Forests and Lands and the NH Fish and Game recognize Extension's lead role in educational programming. The Society for the Protection of New Hampshire Forests, Audubon Society of New Hampshire, NHTimberland Owners Association, Natural Resources Conservation Service, Farm Service Agency, U.S. Forest Service, NH Office of State Planning, Conservation Districts, NH Department of Environmental Services, regional planning commissions and county governments are all active partners.

Forest Resource Extension Educators, three statewide Extension Specialists, a Land and Water Conservation Educator and

Community Forestry Volunteer coordinator provide technical expertise and information about managing forest and community resources to people in each county across the state.

Over 188 components of the current New Hampshire Forest Resources Plan, mandated under RSA 227-1:8, are directed to Cooperative Extension for action. This level of responsibility is second only to that of the Division of Forests and Lands.

**2. Scope of the Program**

- In-State Extension
- Multistate Extension

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

**1. Assumptions made for the Program**

- Funding continues at the federal, state, and local levels so staffing levels permit implementation of this plan.
- Staffing in the Forestry and Wildlife Program remains sufficient.
- Funding is available to complete existing and new components of this plan

**2. Ultimate goal(s) of this Program**

- Communities contain volunteers with a life-long commitment to conservation.
- Conserve and protect land, water and open space.
- Critical wildlife habitats are protected in the state.
- Forests are a significant contributor to the state's economy, improving the quality of life for people living in urban and rural communities by protecting and enhancing the natural environment.
  - Maintain significant open space, including large, contiguous blocks of intact forest that remain under long-term consistent management.
  - Maintain the biodiversity of the state - plants, animals and natural communities. &ndash New Hampshire's forests remain healthy and productive.
  - NH licensed foresters increase their business opportunities through referrals from UNHCE Forestry and Wildlife staff.

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	15.0	0.0	0.0	0.0
2012	15.0	0.0	0.0	0.0
2013	15.0	0.0	0.0	0.0
2014	15.0	0.0	0.0	0.0
2015	15.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

Collaboration with partners: include projects, consultations, committee work on a town, county, state, multi-state basis with partner organizations and agencies include Extension collaborations

One-on-one consultation: woodlot exams, phone calls, emails, office visits, cost share programs, forester referrals, logger and industry visits- including follow up such as letters, map making, publication distribution

Media: press releases, newsletters, radio, TV, web, direct mailing Presentations: workshops and talks regardless of audience including prep time

Volunteer training and management: Coverts, Community Tree Stewards, Master Gardeners, other community volunteers such as conservation commissions, etc.

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Workshop</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> </ul>	<ul style="list-style-type: none"> <li>● Public Service Announcement</li> <li>● Newsletters</li> <li>● Web sites</li> <li>● Other 1 (radio)</li> </ul>

**3. Description of targeted audience**

Target audiences include non-industrial private forest owners (NIPF), municipal and other forest landowners, natural resource professionals, communities, volunteers, NH forest-based industries and the public.

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	5500	22000	0	500
2012	5500	22000	0	1000
2013	5500	22000	0	1000
2014	5500	22000	0	1000
2015	5500	22000	0	1000

**2. (Standard Research Target) Number of Patent Applications Submitted**

2011:0                      2012:0                      2013:0                      2014:0                      2015:0



**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs**

**1. Output Target**

- Collaboration with partners: include projects, consultations, committee work on a town, county, state, multi-state basis with partner organizations and agencies include Extension collaborations

**2011:130                      2012:130                      2013:130                      2014:130                      2015:130**

- One-on-one consultation: woodlot exams, phone calls, emails, office visits, cost share programs, forester referrals, logger and industry visits- including follow up such as letters, map making, publication distribution

**2011:1200                      2012:1200                      2013:1200                      2014:1200                      2015:1200**

- People reached through media: press releases, newsletters, radio, TV, web, direct mailing

**2011:10000                      2012:10000                      2013:10000                      2014:10000                      2015:10000**

- People reached through presentations: workshops and talks regardless of audience

**2011:5000                      2012:5000                      2013:5000                      2014:5000                      2015:5000**

- Volunteers trained and supported: Coverts, Community Tree Stewards, and other community volunteers such as conservation commissions, etc.

**2011:350                      2012:350                      2013:350                      2014:350                      2015:350**

**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of acres of forest management plans meet or exceed NH forest stewardship standards
2	Number of forest owners who receive federal or state financial incentives for implementing conservation practices
3	Number of new landowners engaged with a forester or natural resources professional for the first time or for the first time in 10 or more years
4	Number of volunteers in conservation work in NH communities as a result of training and continued work by UNHCE primarily in the Coverts and Community Tree Stewards programs
5	Percent of of NH licensed foresters trained by UNHCE in each of the two-year licensing period for CEUs
6	Number of people who influence the forest environment in NH with increased working knowledge about forest resource management through workshops, seminars, or educational events annually
7	Number of NH communities engage in natural resource inventories or natural heritage assessments to identify natural assets
8	Number of acres landowners develop conservation easements on in NH acres each year
9	Number of licensed foresters who increase business opportunities through 300 referrals from UNHCE staff - thereby sustaining a cadre of private sector licensed foresters offering services to the public
10	Number of Tree Steward and Coverts who volunteer each year beyond the required 40 hour commitment
11	Number of NH women who improve forest business management as a result of the Women and the Woods program

**Outcome # 1**

**1. Outcome Target**

Number of acres of forest management plans meet or exceed NH forest stewardship standards

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

2011:8000                      2012:8000                      2013:8000                      2014:8000                      2015:8000

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

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of forest owners who receive federal or state financial incentives for implementing conservation practices

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

2011:60                              2012:60                              2013:60                              2014:60                              2015:60

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

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Number of new landowners engaged with a forester or natural resources professional for the first time or for the first time in 10 or more years

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

2011:100                              2012:100                              2013:100                              2014:100                              2015:100

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

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4**

**1. Outcome Target**

Number of volunteers in conservation work in NH communities as a result of training and continued work

by UNHCE primarily in the Coverts and Community Tree Stewards programs

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

**2011:450                      2012:500                      2013:500                      2014:500                      2015:500**

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

- 124 - Urban Forestry
- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

Percent of of NH licensed foresters trained by UNHCE in each of the two-year licensing period for CEUs

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

**2011:75                      2012:75                      2013:75                      2014:75                      2015:75**

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

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 6**

**1. Outcome Target**

Number of people who influence the forest environment in NH with increased working knowledge about forest resource management through workshops, seminars, or educational events annually

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

**2011:5000                      2012:5000                      2013:5000                      2014:5000                      2015:5000**

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

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 7**

**1. Outcome Target**

Number of NH communities engage in natural resource inventories or natural heritage assessments to identify natural assets

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

<b>2011:10</b>	<b>2012:15</b>	<b>2013:15</b>	<b>2014:20</b>	<b>2015:20</b>
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**3. Associated Knowledge Area(s)**

- 123 - Management and Sustainability of Forest Resources
- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 8**

**1. Outcome Target**

Number of acres landowners develop conservation easements on in NH acres each year

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

<b>2011:8000</b>	<b>2012:8000</b>	<b>2013:8000</b>	<b>2014:8000</b>	<b>2015:8000</b>
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**3. Associated Knowledge Area(s)**

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 9**

**1. Outcome Target**

Number of licensed foresters who increase business opportunities through 300 referrals from UNHCE staff - thereby sustaining a cadre of private sector licensed foresters offering services to the public

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

<b>2011:200</b>	<b>2012:200</b>	<b>2013:200</b>	<b>2014:200</b>	<b>2015:200</b>
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**3. Associated Knowledge Area(s)**

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 10**

**1. Outcome Target**

Number of Tree Steward and Coverts who volunteer each year beyond the required 40 hour commitment

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

**2011:65                      2012:65                      2013:65                      2014:65                      2015:65**

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

- 124 - Urban Forestry
- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 11**

**1. Outcome Target**

Number of NH women who improve forest business management as a result of the Women and the Woods program

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

**2011:25                      2012:25                      2013:25                      2014:25                      2015:25**

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

- 123 - Management and Sustainability of Forest Resources

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Competing Programmatic Challenges

**Description**

Landowner assistance programs may come and go, adding or subtracting educational options and outcomes  
Economic factors affect landowners' short term objectives, markets, and opportunities

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

**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)

**Description**

- Review of Farm Service Agency, Natural Resources Conservation Service, NH Fish & Game, and UNHCE records.

- Track acres of plans and report to USFS annually Assessed through site visits, NH Tree Farm Program records direct contact with land owners and natural resources professionals.
- The Forestry and Wildlife Program tracks ongoing actions of trained volunteers including required work and work done beyond program requirements. UNHCE maintains a census of trained volunteers active in NH.
- Comparison of the official list of NH licensed foresters from state records with the actual attendance list for forester licensing CEU programs at the end of each two-year period.
- The Forestry and Wildlife program tracks workshops and participants and includes this in the United States Forest Service report. Assessed via community-based information through Community Conservation Assistance Program, multi-community information and direct landowner contact.
- The Professional Loggers Program with UNHCE keeps records of program participants, certified Timber Harvesters and companies that require Sustainable Forestry Initiative certification.

## 2. Data Collection Methods

- Whole population
- On-Site
- Unstructured
- Observation
- Portfolio Reviews

### Description

{NO DATA ENTERED}

**V(A). Planned Program (Summary)****Program # 2****1. Name of the Planned Program**

Agricultural Resources

**2. Brief summary about Planned Program**

Over the past few decades, New Hampshire's agriculture industry has evolved into a diverse, vibrant sector of the state's economy. Agricultural firms produce a wide variety of crops, plants, livestock products, and specialty foods for sale directly to consumers and through a variety of intermediate markets. Annual sales of agricultural products near \$750 million, but that's only part of the industry's economic impact. The 3,100 individual firms manage over 150,000 acres of cropland with an additional 250,000 acres devoted to pasture, Christmas trees, maple syrup production, and similar uses. This open space buffers residential and commercial development and provides the working landscape that makes New Hampshire attractive to visitors worldwide. In order for the farming community to thrive, it must continue to be economically and environmentally sustainable while meeting societal obligations. University of New Hampshire Cooperative Extension is uniquely positioned to provide educational and research based programs to assist agricultural businesses and related natural resource firms in meeting these goals. UNH Extension professionals understand the challenges and opportunities faced by the state's farms and have forged important partnerships within the state and region as well as nationally.

**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**

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
102	Soil, Plant, Water, Nutrient Relationships	20%			
205	Plant Management Systems	20%			
211	Insects, Mites, and Other Arthropods Affecting Plants	5%			
212	Pathogens and Nematodes Affecting Plants	5%			
216	Integrated Pest Management Systems	10%			
315	Animal Welfare/Well-Being and Protection	10%			
601	Economics of Agricultural Production and Farm Management	10%			
602	Business Management, Finance, and Taxation	10%			
604	Marketing and Distribution Practices	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities**



**Dairy/Livestock/Equine:** The New Hampshire livestock industry is diverse and scattered throughout the state. The state's livestock industry is important to maintaining open space and the rural setting enjoyed by its residents. Each aspect of the industry is important in maintaining the overall infrastructure needed for animal production. The livestock industry has changed over the years and so has its use of Extension. Many services traditionally assumed by Extension have been taken over by agribusinesses such as forage testing, ration balancing, production testing, etc. Now, more than ever, the livestock industry is looking to Extension as a source of non-biased, researched based information to make informed decisions. Farmers are looking for help in holistic management, business management, facilitating family communication, and the practical application of current research findings.

**Farm Management:** More than 3,100 agricultural firms in New Hampshire generate nearly \$750 million in annual product value and manage approximately 445,000 acres in farm land. New Hampshire's agricultural industry is principally comprised of small family farms offering a diverse selection of crop, livestock and specialty products. These family businesses are an integral part of the local community, maintaining a working landscape and providing citizens with superior products as well as connections to farming and "rural" New Hampshire. About half of state's farmers consider farming their principal occupation. For these and many of the part time farms, the family relies on agricultural activities to provide money for an adequate standard of living. New Hampshire's farms need to be profitable if they are to continue to exist. Farm management efforts enhance farm profitability by providing programs in agricultural finance, record keeping, enterprise analysis, business and estate planning, direct marketing and merchandising, and risk management. Each of these program areas address the unique needs of farmers and assist in keeping their operations viable.

**Ornamental Horticulture:** Ornamental horticulture contributes to the economy and environmental quality of the state. Horticulture keeps 21,000 acres in agriculture, more than 14,000 of which is open space, helping to preserve the state's rural character. The ornamental horticulture industry includes at least 935 businesses in New Hampshire that generate \$638 million or more annually in sales and services, according to a recent New England survey. Greenhouse and nursery crops are the fastest growing component of agriculture in this state, having increased by 87% between 1992 and 1997 (USDA Agricultural Census, 1997). More than half the firms identified landscape and tree services as an important part of their business. More than 80% of the income comes from sales and services within the state, making horticulture an integral and important part of the state's economy.

In addition, the turf grass industry provides recreational areas and playing fields, which serve as functional community centers and enhance community pride. Golf course turf also provides significant economic income in the state. New products, technologies, and growing systems are continually needed in order to sustain the growth and profitability of the industry. Management of nutrients, water, and pests are key components to profitability, as plant size, quality, and time to saleable product are dependent on appropriate nutrition, irrigation and pest control. Because of high capital operating costs, as well as increasing competition, quantifying the fixed and variable costs of production is also key to ensuring profitability.

**Fruit and Vegetable Production:** The commercial vegetable industry in New Hampshire is made up of about 313 farms with approximately 3,400 acres of mixed vegetables. The top grossing vegetable commodities are sweet corn, pumpkins, and tomatoes, with many others grown in smaller amounts. The NH commercial small fruit industry is made up of about 203 growers that harvest approximately 543 acres of small fruit. The top grossing small fruit commodities are strawberries, blueberries (highbush and lowbush), and raspberries. The NH commercial tree fruit industry comprises approximately 204 growers that farm approximately 2,650 acres of orchards. The majority of these are apple orchards, but peaches and pears are produced in small amounts. The farm gate value of all commercial vegetable, small fruits, and tree fruits in NH is approximately \$23 million dollars. Roughly 95% of the total sales are through pick your own, roadside stands and farmers' markets, thus direct marketing is a major focus of educational efforts. Consumer awareness of the value of local agriculture and fresh locally grown fruits and vegetables will ensure that a market for high quality NH produce exists. To attain ecological and economic sustainability, NH fruit and vegetable growers must 1) make judicious use of farm inputs, 2) minimize crop production costs, 3) maintain high crop quality and yields, and 4) have reliable and consistent markets for their products.

**Home Horticulture:** New Hampshire's population now exceeds 1,288,000. Each year UNHCE receives thousands of requests from New Hampshire citizens for education on a wide range of topics including home gardening, wildlife, water

quality, household pests, backyard livestock, food preparation and food safety, urban forestry and many other topics. UNHCE has developed a variety of methods to simultaneously meet this need and reduce the burden on staff. Utilizing more than 500 Extension-trained Master Gardeners (who volunteered 11,000 hours in 100 communities last year) UNHCE expanded its impact by responding to more than 10,000 phone inquiries, conducting more than 50 workshops in schools and communities and working on a diverse range projects that resulted in aesthetic, environmental and economic benefits for both NH citizens and volunteers. Each contact with the general public, homeowners, gardeners and municipalities provides the opportunity to teach people how to make changes to their surroundings that optimize the safe use of their properties while protecting the environment.

**Grass Farming & Forage Crop Production:** Forage crops, including hay, pastures, and silage corn, account for more than 100,000 acres statewide and are valued at approximately \$28 million. These crops support a \$116 million animal industry, since most of New Hampshire's dairy, livestock, and equine operations rely heavily on forage crops. Cattle, sheep, and horses have the ability to utilize forages efficiently; producers work towards harvesting quality forages that can support animal production while minimizing the need to purchase off farm feed which can significantly enhance farm profitability.

**Promoting Local Agriculture:** Direct marketing to consumers in NH has increased significantly, as evidenced by the rise in the total number of farmers' markets which now stands at fifty seven up from fewer than thirty five years ago. In addition, Rockingham County ranks 34th in the country in direct purchase of food items by consumers and Hillsborough County ranks 37th, according to the 2002 US Census of Agriculture. Needs assessments have identified that NH producers seek to build their skills in direct marketing and seek to augment their farm profitability through the sale of their products and services directly to consumers. Two additional factors dictate an increase in programming in this area: 1) the loss of wholesale markets for specialty crops as evidenced by the loss of the wholesale apple market and the impact this had on NH apple growers; 2) the rise in the "so called lifestyle farmers" who have chosen farming as a second occupation yet often have little farming background. These constituents need to earn a premium price with limited production and need assistance with marketing plans.

## **2. Scope of the Program**

- In-State Extension
- In-State Research
- Multistate Extension

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

### **1. Assumptions made for the Program**

- The sustainability of agriculture in NH requires a holistic approach that interfaces production, human resources, economic, and environmental issues, and civic policies. All must be addressed at some level.
- County Extension Agricultural Educators will be conversant and responsible for conducting programs in all aspects of agriculture in their respective counties. They will be encouraged and supported to develop one or more specialty areas for state wide programming, i.e. fruits and vegetables, agronomic crops, holistic farm management, nutrient management, greenhouse production.
- Specialists will continue to provide leadership and support in their specialties to county staff. They will provide leadership to both "commodity" and "issue" programming teams.

### **2. Ultimate goal(s) of this Program**

- Enhance farm profitability by providing programs in agricultural finance, record keeping, enterprise analysis, business and estate planning, direct marketing and merchandising, and risk management.

- Enhance the sustainability and profitability of producers in all sectors of NH agriculture:
- Increase the ability of New Hampshire's citizens to enjoy the benefits of home horticulture and sustain the economic, aesthetic and environmental benefits of NH agriculture.
- Increase the consumption of locally produced agricultural goods and the utilization of local agricultural services.
- Increase the economic and environmental sustainability of grass-based livestock operations and forage production systems in New Hampshire.

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	18.0	0.0	0.0	0.0
2012	18.0	0.0	0.0	0.0
2013	18.0	0.0	0.0	0.0
2014	18.0	0.0	0.0	0.0
2015	18.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

- Workshops/conferences - including single- and multi-day conferences, Farm and Forest events, and various producer association meetings
- Pasture walks & twilight meetings
- Farm/site visits, including kitchen table meetings and private consultations
- On-farm and university-based applied research projects
- Phone consultations
- Pesticide Applicator Training
- Soil and plant tissue diagnostic services
- Publications - newsletters, news releases, fact sheets, publications, web page
- Radio and TV spots

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>• Education Class</li> <li>• Workshop</li> <li>• Group Discussion</li> <li>• One-on-One Intervention</li> <li>• Demonstrations</li> <li>• Other 1 (phone consultations)</li> </ul>	<ul style="list-style-type: none"> <li>• Newsletters</li> <li>• TV Media Programs</li> <li>• Web sites</li> <li>• Other 1 (Displays at fairs and festivals)</li> </ul>

**3. Description of targeted audience**

Farmers/producers, people who work in agriculture-related fields, homeowners, nursery/greenhouse managers, turf managers

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	5000	200000	0	0
2012	5000	200000	0	0
2013	5000	200000	0	0
2014	5000	200000	0	0
2015	5000	200000	0	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

**2011:0                      2012:0                      2013:0                      2014:0                      2015:0**

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs****1. Output Target**

- Number of people attending pasture walks

**2011:120                      2012:120                      2013:120                      2014:120                      2015:120**

- Number of farm/site visits, including kitchen table meetings and private consultations

**2011:1200                      2012:1200                      2013:1200                      2014:1200                      2015:1200**

- Number of people reached with agriculture information via radio and TV spots

**2011:23000                      2012:23000                      2013:23000                      2014:23000                      2015:23000**

- Number of people who attend twilight grower meetings

**2011:600                      2012:600                      2013:600                      2014:600                      2015:600**

- Number of phone consultations regarding agricultural practices, home horticulture and miscellaneous agriculture topics

**2011:6000                      2012:6000                      2013:6000                      2014:6000                      2015:6000**

- Number of Pesticide Applicators attending recertification training

**2011:400                      2012:400                      2013:400                      2014:400                      2015:400**

- Number of soil and plant analyses conducted by diagnostic labs

**2011:500                      2012:500                      2013:500                      2014:500                      2015:500**

- Number of people reached through educational Workshops - Single & multi-day educational events such as grower schools, state-wide grazing events, etc.

**2011:8000                      2012:8000                      2013:8000                      2014:8000                      2015:8000**

- Number of people reached though conferences: Farm & Forest, Producer Association Meetings

**2011:8000                      2012:8000                      2013:8000                      2014:8000                      2015:8000**

**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of NH growers who adopt practices that improve farm productivity, quality of life, environmental conditions, and/or profitability.
2	Number of NH growers who submit soil and/or tissue tests to determine crop nutrient needs
3	Number of NH growers who formulate plans to guide their crop production, pest management, nutrient allocation, or farm management decisions
4	Number of NH growers who increase their skills, knowledge, and/or awareness of farm management techniques, risk management programs, or marketing practices
5	Number of NH growers who increase their knowledge, awareness, and/or skills in crop production practices
6	Number of NH growers who increase knowledge, awareness, and/or skills in pest management practices and technologies.
7	Number of NH growers who increase knowledge, awareness, and/or skills in new research, technology
8	Number of participants who increase their knowledge, awareness and/or skills in practices and technologies to increase the quality of athletic fields, public spaces and/or golf course conditions
9	Number of participants in home horticulture programs who gain skills that improve self-esteem, enable them to grow and preserve crops, adopt IPM practices and protect and enhance their environment.
10	Number of NH growers who increase their skills, knowledge or awareness in practices or methods related to dairy, livestock or equine production methods.

**Outcome # 1**

**1. Outcome Target**

Number of NH growers who adopt practices that improve farm productivity, quality of life, environmental conditions, and/or profitability.

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

**2011:350                      2012:350                      2013:350                      2014:350                      2015:350**

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

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of NH growers who submit soil and/or tissue tests to determine crop nutrient needs

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

**2011:500                      2012:500                      2013:500                      2014:500                      2015:500**

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

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Number of NH growers who formulate plans to guide their crop production, pest management, nutrient allocation, or farm management decisions

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

**2011:250                      2012:250                      2013:250                      2014:250                      2015:250**

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

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants

- 216 - Integrated Pest Management Systems

#### 4. Associated Institute Type(s)

- 1862 Extension

##### Outcome # 4

#### 1. Outcome Target

Number of NH growers who increase their skills, knowledge, and/or awareness of farm management techniques, risk management programs, or marketing practices

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

2011:100                      2012:100                      2013:100                      2014:100                      2015:100

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

- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

#### 4. Associated Institute Type(s)

- 1862 Extension

##### Outcome # 5

#### 1. Outcome Target

Number of NH growers who increase their knowledge, awareness, and/or skills in crop production practices

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

2011:150                      2012:150                      2013:150                      2014:150                      2015:150

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

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems

#### 4. Associated Institute Type(s)

- 1862 Extension

##### Outcome # 6

#### 1. Outcome Target

Number of NH growers who increase knowledge, awareness, and/or skills in pest management practices and technologies.



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

**2011:200                      2012:200                      2013:200                      2014:200                      2015:200**

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

- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 216 - Integrated Pest Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 7**

**1. Outcome Target**

Number of NH growers who increase knowledge, awareness, and/or skills in new research, technology

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

**2011:50                      2012:50                      2013:50                      2014:50                      2015:50**

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

- 205 - Plant Management Systems
- 601 - Economics of Agricultural Production and Farm Management
- 604 - Marketing and Distribution Practices

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 8**

**1. Outcome Target**

Number of participants who increase their knowledge, awareness and/or skills in practices and technologies to increase the quality of athletic fields, public spaces and/or golf course conditions

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

**2011:30                      2012:30                      2013:30                      2014:30                      2015:30**

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

- 102 - Soil, Plant, Water, Nutrient Relationships
- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 9**

**1. Outcome Target**

Number of participants in home horticulture programs who gain skills that improve self-esteem, enable them to grow and preserve crops, adopt IPM practices and protect and enhance their environment.

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

**2011:1200                      2012:1200                      2013:1200                      2014:1200                      2015:1200**

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

- 205 - Plant Management Systems
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 10**

**1. Outcome Target**

Number of NH growers who increase their skills, knowledge or awareness in practices or methods related to dairy, livestock or equine production methods.

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

**2011:70                              2012:70                              2013:70                              2014:70                              2015:70**

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

- 315 - Animal Welfare/Well-Being and Protection
- 601 - Economics of Agricultural Production and Farm Management
- 604 - Marketing and Distribution Practices

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Competing Programmatic Challenges

**Description**

Funding sources are requesting and requiring the following: an articulated strategic plan/vision, documented impacts and achievements, an understanding of the interconnectedness of the elements in a long term program, and illustrations of grass roots participation in the development and implementation of Cooperative Extension programs.

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

### **1. Evaluation Studies Planned**

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

#### **Description**

Questionnaires will be used at grower meetings to get information directly from farmers regarding new management practices adopted as a result of UNHCE educational efforts, be these farm visits, programs, newsletters, etc.

Questionnaires will be used at grower meetings and other major UNHCE educational activities to get information directly from producers regarding adoption of any recommended practices or technologies such as new crops or varieties, production systems, season extension techniques and/or greenhouse lighting.

### **2. Data Collection Methods**

- Sampling
- On-Site
- Observation
- Other (web surveys)

#### **Description**

{NO DATA ENTERED}

**V(A). Planned Program (Summary)**

**Program # 3**

**1. Name of the Planned Program**

4-H Youth Development

**2. Brief summary about Planned Program**

4-H is the youth educational program of UNH Cooperative Extension. The mission of 4-H is to help youth acquire knowledge, develop life skills and form attitudes to enable them to become self directing, productive and contributing members of society. 4-H emphasizes the importance of involving youth in the learning process. It is offered free of charge to youth ages 5-18. Youth from all cultural and economic backgrounds get involved in 4-H fun and learning. Members and volunteers live in towns, cities, farms, and suburbs.

**3. Program existence :** Mature (More then 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

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	10%			
805	Community Institutions, Health, and Social Services	10%			
806	Youth Development	80%			
	<b>Total</b>	100%			

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

**1. Situation and priorities**

The 4-H Youth Development program strives to foster the positive successful development of all youth. New Hampshire's program is well supported by constituent groups, the 4-H Foundation of New Hampshire and others. Total enrollment in traditional 4-H groups, camp, school enrichment and other special interest programs was 16,314 in 2009 with a strong cadre of adult volunteers totaling 2,582 in the same year.

Creating supportive environments for 4-H Youth Development programs, where youth have a sense of belonging and a desire to grow in knowledge and skill has become increasingly complex. Each year, NH loses 12,500 acres of open space and farmland due to development. (FAIR-New Hampshire Immigration Impact Statement.) The resulting growth brings excess traffic, overcrowded schools, neighborhoods of strangers, community battles over growth, and an influx of immigrants. The changing demographics and character of the state challenge us to adapt programs to meet the needs of youth and families. Significant changes include:

- More people, new cultures - NH population increased 11% (+127,000 people) from 1990 to 2000 - the fastest growth rate in New England. In that period, the state's foreign-born population increased 32% (+ 13,000 immigrants). About 174,000 NH people (14% of NH population) are immigrants or children of immigrants. Assimilation of the new with the old requires cooperation, acceptance and change.

- Overcrowded schools - From 1990 to 2000, the K-12 public school enrollment increased 25%. Students can become disengaged from learning when pupil/teacher ratio is high, there are too few textbooks, or classes are crowded into libraries, cafeterias, stages, and portable units.
- Drop-out rate - In the first four years of the 21<sup>st</sup> Century, over 10,600 NH teens left school only partially prepared for adulthood based on the cumulative dropout rate. They enter an adult world without the experience and preparation to succeed in the workforce.
- Poverty - Lack of resources affects a family's capacity to participate in work and community life. The state's housing wage (able to pay rent on the wages for 40 hours/week) is \$15.77. Homelessness, transience and living with relatives in crowded conditions can diminish a child's capacity to develop into a successful adult.
- Language barriers - An increasing number of New Hampshire public school students have limited English proficiency. There is a greater need for cultural understanding and bilingual program resources.

Positive youth development is increasingly guided by scientific research. National 4-H Headquarters, USDA adopted a positive youth development model based on theory, research and practice (L.Brendtro, M.Brokenleg, and S.Van Bockern). In this model, those who work in youth development programs strive to create effective programs and safe environments that meet the four basic needs of youth: mastery, belonging, independence, and generosity. These four areas parallel the traditional four Hs – head, heart, hands, and health.

**Head -(Independence)** - Youth need to gain confidence and skills necessary to make thoughtful decisions, accept responsibility, exercise self-discipline, and move toward independence. They need to know they are able to influence people and events through decision-making and actions. Young people aren't just leaders of tomorrow. They have great untapped potential for responsible leadership today. 4-H Youth Development volunteers create opportunities where youth learn to better understand themselves and become independent thinkers. By exercising independence through 4-H leadership opportunities, youth mature in self-discipline and responsibility. Through 4-H experiences, youth learn to think independently and make decisions that prepare them for the important choices made in later life. 4-H leadership roles allow youth to take responsibility for many decisions and/or actions that once fell solely on adults. Organizational skills, patience and group dynamics are assets learned as youth become contributing adults.

**Heart (Belonging)** - Youth need to know they are cared about, feel connected and physically and emotionally safe, learn and practice social skills, have opportunities to interact with others similar and different from them, learn the value of cooperation, and have opportunities for long-term consistent relationships with adults other than parents. Research suggests a sense of belonging may be the most powerful positive ingredient we can provide to youth. (National 4-H Headquarters.) 4-H Youth Development provides safe environments and opportunities for 4-H youth to get to know and interact with each other through projects and activities. Through involvement in their community and 4-H groups, 4-H youth gain the important social skills that allow them to thrive with others in society. Learning communication, cooperation and social skills provides a foundation for life-long participation in family, community and work environments.

**Hands (Generosity)** - Youth need to feel their lives have meaning and purpose, and their effort to help others is important and valuable. They need to feel they are connected and contributing members of their peer group, family, school and community. They need to realize they do not live in a secluded world, but instead in a global community which requires awareness and compassion for others. (National 4-H Headquarters) Families, schools, communities, youth programs, and volunteers influence the positive development of young people. Youth are capable, motivated, enthusiastic and risk-takers. Involving youth in civic activities and youth-adult partnerships helps them develop new knowledge and skills, builds a more engaged citizenry, and enriches our programs. There is strength in bringing together individuals of different ages, from diverse backgrounds and community groups to address youth, family, school and/or community issues. Participation in 4-H community service and citizenship activities allows youth to give back to others, and provides a foundation to better understand the "big picture" and find purpose and meaning in life.

**Health (Mastery)** - Successful youth believe they are capable and competent, and have acquired experience making decisions, solving problems and meeting challenges. The subject matter taught in 4-H projects is the foundation enabling 4-H youth to master skills and explore possible careers leading to healthy and productive adulthood. The breadth and depth of 4-H youth development projects and activities enable youth to pursue their own interests. Learning about the environment, science and technology, how to be good consumers, as well as caring for animals provides 4-H subject matter skills that can be of economic, social and/or personal value to youth in their future. The 4-H volunteers utilize quality research-based content in providing opportunities for youth to learn by doing. (National 4-H Headquarters)

**2. Scope of the Program**

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

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

**1. Assumptions made for the Program**

- 4-H YD is a well respected and effective youth development program in NH.
- A successful 4-H YD program is dependent on adequate number of competent volunteers.
- NH 4-H YD staff will collaborate with other UNHCE program area staff and community partners to accomplish desired impacts.
- The NH 4-H YD program provides youth a unique and inclusive setting for individual life skill development and mastery of subject matter competencies through the interactions with caring adults (paid and volunteer)
- 4-H YD staff have the ability to recognize and understand the needs of individuals in communities, and to facilitate educational opportunities in respond to those needs.
- 4-H alumni who had positive experiences in 4-H YD programs often make long term commitments to the program by providing time, money or other resources.
- National Extension 4-H YD initiatives are integrated into the NH state/county 4-H youth development efforts, including CYFAR (Children Youth and Families at Risk), after school programs, youth adult partnerships and others as they evolve.
- Partnerships between University System of New Hampshire (USNH) and UNHCE 4-H YD can provide two-way communications for youth, faculty and community partners to foster lifelong learning.

**2. Ultimate goal(s) of this Program**

- Youth become caring and contributing members of society through positive experiences in a diverse 4-H Youth Development program.
- 4-H Youth Development volunteers and staff of other youth serving organizations positively influence the development of youth and continually develop their competencies as adult volunteers who work with youth.
- Youth and adults collaborate and contribute to influence the quality of life in their communities.

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	14.0	0.0	0.0	0.0
2012	14.0	0.0	0.0	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2013	14.0	0.0	0.0	0.0
2014	14.0	0.0	0.0	0.0
2015	14.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

- Recruit, screen, orient new volunteers
- Support and recognize volunteers
  - Middle manager system design and support
- Volunteer/staff training-multiple delivery methods
- Club/group organization, management, and reporting
- 4-H Afterschool (includes coalitions, meetings, staff training ,etc.)
- CYFAR - (includes coalitions, meetings, staff training, etc.)
- OMK - (includes coalitions, meetings, staff training, etc.)
- Technical support to youth serving agencies/organizations
- Grant development
- Media, including radio. TV, newspaper (indirect)
- 4-H Foundation work (local and state-wide) - fund raising activities
- Marketing/PR, general 4-H newsletters
- Event and activity development and management
  - Subject matter/life skill training-multiple delivery methods
- Records, Resume, recognition opportunities
- County Fair

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>• Education Class</li> <li>• Workshop</li> <li>• Group Discussion</li> <li>• One-on-One Intervention</li> <li>• Demonstrations</li> <li>• Other 1 (Competitive events)</li> </ul>	<ul style="list-style-type: none"> <li>• Public Service Announcement</li> <li>• Newsletters</li> <li>• TV Media Programs</li> <li>• Web sites</li> </ul>

**3. Description of targeted audience**

Youth - ages 5-18 involved in community 4-H clubs, after school programs, community coalitions and classrooms.

Adult volunteers, educators, decision makers, policy makers

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	2500	2000	6000	5000
2012	2500	2000	6000	5000
2013	2500	2000	6000	5000
2014	2500	2000	6000	5000
2015	2500	2000	6000	5000

**2. (Standard Research Target) Number of Patent Applications Submitted**

**2011:0                      2012:0                      2013:0                      2014:0                      2015:0**

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0



**V(H). State Defined Outputs**

**1. Output Target**

- Number of volunteers supported and recognized

**2011:1000                      2012:1000                      2013:1000                      2014:1000                      2015:1000**

- Number of volunteers trained

**2011:400                      2012:400                      2013:400                      2014:400                      2015:400**

- Number of clubs/groups supported

**2011:400                      2012:400                      2013:400                      2014:400                      2015:400**

- Number of youth enrolled in 4-H as a 4-H club, after school or special interest group member

**2011:16000                      2012:16000                      2013:16000                      2014:16000                      2015:16000**

- Number of youth and adults participating in community service projects

**2011:3500                      2012:3500                      2013:3500                      2014:3500                      2015:3500**

**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of of NH youth involved in 4-H YD programs who demonstrate an increase in specific life skills.
2	Number of youth/adults who demonstrate an increase in knowledge and skills related to specific projects and/or subject matter.
3	Number of youth and adults surveyed on involvement in 4-H YD programs that reported they influenced their community.
4	Number of NH youth over the age of 12 and involved in targeted 4-H YD, who present their achievements and/or act as teachers or resources to others through their 4-H experience.
5	Number of 4-H YD volunteers and program staff surveyed that understand and adopt practices within their programs/groups/clubs which foster a sense of belonging, mastery, generosity and independence (Circle of Courage) for all participating youth

**Outcome # 1****1. Outcome Target**

Number of of NH youth involved in 4-H YD programs who demonstrate an increase in specific life skills.

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

**2011:1000                      2012:1000                      2013:1000                      2014:1000                      2015:1000**

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

- 802 - Human Development and Family Well-Being
- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2****1. Outcome Target**

Number of youth/adults who demonstrate an increase in knowledge and skills related to specific projects and/or subject matter.

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

**2011:1000                      2012:1100                      2013:1200                      2014:1200                      2015:1200**

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

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3****1. Outcome Target**

Number of youth and adults surveyed on involvement in 4-H YD programs that reported they influenced their community.

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

**2011:600                      2012:600                      2013:600                      2014:600                      2015:600**

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

- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4**

**1. Outcome Target**

Number of NH youth over the age of 12 and involved in targeted 4-H YD, who present their achievements and/or act as teachers or resources to others through their 4-H experience.

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

**2011:500                      2012:500                      2013:500                      2014:500                      2015:600**

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

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

Number of 4-H YD volunteers and program staff surveyed that understand and adopt practices within their programs/groups/clubs which foster a sense of belonging, mastery, generosity and independence (Circle of Courage) for all participating youth

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

**2011:250                      2012:250                      2013:250                      2014:250                      2015:0**

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

- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

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

**Description**

- The demographics of New Hampshire (NH) are rapidly changing.
- More diverse family structures. Increase in number of NH families living in poverty.
- NH communities lack resources for youth opportunities, particularly in rural areas.
- Increasing need for out-of-school time activities promoting positive youth development for NH youth, especially teens.

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

**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)

### **Description**

- Evaluation of youth development programs is challenging as many of the long-term impacts of 4-H youth development are not apparent until after the youth has left the program.
  - Tracking long-term impacts is expensive and time consuming.
  - Research in positive youth development has found a caring, capable adult role model, along with opportunities to learn and practice important life and social skills, helps youth to develop into a successful and capable adult.
- The focus on evaluation studies in the NH 4-H youth development program is on measuring and documenting life skill development and training and supporting adult volunteers in their role as positive mentors to the youth they work with.

## **2. Data Collection Methods**

- Sampling
- Mail
- On-Site
- Unstructured
- Observation
- Portfolio Reviews

### **Description**

**V(A). Planned Program (Summary)**

**Program # 4**

**1. Name of the Planned Program**

Strengthening New Hampshire Communities through Civic Participation and Leadership

**2. Brief summary about Planned Program**

The Strengthening New Hampshire Communities (SNHC) through Civic Participation and Leadership program builds community capacity to engage diverse members in planning, decision-making, community action, and building connections within the community. Community leaders will be engaged in skill development and enhancement to empower individuals and groups to participate more fully in their community.

**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

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
805	Community Institutions, Health, and Social Services	50%			
806	Youth Development	30%			
903	Communication, Education, and Information Delivery	20%			
	<b>Total</b>	100%			

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

**1. Situation and priorities**

New Hampshire communities face many challenges, including changing demographics, shifting economic structures, and societal crises, with unprecedented growth in some regions and decline in others. Extension's Community Development program helps communities achieve long-term well-being by building human, economic, social and environmental capacity. To build community capacity, Extension Educators provide a variety of educational services to community residents, organizations and local governments. Examples include facilitation of community forums, training in leadership development, assistance with planning activities and provision of technical assistance for economic development, tourism and communications. Extension also connects campus-based resources - particularly faculty and students - to New Hampshire communities.

Further, information gleaned from needs identified as a result of 45 Community Profiles conducted in NH towns over five years, indicates that communities find it difficult to engage diverse citizens in activities and decision-making processes. Lack of volunteerism and deficiencies in leadership exacerbate this decline in civic engagement. The following trends outline the situation facing NH communities:

- There appears to be a decreasing diversity of individuals participating in decision-making and community activities at the local level.

- There is a lack of support for activities that encourage diverse participation in local decision-making processes.
- Social networks between community citizens, organizations, and associations appear to be weakening.
- Volunteerism around community activities has declined due to increasing life-demands on individuals and families.
- Existing leaders lack the skills to engage and/or mobilize diverse participation in community activities and decision-making processes.
- It is becoming increasingly difficult to recruit and develop new leaders for community activities.

**2. Scope of the Program**

- In-State Extension

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

**1. Assumptions made for the Program**

- Citizens want to impact community decision-making.
- All citizens have leadership potential and the capacity to contribute to their community.
- There are potential leaders and volunteers in every community.

**2. Ultimate goal(s) of this Program**

- Individuals and groups from communities gain new leadership skills that enable them to empower others to engage in community activities/projects.
- A diverse range of community members - both communities of place and communities of interest - will become effectively engaged in planning, decision-making, needs assessment, community action and evaluation of community efforts.
- Groups and organizations effectively mobilize available resources &ndash technical assistance, information, and contacts &ndash to achieve their mission/goals.
- Residents of New Hampshire communities build strong connections with neighbors and other community members.
- Leaders guide communities in a more effective manner, ensuring change is made in an organized and inclusive way.

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	3.0	0.0	0.0	0.0
2012	3.0	0.0	0.0	0.0
2013	3.0	0.0	0.0	0.0
2014	3.0	0.0	0.0	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2015	3.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

- Community Profiles, a community-level strategic planning program enables diverse community citizens to come together and map out their desired future and develop an action plan to achieve that future. In addition to working with communities to organize and facilitate Community Profiles, SNHC staff provide follow-up technical assistance to community action teams working on specific projects
- Participatory Planning: Provide assistance/training to enable communities to implement participatory planning processes (i.e. Master Plan visioning, visioning for the arts, youth-adult partnerships, juvenile justice, and accessible agriculture).
- Economic and Tourism Development Assistance: SNHC Team members provide technical and planning assistance to local economic development corporations, regional economic entities and tourism development groups to enhance their decision-making with regard to tourism and economic development plans, projects and activities.
- Web-Based Community Planning Tools: The SNHC team is developing a suite of web-based tools that will enable community decision-makers to conduct community assessments, inform community decisions and implement community-based plans. Examples of tools include the Community Capacity Assessment and the Land Use Resource Clearinghouse.
- Facilitation/leadership skills course-provide yearly skills courses of two to five sessions to community leaders in group facilitation, participatory planning techniques and leadership.
- Global Positioning System (GPS) Training: Provide training to community groups on using global positioning systems to map community assets.

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>• Education Class</li> <li>• Workshop</li> <li>• Group Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Newsletters</li> <li>• Web sites</li> </ul>

**3. Description of targeted audience**

Youth and adult audiences will be addressed through civic participation and leadership programs. Particular emphasis will be made to include formal, informal, and potential community leaders and disenfranchised audiences (low-income, minority, individuals with disabilities).

**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**



	<b>Direct Contact Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
2011	1000	3000	0	0
2012	1000	3000	0	0
2013	1000	3000	0	0
2014	1000	3000	0	0
2015	1000	3000	0	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

**2011:0                      2012:0                      2013:0                      2014:0                      2015:0**

**3. Expected Peer Review Publications**

<b>Year</b>	<b>Research Target</b>	<b>Extension Target</b>	<b>Total</b>
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs**

**1. Output Target**

- Number of community leaders who complete a facilitation/leadership skills course

<b>2011:20</b>	<b>2012:20</b>	<b>2013:20</b>	<b>2014:20</b>	<b>2015:20</b>
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- Number of people receiving Global Positioning System (GPS) Training

<b>2011:600</b>	<b>2012:600</b>	<b>2013:600</b>	<b>2014:600</b>	<b>2015:600</b>
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- Number of people viewing web-based Inventory Citizen Engagement/Leadership Resources

<b>2011:3000</b>	<b>2012:3000</b>	<b>2013:3000</b>	<b>2014:3000</b>	<b>2015:3000</b>
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- Number of Community Profiles (community-level strategic planning program enables diverse community citizens to come together and map out their desired future and develop an action plan to achieve that future) held.

<b>2011:2</b>	<b>2012:2</b>	<b>2013:2</b>	<b>2014:2</b>	<b>2015:2</b>
---------------	---------------	---------------	---------------	---------------
  
- Number of communities provided with technical assistance to enhance their decision making with regard to tourism and economic development plans, project, and activities.

<b>2011:10</b>	<b>2012:10</b>	<b>2013:10</b>	<b>2014:10</b>	<b>2015:10</b>
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**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of groups/organizations around the state that network more effectively and share resources, expertise, and assistance with other groups. This will enable groups to provide more needed services to individuals and communities.
2	Number of groups around the state to implement participatory decision-making processes as a result of Civic Participation and Leadership Team activities (i.e. Master Plan Visioning Session, Community Profile Action Planning, strategic planning)
3	Number of groups that learn to collaborate more effectively to form partnerships and/or community coalitions
4	Number of community leaders who learn skills to more effectively lead groups/organizations
5	Number of communities that build a knowledge base of resources for building civic engagement and leadership
6	Number of community leaders who learn processes and techniques for engaging citizens in community decision-making
7	Number of communities that work with Extension to implement mechanisms/tools to analyze the current situation and identify emerging issues to be addressed.
8	Number of community leaders who develop a new understanding of the issues facing their community.
9	Number of citizens who take on new leadership roles within their community as a result of Extension programs.
10	Number of action groups/committees that utilize UNH Cooperative Extension expertise in partnership with other agencies/organizations around the state to preserve and conserve open space.
11	Number of citizens and community leaders who develop a better understanding of local land use planning and zoning policies
12	Number of action groups/committees that engage diverse audiences in planning for the economic viability of their communities.

**Outcome # 1****1. Outcome Target**

Number of groups/organizations around the state that network more effectively and share resources, expertise, and assistance with other groups. This will enable groups to provide more needed services to individuals and communities.

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

2011:20	2012:20	2013:20	2014:20	2015:20
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**3. Associated Knowledge Area(s)**

- 805 - Community Institutions, Health, and Social Services
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2****1. Outcome Target**

Number of groups around the state to implement participatory decision-making processes as a result of Civic Participation and Leadership Team activities (i.e. Master Plan Visioning Session, Community Profile Action Planning, strategic planning)

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

2011:20	2012:20	2013:20	2014:20	2015:20
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**3. Associated Knowledge Area(s)**

- 805 - Community Institutions, Health, and Social Services

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3****1. Outcome Target**

Number of groups that learn to collaborate more effectively to form partnerships and/or community coalitions

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

2011:15	2012:15	2013:15	2014:15	2015:15
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**3. Associated Knowledge Area(s)**

- 805 - Community Institutions, Health, and Social Services

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4**

**1. Outcome Target**

Number of community leaders who learn skills to more effectively lead groups/organizations

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

**2011:100                      2012:100                      2013:10                      2014:100                      2015:100**

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

- 805 - Community Institutions, Health, and Social Services

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

Number of communities that build a knowledge base of resources for building civic engagement and leadership

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

**2011:15                      2012:15                      2013:15                      2014:15                      2015:15**

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

- 805 - Community Institutions, Health, and Social Services
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 6**

**1. Outcome Target**

Number of community leaders who learn processes and techniques for engaging citizens in community decision-making

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

**2011:100                      2012:100                      2013:100                      2014:100                      2015:100**

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

- 805 - Community Institutions, Health, and Social Services

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 7**

**1. Outcome Target**

Number of communities that work with Extension to implement mechanisms/tools to analyze the current situation and identify emerging issues to be addressed.

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

<b>2011:15</b>	<b>2012:15</b>	<b>2013:15</b>	<b>2014:15</b>	<b>2015:15</b>
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**3. Associated Knowledge Area(s)**

- 805 - Community Institutions, Health, and Social Services

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 8**

**1. Outcome Target**

Number of community leaders who develop a new understanding of the issues facing their community.

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

<b>2011:30</b>	<b>2012:30</b>	<b>2013:30</b>	<b>2014:30</b>	<b>2015:30</b>
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**3. Associated Knowledge Area(s)**

- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 9**

**1. Outcome Target**

Number of citizens who take on new leadership roles within their community as a result of Extension programs.

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

<b>2011:10</b>	<b>2012:10</b>	<b>2013:10</b>	<b>2014:10</b>	<b>2015:10</b>
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**3. Associated Knowledge Area(s)**

- 805 - Community Institutions, Health, and Social Services
- 806 - Youth Development
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 10**

**1. Outcome Target**

Number of action groups/committees that utilize UNH Cooperative Extension expertise in partnership with other agencies/organizations around the state to preserve and conserve open space.

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

**2011:15                      2012:15                      2013:15                      2014:15                      2015:15**

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

- 805 - Community Institutions, Health, and Social Services

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 11**

**1. Outcome Target**

Number of citizens and community leaders who develop a better understanding of local land use planning and zoning policies

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

**2011:100                      2012:100                      2013:100                      2014:100                      2015:100**

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

- 805 - Community Institutions, Health, and Social Services
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 12**

**1. Outcome Target**

Number of action groups/committees that engage diverse audiences in planning for the economic viability of their communities.

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

**2011:10                      2012:10                      2013:10                      2014:10                      2015:10**

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

- 805 - Community Institutions, Health, and Social Services
- 903 - Communication, Education, and Information Delivery

#### 4. Associated Institute Type(s)

- 1862 Extension

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

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

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Competing Public priorities
- Populations changes (immigration, new cultural groupings, etc.)

##### Description

- Changes in Extension priorities may occur as federal, state and county financial support changes
- Support for local Extension work may limit the scope of staff activities.
- Disasters and economic conditions may influence the short and long-term civic participation and leadership needs of NH residents.

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

##### 1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)

##### Description

Community leaders, diverse community residents and Extension staff involved with towns undergoing Extension's community development programming will be surveyed by telephone to see what participatory decision-making is spawned as a result of Profiles and other programs. A follow-up telephone survey gauges frequency of participatory planning activities directly or indirectly resulting from Profiles and other processes. A year end report will be produced by October 1. Data will be distributed to community leaders, legislators and others.

Community leaders, diverse community residents and Extension staff will be involved with a pre and post Community Capacity Index to measure changes in civic/social capacity. These assessments will take place each September. The results will inform Extension staff where civic/social capacity deficiencies may exist in communities, enabling staff to retool programs to address deficiencies.

##### 2. Data Collection Methods

- Sampling
- On-Site
- Other (web survey)

##### Description

{NO DATA ENTERED}



**V(A). Planned Program (Summary)****Program # 5****1. Name of the Planned Program**

Family and Consumer Resources

**2. Brief summary about Planned Program**

University of New Hampshire Cooperative Extension delivers science-based programs through workshops, home-study courses, web-based curricula and other methods to give people the knowledge, skills and motivation to achieve their economic and social goals. The emphasis of Family and Consumer Resources Extension programs is on changing behaviors resulting in effective individuals, strong families and prosperous communities.

**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**

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
801	Individual and Family Resource Management	50%			
802	Human Development and Family Well-Being	50%			
	<b>Total</b>	100%			

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities****Parenting Education**

Strong families raise children to become responsible, productive and caring adults. As a nation we have gradually increased the supports that we offer for families and overall, our knowledge and understanding of children and their developmental needs have greatly improved. However, deficits remain and many families face problems that place their children at risk for a life of adversity. Parents, from diverse backgrounds and with diverse strengths and weaknesses, are in need of education to help them understand how to more effectively parent their children. For example, many parents do not understand that infants begin to "take in" their environment in the first few days of life; and, about the harmful effects of children being exposed to violence or how a parent's state of depression can place his or her children at risk for adjustment problems. Characteristics about children's families can also place them at-risk for future problems. For example, in 2003, 1 in 5 New Hampshire children lived in families that were headed by a single parent and 22% of children lived in families that were considered low-income. In that same year, over 12,000 children lived in extreme poverty and 7,000 children lived in a household where no adult worked in the past 12 months. When these types of risk factors are combined with a lack of knowledge, children can suffer.

**Quality Child Care**

It is not only parents who need assistance in raising and caring for children. Many caregivers outside the home have a significant impact on children's lives. More parents work outside the home today than ever before. This is especially true of parents with young children. Nationwide, 72% percent of women with minor children participate in the work force, and among New Hampshire families with children under the age of six, 61% of those families have both parents in the workforce.

Nationally, almost three-quarters of children under the age of 5 whose mothers are employed are in non-relative child care. While many children attend an organized daycare or nursery school center, many others do not. This can lead to great variations in the level of knowledge of caregivers and in the quality of care that children receive.

## **Family Resource Management**

Americans are making less and saving less. Personal income declined from 6.1% in 2004 to 4.3% in 2005 (U.S. Department of Commerce, Bureau of Economic Analysis). Personal savings as a percentage of disposable personal income declined from 1.8% in 2004 to -.4% in 2005 (U.S. Department of Commerce, Bureau of Economic Analysis). Consumer credit increased 3% in 2005 (Federal Reserve). There were 6058 bankruptcy filings in NH in 2005 which was a 32% increase from 2004 (United States Bankruptcy Court for the District of New Hampshire). Households are saving less and spending more putting their financial security at risk. Spending habits start early. Comparing 2005 to 2004, teens overall spending level declined 6% but nearly half believe they'll spend more in 2006 than they did in 2005 (Teenage Research Unlimited).

## **2. Scope of the Program**

- In-State Extension
- Multistate Extension

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

### **1. Assumptions made for the Program**

1. A committed and skilled professional staff in Family and Consumer Resources will be retained.
2. Cooperative Extension has the capacity to address the educational needs of the residents of NH.
3. Cooperative Extension is a highly effective educational program development and delivery organization and is a non-biased research-based source of information and education.
4. Educational resources needed to achieve long term outcomes will be supported and developed.
5. Effective collaborations of agencies and organizations, and strategic partnerships will strengthen program development, delivery and evaluation.
6. Funding through NIFA, State of NH, and NH counties remains in place and is enhanced through sustainable grants, contracts and gifts.

### **2. Ultimate goal(s) of this Program**

- Child care providers provide high quality child care.
- Increase number of families able to meet their nutritional needs through available resources.
- Individuals and families have greater capacity to establish and maintain financial security.

- Parents demonstrate healthy interpersonal relationships and provide appropriate nurturance and guidance to their children.

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	13.0	0.0	0.0	0.0
2012	13.0	0.0	0.0	0.0
2013	13.0	0.0	0.0	0.0
2014	13.0	0.0	0.0	0.0
2015	13.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

- Parenting Education such as Strengthening Families 10- 14, Dare To Be You, Family Focus, Supportive Connections for Single Parent Families, Stepfamilies, Relatives as Parents; Cradle Crier and Toddler Tales ( age- paced newsletters); Single topic sessions including Positive Discipline, Raising Your Child's Self- Esteem
- Better Kid Care, Promoting the Social Emotional Competence of Young Children, Collaborations with NH Resource and Referral Agencies.
- Making Money Work for You, Planning Ahead...Staying Ahead, Credit Check Up, Debt Check Up, Starting Over Bankruptcy Education, Take the Road to Financial Security in Later Life, Investing for Your Future, Legally Secure Your Financial Future, High School Financial Planning

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>• Education Class</li> <li>• Workshop</li> <li>• Group Discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Newsletters</li> <li>• Web sites</li> </ul>

**3. Description of targeted audience**

Parents, youth, child care providers, policy makers, human service agencies, families

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	4000	0	300	0
2012	4000	0	300	0
2013	4000	0	300	0
2014	4000	0	300	0
2015	4000	0	300	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

2011:0                      2012:0                      2013:0                      2014:0                      2015:0

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs**

**1. Output Target**

- Number of people participating in Better Kid Care, Promoting the Social Emotional Competence of Young Children, Collaborations with NH Resource and Referral Agencies

<b>2011:100</b>	<b>2012:100</b>	<b>2013:100</b>	<b>2014:100</b>	<b>2015:100</b>
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- Number of adults participating in Making Money Work for You, Planning Ahead...Staying Ahead, Credit Check Up, Debt Check Up, Starting Over Bankruptcy Education, Take the Road to Financial Security in Later Life, or Investing for Your Future

<b>2011:1000</b>	<b>2012:1000</b>	<b>2013:1000</b>	<b>2014:1000</b>	<b>2015:1000</b>
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- Number of people participating in Parenting Education such as Strengthening Families 10- 14, Dare To Be You, Family Focus, Supportive Connections for Single Parent Families, Stepfamilies, Relatives as Parents; receiving Cradle Crier and Toddler Tales

<b>2011:20000</b>	<b>2012:20000</b>	<b>2013:20000</b>	<b>2014:20000</b>	<b>2015:20000</b>
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- Number of youth participating in Making Money Work for You, Planning Ahead...Staying Ahead, Credit Check Up, Debt Check Up, Starting Over Bankruptcy Education, Take the Road to Financial Security in Later Life, or Investing for Your Future

<b>2011:1500</b>	<b>2012:1500</b>	<b>2013:1500</b>	<b>2014:1500</b>	<b>2015:1500</b>
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**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of program participants who report utilizing effective practices that lead to quality child care experiences
2	Number of money management education participants who document their improved money management practices on evaluation instruments
3	Number of program participants who document an increase in their financial literacy on evaluation instruments
4	Number of participants reporting a positive change in family functioning and resiliency as indicated by such behaviors as listening to one another, talking about and solving problems and pulling together when faced with stressful situations.
5	Number of participants that indicate a positive increase in their ability to access social support such as having someone to talk to when their family is in crisis, facing problems, or when they feel lonely.
6	Number of participants that report a positive change in their ability to provide nurturing and attachment to their child(ren) as indicated by the frequency they felt happy being with their child, they felt close to their child, were able to soothe their child when he/she was upset, and spending time with their child doing what he or she likes
7	Number of participants that indicate an increase in their Understanding of Child Development and Knowledge of Parenting
8	Number of participants that indicate that as a direct result of their participation in this Cooperative Extension Program, they have improved their behavior related to parenting, stress/time management, family coping, communication, conflict management, and/or access to services and support
9	Number of participants that indicate satisfaction with their quality of life including their family relationships, their community's schools, their ability to access health care and with their neighborhood and community

**Outcome # 1**

**1. Outcome Target**

Number of program participants who report utilizing effective practices that lead to quality child care experiences

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

**2011:50                      2012:50                      2013:50                      2014:50                      2015:50**

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

- 802 - Human Development and Family Well-Being

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of money management education participants who document their improved money management practices on evaluation instruments

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

**2011:875                      2012:875                      2013:875                      2014:875                      2015:875**

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

- 801 - Individual and Family Resource Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Number of program participants who document an increase in their financial literacy on evaluation instruments

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

**2011:700                      2012:700                      2013:700                      2014:700                      2015:700**

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

- 801 - Individual and Family Resource Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4****1. Outcome Target**

Number of participants reporting a positive change in family functioning and resiliency as indicated by such behaviors as listening to one another, talking about and solving problems and pulling together when faced with stressful situations.

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

2011:50

2012:50

2013:50

2014:50

2015:50

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

- 802 - Human Development and Family Well-Being

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5****1. Outcome Target**

Number of participants that indicate a positive increase in their ability to access social support such as having someone to talk to when their family is in crisis, facing problems, or when they feel lonely.

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

2011:30

2012:30

2013:30

2014:30

2015:30

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

- 802 - Human Development and Family Well-Being

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 6****1. Outcome Target**

Number of participants that report a positive change in their ability to provide nurturing and attachment to their child(ren) as indicated by the frequency they felt happy being with their child, they felt close to their child, were able to soothe their child when he/she was upset, and spending time with their child doing what he or she likes

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

2011:50

2012:50

2013:50

2014:50

2015:50

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

- 802 - Human Development and Family Well-Being

**4. Associated Institute Type(s)**

- 1862 Extension



**Outcome # 7****1. Outcome Target**

Number of participants that indicate an increase in their Understanding of Child Development and Knowledge of Parenting

**2. Outcome Type : Change in Knowledge Outcome Measure****2011:70****2012:70****2013:70****2014:70****2015:70****3. Associated Knowledge Area(s)**

- 802 - Human Development and Family Well-Being

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 8****1. Outcome Target**

Number of participants that indicate that as a direct result of their participation in this Cooperative Extension Program, they have improved their behavior related to parenting, stress/time management, family coping, communication, conflict management, and/or access to services and support

**2. Outcome Type : Change in Action Outcome Measure****2011:30****2012:30****2013:30****2014:30****2015:30****3. Associated Knowledge Area(s)**

- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 9****1. Outcome Target**

Number of participants that indicate satisfaction with their quality of life including their family relationships, their community's schools, their ability to access health care and with their neighborhood and community

**2. Outcome Type : Change in Knowledge Outcome Measure****2011:70****2012:70****2013:70****2014:70****2015:70****3. Associated Knowledge Area(s)**

- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being

#### **4. Associated Institute Type(s)**

- 1862 Extension

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

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

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

##### **Description**

- Family and Consumer Sciences will become better understood as a discipline.
- Poverty places families and communities under great stress that interferes with their ability to achieve positive outcomes.
- Economic development and stability is a goal for individuals, families, communities and businesses.
- Individuals will choose to make good decisions, be effective parents, choose quality child care, and manage their resources with skill if they have the awareness, knowledge, attitudes and skills to do so.
- Individuals are challenged to balance personal, family and professional goals and often lack the time to participate in learning opportunities.

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

##### **1. Evaluation Studies Planned**

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

##### **Description**

A post-workshop survey will be administered to all participants of child care provider educational workshops. Participants will be asked to indicate to what degree they learned new information, whether the information that was presented was relevant to the children that they serve, to what degree and how they will be able to use the information learned in the educational session.

Pre and post test evaluations for participants of financial literacy programs

Program participants in parenting education programs will be asked to complete a retrospective pre- and post-survey at the time of program completion. They will be asked to what extent they have gained knowledge about positive discipline or behaviors that will result in their child taking responsibility and exercising self control. They will be assessed with regard to how useful the program information was and to what extent they will be able to use this information in their day-to-day parenting. Finally, they will be asked whether and how they plan to use the

information in their parenting role.

## 2. Data Collection Methods

- Whole population
- On-Site

### Description

{NO DATA ENTERED}

**V(A). Planned Program (Summary)****Program # 6****1. Name of the Planned Program**

Natural Resource Business Institute

**2. Brief summary about Planned Program**

This plan reflects an interdisciplinary effort to support new and existing businesses that are directly related to New Hampshire's natural resources. By providing training, support and resources to entrepreneurs, new and existing natural resource-based business initiatives will grow and remain viable in New Hampshire.

**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**

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
601	Economics of Agricultural Production and Farm Management	25%			
602	Business Management, Finance, and Taxation	25%			
604	Marketing and Distribution Practices	25%			
605	Natural Resource and Environmental Economics	25%			
	<b>Total</b>	100%			

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities**

Businesses directly or indirectly involved with farming, fishing or forestry enterprises not only make significant contributions to the New Hampshire economy, but also provide stewardship of the state's natural resources and a working landscape benefiting citizens and attracting tourists. If the present natural resource businesses are to continue and new ones start, they need to carefully evaluate their personal goals, resource base, and enterprise options. UNH Cooperative Extension is familiar with and especially positioned to assist natural resource businesses through a natural resource business institute.

**2. Scope of the Program**

- In-State Extension

**V(D). Planned Program (Assumptions and Goals)****1. Assumptions made for the Program**

Businesses which provide open space, working landscapes and stewardship of land and water resources are important to the state.

New Hampshire citizens and decision makers are concerned with the viability of existing natural resource

businesses.

Cooperative Extension offers a unique level of expertise especially pertinent to natural resource businesses.

An interdisciplinary approach will produce more impact and greater results than working individually.

**2. Ultimate goal(s) of this Program**

Improved viability of New Hampshire's natural resource businesses

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	0.5	0.0	0.0	0.0
2012	1.0	0.0	0.0	0.0
2013	0.5	0.0	0.0	0.0
2014	0.5	0.0	0.0	0.0
2015	0.5	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

Conduct one or two 13-week, intensive Natural Resources Business Institutes annually across the state for new and existing natural resource-based businesses. The institute will include forty hours of instruction, homework, and the opportunity for participants to receive college credit.

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

**Extension**

Direct Methods	Indirect Methods
• Education Class	• Web sites

**3. Description of targeted audience**

People interested in starting or already running natural resource-based businesses in New Hampshire

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	20	0	0	0
2012	20	0	0	0
2013	20	0	0	0
2014	20	0	0	0
2015	20	0	0	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

2011:0                      2012:0                      2013:0                      2014:0                      2015:0

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs**

**1. Output Target**

- Number of people completing the Natural Resource Business Institute

2011:20                      2012:20                      2013:20                      2014:20                      2015:20

**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of participants who start, expand or modify a business enterprise
2	Number of participants who report completing a planning worksheets on a regular basis

**Outcome # 1**

**1. Outcome Target**

Number of participants who start, expand or modify a business enterprise

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

<b>2011:5</b>	<b>2012:5</b>	<b>2013:5</b>	<b>2014:5</b>	<b>2015:5</b>
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**3. Associated Knowledge Area(s)**

- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices
- 605 - Natural Resource and Environmental Economics

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of participants who report completing a planning worksheets on a regular basis

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

<b>2011:20</b>	<b>2012:20</b>	<b>2013:20</b>	<b>2014:20</b>	<b>2015:20</b>
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**3. Associated Knowledge Area(s)**

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

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

- Economy
- Competing Programmatic Challenges

**Description**

Development pressures throughout New Hampshire are reducing the natural resource base available for farming, fishing and forestry business activities. Changes in state priorities may shift support away from natural resource business viability issues. UNH Cooperative Extension budget shortfalls may limit the scope of activities.

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

**1. Evaluation Studies Planned**



- After Only (post program)
- Time series (multiple points before and after program)

**Description**

Participants will be asked to complete a post-institute survey asking them about knowledge gained as a result of the Institute and their intentions to implement any of the practices taught. A follow-up survey will be done six months after the Institute to ascertain if they have started, modified, expanded a business enterprise; whether or not they have adopted any new practices (like completing planning worksheets on a regular basis); and whether or not they are active in groups that advocate for natural resource businesses.

**2. Data Collection Methods**

- Whole population
- Mail
- On-Site

**Description**

{NO DATA ENTERED}

**V(A). Planned Program (Summary)****Program # 7****1. Name of the Planned Program**

Sea Grant and Water Resources

**2. Brief summary about Planned Program**

New Hampshire's fresh water and marine resources are critical to the state's environment, economic security and quality of life. UNH Cooperative Extension's Water Resources and Sea Grant Program promotes the protection, conservation and wise use of New Hampshire's resources through education and outreach. We work with partner organizations to bring research-based information and assistance to individuals, schools, communities and organizations throughout the state. The Water Resources and Sea Grant Team works with Extension Field staff in eleven office locations around the state.

**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

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
112	Watershed Protection and Management	10%			
131	Alternative Uses of Land	20%			
133	Pollution Prevention and Mitigation	30%			
135	Aquatic and Terrestrial Wildlife	25%			
307	Animal Management Systems	5%			
903	Communication, Education, and Information Delivery	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities****COMMERCIAL FISHERIES**

In 2005, the Northeast had landings of 683 million pounds of fish, worth nearly \$97 million. The two most economically important species for the region are the American Lobster and Sea Scallop, with landings of 87.6 million pounds valued at \$414 million and \$433 million respectively. The mixed groundfish and flounder fisheries were valued at \$120 million.

The commercial fishing industry in New Hampshire is composed of nearly 140 commercial vessels, consisting of 100 lobster and 40 groundfish boats. In 2005, New Hampshire had landings of 21.2 million pounds of fish, worth just over \$22 million. The single most economically important species for New Hampshire continues to be the American lobster, with landings of

2.5 million pounds valued at \$14.3 million; Atlantic cod, at \$ 1.9 million, ranked second in value; followed by goosefish at just over \$1.5 million; and Atlantic herring at \$ 1.3 million. The groundfish boats are divided almost equally between gillnetters and druggers. With the exception of one large company targeting offshore lobster, most New Hampshire fishermen represent small, family-owned operations that fish inshore.

By-catch and regulatory discards continue to be a significant challenge facing the industry. These issues have been addressed through regulations and conservation engineering. Conservation engineering, or the science of designing innovative fishing gear to reduce by-catch and improve species selectivity, has raised hope for sustainable fishing practices by developing gear that has separated cod from the multi-species groundfishery, and significantly reduced by-catch in the northern shrimp fishery. Commercial fishing in the Gulf of Maine continues to face the complicated challenge of mitigating interactions between gear and threatened/endangered species, particularly marine mammals.

In addition to overfishing, commercial fisheries are under a "microscope" that has focused on understanding the impact of mobile and fixed gear on the benthic ecosystem. Scientists do not have a clear or thorough understanding of the short or long-term impacts of fishing on benthic communities. Over the coming years it will continue to be important for fisheries scientist and industry to work collaboratively to evaluate these impacts and develop strategies that will promote a healthy and economically viable fishery.

## **LAND AND WATER CONSERVATION**

Rapid land use changes are causing environmental, economic and social impacts. People have less connection with traditional uses of land. Rural and pristine waters and habitats are at risk and urban water quality remains in need of improvement and/or protection.

People often respond most when the impacts are personal. Community and conservation leaders are mainly volunteers without extensive backgrounds in natural resources and other disciplines related to land use and water quality issues. Tools are available for conserving natural resources and managing growth, but many community and conservation leaders have limited understanding of them. Groups and individuals need long-term, sustained assistance as well as timely access to information and other resources for better natural resources stewardship.

There is currently broad public support for land and water conservation. Commercial audiences are faced with increasing environmental, regulatory and economic pressures that strain the ability to maintain open space. The general public does not fully understand the consequences of land and water protection and development impacts.

## **COASTAL ECOSYSTEM HEALTH AND COMMUNITIES**

Coastal ecosystems are ecologically and economically valuable environments that are subject to multi-use demands ranging from food production and the purification of societies' wastes, to flood control, transportation and recreation. These systems provide essential habitat for fish and shellfish that constitute 75% of commercial landings in the United States and provide essential 'ecosystem services' valued in the trillions of dollars annually on a global scale. At the same time, these systems have become increasingly threatened by human-induced perturbations. These include non-point source pollution, invasive species, coastal development and habitat alteration.

Although New Hampshire is not a particularly populous state (1.3 million residents) and has a relatively short coastline, it in many ways mirrors other coastal states in the pressures of continued population growth and the demographics of that growth. Nearly 75% of New Hampshire residents live within 50 miles of the coast, and the rate of growth in the 'seacoast' region has grown at a rate of 10% over the past decade, a rate nearly double that of the rest of the state. Coastal communities, deeply rooted in the resources of the estuaries and ocean coasts that they inhabit, are struggling with how to manage growth and its associated waste streams. The Great Bay estuary is displaying indicators of nutrient over-enrichment, bacterial contamination and habitat loss, while coastal fishermen are dealing with harmful algal bloom related fisheries closures and the unknown effects of proposed offshore sewage outfalls.

## **MARINE SCIENCE EDUCATION**

The recent reports of two national commissions on the status of the oceans emphasize the important role of education in the future of the oceans. Both commissions, the PEW Oceans Commission and the United States Commission on Ocean Policy, stress that successful management of our ocean resources is dependent upon the development of a citizenry literate in marine and aquatic science.

The heightened urgency to increase marine literacy identified by the Commissions joins the on-going efforts in public schools throughout the country to significantly improve student performance in mathematics and science. This effort can benefit greatly from the utilization of marine and aquatic science as an engaging context for the teaching of core mathematics and science content. Programs like Sea Grant are well positioned to help provide the curriculum resources and teacher professional development necessary to succeed.

## **WATER QUALITY**

The fresh and coastal waters of New Hampshire represent a valuable water resource contributing to the state's economic base through recreation, tourism, and real estate revenues. In addition some lakes and rivers serve as current or potential water supplies. For most residents (as indicated by boating and fishing registrations) our waters help to insure a high quality of life. However, New Hampshire currently leads all of the New England states in the rate of new development and redevelopment. The long-term consequences of the resulting pressure and demands on the state's precious water resources remain unknown. Of particular concern is the response of our waters to increasing non-point source pollutant loading due to watershed development and land use activities. Local citizens, lake/watershed associations and local decision-makers remain in dire need of additional information required for the intelligent management of our water resources. Limited financial resources do not allow for adequate monitoring of these waters by state or federal agencies, and the increased development and recreational use require a more accurate assessment of the water quality of our estuaries, lakes, ponds, rivers and streams.

Many volunteer water quality monitoring programs in NH and in New England have mastered basic sampling techniques and are now at the stage where they require assistance to go the next step. With data being collected they require guidance in how to manage it, analyze it and use it to tell a story of local importance. In addition they are requesting guidance on how to expand their monitoring to tackle non-point source pollution at the origins and how to better integrate their programs to address community concerns in the context of a watershed approach. There is a growing recognition that it's not just the water - it's the watershed - which must be understood in order to solve non-point pollution problems.

### **2. Scope of the Program**

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

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

#### **1. Assumptions made for the Program**

##### Commercial Fisheries

- Commercial fishing industry remains viable
- Sea Grant funding remains stable
- Fishing regulations continue to restrain days at sea

### Coastal Ecosystem Health and Communities

- Despite differences among community members, natural resource protection is a shared value overall
- Training and education, technical assistance, iterative contact and inclusive processes with communities will enhance their capacities to engage in community based natural resource protection
- Local decision makers come to their positions with wide variation in knowledge, skill and attitudes
- Knowledge about the benefits of desired behaviors and about possible harmful consequences of non-desired behaviors can influence community member behavior toward natural resources over time

### Marine Science Education

- Improving student performance in science is a priority for the state and nation's educators and communities
- Engaging students in the study of the marine environment will help improve their performance in science overall
- An improved understanding of the marine environment will increase decision-makers capacity to make wise, informed decisions at the local, state and national level

### Water Quality

- Volunteer monitoring provides cost-effective data that is acceptable for guiding local growth and natural resources management decisions as well as providing information for statewide water quality assessments.
- Participation in the NH Lakes Lay Monitoring Program and Great Bay Coastal Watch empowers participants to become more active in their community serving as an advocate for water resources protection
- Extension volunteer monitoring efforts in the New England region are model programs with high program transferability potential at a national and regional scale

## **2. Ultimate goal(s) of this Program**

- Develop technologies and techniques that will lead to increased selectivity and reduced by-catch and regulatory discard of commercially important Gulf of Maine species
- Improve fisheries science and provide ancillary employment for fishermen by encouraging and facilitating cooperative research
- Viable commercial groundfish and shellfish fisheries will remain in the New England region.
- Reduce the rate of open space loss by increasing the level of land conservation that ensures working landscapes
- Biodiversity is maintained and protected over the long-term
- Water quality in lakes, streams and estuaries improves or is maintained at acceptable levels
- Identify potential vectors for the introduction of potentially harmful aquatic invasive species and provide educational programs and resources to help appropriate audiences prevent such introductions

- Continue building the local community's capacity for monitoring water bodies with emphasis on detecting long-term trends as well as impacts due to increasing development and recreational pressures by improving the capability of volunteer monitors to report their findings back to their communities to allow for proactive planning and stewardship of local water resources
- Continue to develop and foster participatory research collaborative with citizens, faculty and cooperating agencies that address emerging issues and information needs regarding water resources
- Create and sustain effective marine and aquatic science-based educational programs for both formal K-12 audiences and informal family and adult audiences
- Support the use of marine and aquatic sciences content and examples in the teaching of K-12 science, mathematics, social sciences and language arts

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	7.0	0.0	0.0	0.0
2012	7.0	0.0	0.0	0.0
2013	7.0	0.0	0.0	0.0
2014	7.0	0.0	0.0	0.0
2015	7.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

**COMMERCIAL FISHERIES**

- Hold educational workshops on the following topics:
  - Focusing efforts on reducing by-catch and increasing selectivity of fishing gear;
  - Focusing efforts on reducing sea-bed impacts by mobile fishing gear;
  - Facilitating cooperative research partnerships between fishermen and scientists;
  - Safety drill conductor training.
  - Welding safe practices and techniques.
  - Weather interpretation and forecasting.
  - Marine engine repair.
- Publish information sheets, technical reviews, and web pages which detail innovative fishing gears and technologies that reduce by-catch, minimize benthic impacts and enhance gear selectivity.

**LAND AND WATER CONSERVATION**

- Provide focused training and long-term assistance to communities on natural resource planning and land conservation.
- Provide direct assistance to towns and conservation groups upon request
- Conduct land conservation and natural resources workshops and other educational activities as suggested by program staff and as requested by communities and conservation groups
- Conduct the Natural Resources Outreach Coalition program for communities selected annually.
- Develop, enhance and deliver presentations (including GIS-based) about land use/water quality to local decision makers
- Facilitate community meetings to develop action plans for implementing water and natural resource based planning

### **COASTAL ECOSYSTEM HEALTH AND COMMUNITIES**

- Broadcast educational messages over low power radio (Great Bay Area Radio) to motorists about the estuary, research, educational opportunities and Sea Grant.
- Conduct at least 5 activity-based Great Bay Discovery Cruises.
- Provide information to communities and development professionals to encourage the use of more innovative stormwater management.
- Produce printed, presentation, web and other educational materials

### **MARINE SCIENCE EDUCATION**

- Review and revise existing programs and curriculum materials to support teaching core science standards through a marine context
- Develop new marine education K-12 Sea Trek programs that reflect emerging national scientific issues and address prioritized education standards
- Expand our programs and materials that target adult audiences and recruit and train a cadre of Docents specifically for that role
- Develop programs focused on high school level teachers and students that provide exposure to marine research and encourage students to pursue marine fields in college and beyond

### **WATER QUALITY**

- Hold water quality monitoring training sessions for new and existing volunteers - conduct field visits for in-depth monitoring and quality assurance
- Provide analytical services, data base management and data analysis for Great Bay Coastal Watch and NH Lakes Lay Monitoring Program collected samples
- Produce annual lake reports and coastal reports on water quality assessments from volunteer monitoring efforts
- Hold regular meetings of the monitors to provide program updates, advanced monitoring technique trainings and data interpretation/presentation skill building. Also conduct needs assessment and evaluation

- Provide data and data interpretation as requested by decision-makers, cooperators and watershed stakeholder groups

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>• Education Class</li> <li>• Workshop</li> <li>• Group Discussion</li> <li>• One-on-One Intervention</li> <li>• Demonstrations</li> </ul>	<ul style="list-style-type: none"> <li>• Public Service Announcement</li> <li>• Newsletters</li> <li>• TV Media Programs</li> <li>• Web sites</li> <li>• Other 1 (radio)</li> </ul>

**3. Description of targeted audience**

Commercial fishermen and related industries; land owners and recreational users of New Hampshire's lakes, estuaries, rivers, and ocean beaches; Formal and non-formal educators and K-12 students; policy and decision makers

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	1700	50000	0	0
2012	1700	50000	0	0
2013	1700	50000	0	0
2014	1700	50000	0	0
2015	1700	50000	0	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

2011:0                      2012:0                      2013:0                      2014:0                      2015:0

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0



<b>Year</b>	<b>Research Target</b>	<b>Extension Target</b>	<b>Total</b>
2015	0	0	0

**V(H). State Defined Outputs****1. Output Target**

- Number of activity-based Great Bay Discovery Cruises provided to citizens with the opportunity to learn about the estuary aboard the University's research vessel

**2011:5**                      **2012:5**                      **2013:5**                      **2014:5**                      **2015:5**

- Number of water quality monitoring training sessions held for new and existing volunteers

**2011:2**                      **2012:2**                      **2013:2**                      **2014:2**                      **2015:2**

- Number of annual lake reports and coastal reports published on water quality assessments from volunteer monitoring efforts

**2011:5**                      **2012:5**                      **2013:5**                      **2014:5**                      **2015:5**

- Number of new volunteers trained in proper water quality sampling methods and who participate in seasonal sampling as part of the Great Bay Coastal Watch or Lakes Lay Monitoring Program

**2011:10**                      **2012:10**                      **2013:10**                      **2014:10**                      **2015:10**

- Number of hours NH Lakes Lay Monitoring Program volunteers contribute toward conducting water quality monitoring and analysis activities in their local watersheds

**2011:8500**                      **2012:8500**                      **2013:8500**                      **2014:8500**                      **2015:8500**

- Number of towns and conservation groups provided with direct assistance regarding land and water conservation

**2011:20**                      **2012:20**                      **2013:20**                      **2014:20**                      **2015:20**

- Number of convenient and effective teacher training programs held in conjunction with all boat-based and field programs utilizing both face-to-face and remote methods

**2011:2**                      **2012:2**                      **2013:2**                      **2014:2**                      **2015:2**

- Number of NROC communities provided with water resource/water quality related technical assistance

**2011:2**                      **2012:2**                      **2013:2**                      **2014:3**                      **2015:3**

- Number of educational workshops for commercial fishermen on the following topics:

\* Focusing efforts on reducing by-catch and increasing selectivity of fishing gear;

\* Focusing efforts on reducing sea-bed impacts by mobile fishing gear;

\* Facilitating cooperative research partnerships between fishermen and scientists.

**2011:8**                      **2012:8**                      **2013:8**                      **2014:8**                      **2015:8**

- Number of published information sheets, technical reviews, and web pages which detail innovative fishing gears and technologies that reduce by-catch, minimize benthic impacts and enhance gear

selectivity.

**2011:7**                      **2012:7**                      **2013:7**                      **2014:7**                      **2015:7**

- Number of Safety-at-Sea programs held.

**2011:2**                      **2012:2**                      **2013:2**                      **2014:2**                      **2015:2**

- Number of homeowners provided with information about home and yard care practices that prevent or minimize contamination of water resources via runoff.

**2011:100**                      **2012:100**                      **2013:100**                      **2014:100**                      **2015:100**

- Number of communities and development professionals provided information to encourage the use of more innovative stormwater management.

**2011:25**                      **2012:25**                      **2013:25**                      **2014:25**                      **2015:25**

- Number of fishermen trained in safe welding practices

**2011:10**                      **2012:10**                      **2013:10**                      **2014:10**                      **2015:10**

**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of adults and children with a measurable increase in their marine science literacy through specialist and volunteer delivered outcome-based, formal and informal education programs
2	Number of fishermen who choose non-mandatory conservation-minded gear over traditional equipment
3	Number of cooperative research proposals submitted involving scientists and fishermen that focus on reducing benthic impacts of mobile fishing gear are submitted to appropriate programs/agencies
4	Number of fishermen who successfully complete cooperative research projects
5	Number of communities to develop action plans that include a variety of approaches for making progress in community-based natural resource protection projects.
6	Percent of new or existing volunteer monitoring programs that request assistance and then initiate enhanced or expanded program efforts due to assistance provided by the project
7	Number of fishermen who gain knowledge increase knowledge of new conservation fishing gear that reduces benthic habitat impact.
8	Number of fishermen who become certified as safety drill conductors.
9	Number of communities to implement or start to implement a natural resource protection project.
10	Number of community decision makers, conservation groups or development professionals who report gaining knowledge about preventing degradation from storm water runoff.
11	Number of community decision-makers and Coverts Cooperators who identify actions they will take to conserve the state's biodiversity.

**Outcome # 1**

**1. Outcome Target**

Number of adults and children with a measurable increase in their marine science literacy through specialist and volunteer delivered outcome-based, formal and informal education programs

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

**2011:5000                      2012:5000                      2013:5000                      2014:5000                      2015:5000**

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

- 112 - Watershed Protection and Management
- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of fishermen who choose non-mandatory conservation-minded gear over traditional equipment

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

**2011:10                      2012:10                      2013:10                      2014:10                      2015:10**

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

- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Number of cooperative research proposals submitted involving scientists and fishermen that focus on reducing benthic impacts of mobile fishing gear are submitted to appropriate programs/agencies

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

**2011:5                      2012:5                      2013:5                      2014:5                      2015:5**

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

- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 4**

**1. Outcome Target**

Number of fishermen who successfully complete cooperative research projects

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

**2011:5                      2012:5                      2013:5                      2014:5                      2015:5**

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

- 307 - Animal Management Systems
- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 5**

**1. Outcome Target**

Number of communities to develop action plans that include a variety of approaches for making progress in community-based natural resource protection projects.

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

**2011:10                      2012:10                      2013:10                      2014:10                      2015:10**

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

- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land
- 133 - Pollution Prevention and Mitigation

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 6**

**1. Outcome Target**

Percent of new or existing volunteer monitoring programs that request assistance and then initiate enhanced or expanded program efforts due to assistance provided by the project

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

**2011:70                      2012:70                      2013:70                      2014:70                      2015:70**

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

- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 7**

**1. Outcome Target**

Number of fishermen who gain knowledge increase knowledge of new conservation fishing gear that reduces benthic habitat impact.

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

2011:30	2012:30	2013:30	2014:30	2015:30
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**3. Associated Knowledge Area(s)**

- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 8**

**1. Outcome Target**

Number of fishermen who become certified as safety drill conductors.

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

2011:10	2012:10	2013:10	2014:10	2015:10
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**3. Associated Knowledge Area(s)**

- 903 - Communication, Education, and Information Delivery

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 9**

**1. Outcome Target**

Number of communities to implement or start to implement a natural resource protection project.

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

2011:2	2012:2	2013:2	2014:2	2015:2
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**3. Associated Knowledge Area(s)**

- 112 - Watershed Protection and Management
- 131 - Alternative Uses of Land

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 10**

**1. Outcome Target**

Number of community decision makers, conservation groups or development professionals who report gaining knowledge about preventing degradation from storm water runoff.

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

<b>2011:12</b>	<b>2012:12</b>	<b>2013:12</b>	<b>2014:12</b>	<b>2015:12</b>
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**3. Associated Knowledge Area(s)**

- 112 - Watershed Protection and Management

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 11**

**1. Outcome Target**

Number of community decision-makers and Coverts Cooperators who identify actions they will take to conserve the state's biodiversity.

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

<b>2011:25</b>	<b>2012:25</b>	<b>2013:25</b>	<b>2014:25</b>	<b>2015:25</b>
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**3. Associated Knowledge Area(s)**

- 112 - Watershed Protection and Management
- 135 - Aquatic and Terrestrial Wildlife

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)

**Description**

**COMMERCIAL FISHERIES**

- There is uncertainty with National Oceanic and Atmospheric Administration (NOAA)/Northeast

Consortium (NEC) funding for these research and extension projects

- There is extensive lag-time between conservation gear research and review by New England Fishery Management Council (NEFMC), a low number of conservation engineering projects that will not need regulatory change to utilize, limited cooperative research funding sources and established infrastructure by NEC for management transfer

### **LAND AND WATER CONSERVATION**

- Possible budget constraints, possible loss of staff
- Communities increasingly responding to conservation needs
- A conservation ethic on the part of landowners
- External political support
- The rate of land conservation
- High economic land values
- Unforeseen extreme natural catastrophic events

### **COASTAL ECOSYSTEM HEALTH AND COMMUNITIES**

- Individual home and yard care practices are influenced by a wide variety of influences including commercial marketing.
- Development pressure in coastal areas is high and is related to market forces as well as demographic influences.
- Land use regulations often lag behind issues of concern.

### **MARINE SCIENCE EDUCATION**

Two major external factors have helped mold this plan.

- o First, the imminent inclusion of science in high accountability assessments in public education has heightened the need for effective science education. This focus on improving student performance in science will require significant professional development for science teachers at all grades, and will lead to an increased interest in contexts and topics that engage students.
- o The second external factor is the recognition by the two ocean commissions that the education of students and the general public must become a high priority. The bulk of that education process will fall to Extension and informal educators around the country.

### **WATER QUALITY**

- Funding sources, program support

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

##### **1. Evaluation Studies Planned**

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



## **Description**

### **COMMERCIAL FISHERIES**

- Evaluation data will be generated through self reporting, observation, mail surveys, one-on-one contact and securing information from the North East Consortium on funds provided to commercial fishermen
- Surveys of workshop attendees will be done to determine what decisions they make relative to developing a new business

### **LAND AND WATER CONSERVATION**

- Short term individual program & event evaluations (at the time of the programs)
- Long term (follow-up) evaluations on programs
- Periodic staff evaluation of programs as part of ongoing program planning

### **MARINE SCIENCE EDUCATION**

- Programs will undergo periodic evaluation based upon participant surveys, observation, and stakeholder review - student assessments and adult surveys will be analyzed to determine if program methods are effective

### **WATER QUALITY**

- Collect impact indicator information and program outputs through post-training session, workshop and meeting questionnaires immediately following events and through mailed, phone and on-line surveys for longer term outcomes. Target audience for assessments: Lakes Lay Monitoring Program participants, their associations, and local decision-makers
- For any workshops that we conduct we will use questionnaires, training exercises and observers along with a contact follow-up in three to six month intervals. NERMC, VMNFP and the New England Regional Water Quality Program have ongoing evaluation efforts to which we will supply data and review as requested

## **2. Data Collection Methods**

- Whole population
- Mail
- Telephone
- On-Site
- Unstructured
- Observation
- Portfolio Reviews
- Other (Web survey)

### **Description**

{NO DATA ENTERED}

**V(A). Planned Program (Summary)****Program # 8****1. Name of the Planned Program**

Food Safety

**2. Brief summary about Planned Program**

The University of New Hampshire Cooperative Extension delivers science-based programs through many avenues to give people the knowledge, skills and motivation to achieve their economic and social goals. Food safety programs focus on training and resources for food handlers in restaurants, schools and other institutions as well as consumer education around food safety.

**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**

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	20%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	70%			
723	Hazards to Human Health and Safety	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities**

Food borne illness is one of the greatest concerns of public health experts and the food industry. Each year, as many as 76 million Americans experience food borne illness, and an estimated 5,000 deaths are linked to tainted foods. Incredible as these figures are, they probably represent only a fraction of the whole picture.

Many mild cases of food borne illness are never reported for a number of reasons: The victims pass off the symptoms as flu and do not seek medical attention, the illness is misdiagnosed as another problem with similar symptoms, the victim fails to recognize food as the source of the illness, or the physician doesn't report the illness to local health agencies. Diarrhea, nausea, abdominal pain, or vomiting without fever or upper respiratory distress is often taken to be flu, but people who experience such symptoms are highly likely to be suffering from food borne illness.

**2. Scope of the Program**

- In-State Extension
- Multistate Extension

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

**1. Assumptions made for the Program**

1. A committed and skilled professional staff in Family and Consumer Resources will be retained.
2. Cooperative Extension has the capacity to address the educational needs of the residents of NH.
3. Cooperative Extension is a highly effective educational program development and delivery organization and is a non-biased research-based source of information and education.
4. Educational resources needed to achieve long term outcomes will be supported and developed.
5. Effective collaborations of agencies and organizations, and strategic partnerships will strengthen program development, delivery and evaluation.
6. Funding through NIFA, State of NH, and NH counties remains in place and is enhanced through sustainable grants, contracts and gifts.

**2. Ultimate goal(s) of this Program**

Reduce the incidence of food borne illness in New Hampshire.

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	3.0	0.0	0.0	0.0
2012	3.0	0.0	0.0	0.0
2013	3.0	0.0	0.0	0.0
2014	3.0	0.0	0.0	0.0
2015	3.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

ServSafe®, SAFE (Safety Awareness in the Food Environment)

Food safety and preservation education for consumers.

Good Agricultural Practices (GAP) Training

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

**Extension**

Direct Methods	Indirect Methods
----------------	------------------

- Education Class
- Workshop

- Public Service Announcement
- Newsletters
- TV Media Programs
- Web sites

**3. Description of targeted audience**

Food handlers at restaurants, schools, health facilities, etc. and the general public.

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	2700	0	1200	0
2012	2700	0	1200	0
2013	2700	0	1200	0
2014	2700	0	1200	0
2015	2700	0	1200	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

**2011:0                      2012:0                      2013:0                      2014:0                      2015:0**

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs**

**1. Output Target**

- Number of participants in food safety and preservation education for consumers

<b>2011:1000</b>	<b>2012:1000</b>	<b>2013:1000</b>	<b>2014:1000</b>	<b>2015:1000</b>
------------------	------------------	------------------	------------------	------------------
  
- Number of farms attending USDA Good Agricultural Practices workshops

<b>2011:20</b>	<b>2012:20</b>	<b>2013:20</b>	<b>2014:20</b>	<b>2015:20</b>
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- Number of people who participate in ServSafe workshops, SAFE (Safety Awareness in the Food Environment)

<b>2011:1300</b>	<b>2012:1300</b>	<b>2013:1300</b>	<b>2014:1300</b>	<b>2015:1300</b>
------------------	------------------	------------------	------------------	------------------
  
- Number of adults participating in food safety programming through Nutrition Connections - educational courses to income eligible New Hampshire residents

<b>2011:400</b>	<b>2012:400</b>	<b>2013:400</b>	<b>2014:400</b>	<b>2015:400</b>
-----------------	-----------------	-----------------	-----------------	-----------------
  
- Number of youth participating in food safety programming through Nutrition Connections - educational courses to income eligible New Hampshire residents

<b>2011:1200</b>	<b>2012:1200</b>	<b>2013:1200</b>	<b>2014:1200</b>	<b>2015:1200</b>
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**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of program participants who score 75% or greater on knowledge tests of high risk practices including: * Personal hygiene * Holding/time and temperature * Cooking temperatures * Prevention of contamination
2	Number of participants report keeping food at safe temperatures.
3	Number of farms receiving USDA Good Agricultural Practices certification as a result of Extension workshops.

**Outcome # 1**

**1. Outcome Target**

Number of program participants who score 75% or greater on knowledge tests of high risk practices including:

- \* Personal hygiene
- \* Holding/time and temperature
- \* Cooking temperatures
- \* Prevention of contamination

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

**2011:800                      2012:800                      2013:800                      2014:800                      2015:800**

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

- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
- 723 - Hazards to Human Health and Safety

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of participants report keeping food at safe temperatures.

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

**2011:120                      2012:120                      2013:120                      2014:120                      2015:120**

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

- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
- 723 - Hazards to Human Health and Safety

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Number of farms receiving USDA Good Agricultural Practices certification as a result of Extension workshops.

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

**2011:5**

**2012:5**

**2013:5**

**2014:5**

**2015:5**

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

- 711 - Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
- 723 - Hazards to Human Health and Safety

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

- Public Policy changes
- Competing Programmatic Challenges

**Description**

{NO DATA ENTERED}

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

**1. Evaluation Studies Planned**

- After Only (post program)

**Description**

A post-workshop knowledge questionnaire will be administered after each SAFE program. Examination scores of ServSafe® program participants will be used to ascertain food safety and sanitation knowledge. Participants in both SAFE and ServSafe® programs will complete another questionnaire to assess intent to implement recommended food safety and sanitation practices.

**2. Data Collection Methods**

- Whole population
- Tests

**Description**

{NO DATA ENTERED}



**V(A). Planned Program (Summary)****Program # 9****1. Name of the Planned Program**

Childhood Obesity

**2. Brief summary about Planned Program**

This planned program covers not only childhood obesity, but over all efforts by UNH Cooperative Extension to address the health and well-being of all people in New Hampshire. Included are efforts include our Nutrition Connections program (EFNEP) and Supplemental Nutrition Education Program (SNAP-ed).

**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**

<b>KA Code</b>	<b>Knowledge Area</b>	<b>%1862 Extension</b>	<b>%1890 Extension</b>	<b>%1862 Research</b>	<b>%1890 Research</b>
703	Nutrition Education and Behavior	80%			
704	Nutrition and Hunger in the Population	20%			
	<b>Total</b>	100%			

**V(C). Planned Program (Situation and Scope)****1. Situation and priorities**

Nutrition plays a vital role in overall health. In fact, research has found that diet is associated with the leading causes of death, many of which are preventable heart disease, diabetes, obesity, and several types of cancer. Cardiovascular disease and cancer together account for almost two thirds of all deaths in the United States. Despite the importance of diet, however, Americans fail to achieve recommendations of the Dietary Guidelines which lower the risk of disease. Of interest, are the results of the 2006 New Hampshire Food Stamp Recipient telephone survey conducted with 401 randomly selected recipients.

**2. Scope of the Program**

- In-State Extension

**V(D). Planned Program (Assumptions and Goals)****1. Assumptions made for the Program**

A committed and skilled professional staff will be retained.

Cooperative Extension has the capacity to address the educational needs of the residents of NH

Educational resources needed to achieve long term outcomes will be supported.

Funding through NIFA, the state of NH and NH counties remains in place and is enhanced through sustainable

grants, contracts and gifts.

**2. Ultimate goal(s) of this Program**

Increased health and well-being of the people of New Hampshire

Reduced rates of obesity

**V(E). Planned Program (Inputs)**

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

Year	Extension		Research	
	1862	1890	1862	1890
2011	10.0	0.0	0.0	0.0
2012	10.0	0.0	0.0	0.0
2013	10.0	0.0	0.0	0.0
2014	10.0	0.0	0.0	0.0
2015	10.0	0.0	0.0	0.0

**V(F). Planned Program (Activity)**

**1. Activity for the Program**

Nutrition Connections - educational courses to income eligible NH residents - through the Expanded Food and Nutrition Education Program (EFNEP) and Supplemental Nutrition Education Program (SNAP-ed)

4-H Youth Development programs - Healthy Living/Healthy Choices

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

**Extension**

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> <li>● Education Class</li> <li>● Group Discussion</li> <li>● One-on-One Intervention</li> <li>● Demonstrations</li> </ul>	

**3. Description of targeted audience**

Youth, ages 0-18

Limited-resource adults

**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**

	Direct Contact Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2011	2500	200000	750	0
2012	2500	200000	750	0
2013	2500	200000	750	0
2014	2500	200000	750	0
2015	2500	200000	750	0

**2. (Standard Research Target) Number of Patent Applications Submitted**

**2011:0                      2012:0                      2013:0                      2014:0                      2015:0**

**3. Expected Peer Review Publications**

Year	Research Target	Extension Target	Total
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0

**V(H). State Defined Outputs**

**1. Output Target**

- Number of low-income adults participating in Nutrition Connections - educational courses to income eligible New Hampshire residents

**2011:2500                      2012:2500                      2013:2500                      2014:2500                      2015:2500**

- Number of youth participating in nutrition programming through Nutrition Connections

**2011:600                      2012:600                      2013:600                      2014:600                      2015:600**

- Number of youth participating in 4-H Healthy Living programs

**2011:150                      2012:150                      2013:150                      2014:150                      2015:150**

**V(I). State Defined Outcome**

O. No.	Outcome Name
1	Number of participants who report an increase in their physical activity
2	Number of youth who learn how to choose foods according to the Pyramid and Dietary Guidelines
3	Number of participants who report eating nearer to the recommended number of cup equivalents from the Fruits and Vegetable Group

**Outcome # 1**

**1. Outcome Target**

Number of participants who report an increase in their physical activity

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

**2011:200                      2012:200                      2013:200                      2014:200                      2015:200**

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

- 703 - Nutrition Education and Behavior

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 2**

**1. Outcome Target**

Number of youth who learn how to choose foods according to the Pyramid and Dietary Guidelines

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

**2011:750                      2012:750                      2013:750                      2014:750                      2015:750**

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

- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population

**4. Associated Institute Type(s)**

- 1862 Extension

**Outcome # 3**

**1. Outcome Target**

Number of participants who report eating nearer to the recommended number of cup equivalents from the Fruits and Vegetable Group

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

**2011:200                      2012:200                      2013:200                      2014:200                      2015:200**

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

- 703 - Nutrition Education and Behavior

**4. Associated Institute Type(s)**

- 1862 Extension

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

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

- Economy
- Populations changes (immigration, new cultural groupings, etc.)

**Description**

{NO DATA ENTERED}

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

**1. Evaluation Studies Planned**

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)

**Description**

Evaluations for Nutrition Connections include retrospective behavior surveys, pre/post food recalls (adults only), direct observation

**2. Data Collection Methods**

- Sampling
- Whole population
- On-Site
- Observation

**Description**

{NO DATA ENTERED}