2009 University of New Hampshire Extension Plan of Work

Status: Accepted
Date Accepted: 05/30/08

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 courseware, 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 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.

Vace	Exter	nsion	Rese	earch
Year	1862	1890	1862	1890
2009	85.0	0.0	0.0	0.0
2010	85.0	0.0	0.0	0.0
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

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

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with three other states in developing our system has also resulted in discussions around state and regional programs, opportunities for multistate work, sharing staff resources and a much better understanding of how each of our unique programs are similar and different than others in New England. As a result, the four states have agreed to provide merit review for each state as part of our formal partnership. The new system provides access to each state plan of work for all four states, allowing for easy sharing of ideas and opportunities for further collaboration. Further, we've agreed to set up a rotating system of more comprehensive merit review by selecting a different state plan each year for in-depth review by Extension staff from the other three states. New Hampshire was identified as the first state to undergo review, which was just completed. A panel of program staff from Maine, Massachusettes, and Vermont reviewed and provided comment on each of New Hampshire's planned programs. 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 will be 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 comprehensive statewide needs assessment conducted in 2003 and 2004. Extension advisory councils, select UNH faculty members, and stakeholders systematically analyzed data collected and identified the highest priority needs. In the end, over 300 council members, faculty, and other citizens helped to identify local issues, Extension's role in addressing these issues, and ways to deliver educational programs through listening sessions held in each county, on line surveys, and a statewide face-to-face caucus. Based on this feedback and in keeping with UNH Cooperative Extension's strategic plan, our planned programs were developed by traditional program area teams and interdisciplinary teams formed as a basis of this needs assessment.

Staff developed logic models and evaluation plans for programs based on stakeholder feedback. These models became a draft plan of work under the guidance of UNHCE's Program Council consisting of the five Program Leaders and interdisciplinary team chairs. These include:

- Program Attractiveness: The congruence with mission and vision, programmatic fit, existing expertise and resources, support base, education vs. service function, clientele base, volunteer appeal, measurability of results and impact.
- Competitive Position: The degree to which the organization has, or is acknowledged as having superior potential over other organizations or agencies to support and carry out he program. This includes delivery system, clientele base, funding track record, quality and research, technical and organizational skills.
- Alternative Coverage: The extent to which other organizations or agencies are involved in the delivery of the same or similar programs or activities.
- Program Urgency: The need for immediate response to issues through an educational role that no other agency or entity can provide.
 - Funding Limitations: The requirements put forth by the funding sources for educational programming expenditures.
- Emerging Issues: The degree to which the organization can plan a leading or collaborative role in addressing future trends and needs of clientele

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

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 camping and 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 and 4-H camp along with traditional 4-H programs work with UNH staff from the Institute on Disabilities to provide appropriate support and accommodations for youth with learning, emotional and physical disabilities in our 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.

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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 piloting 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.

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

The NH 2009-2012 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. 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 every action and learning outcome have been articulated and evaluation plans have been developed. Impact indicators are written similar to SMART 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 new electronic 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. Through continued work of a state-wide program council, disciplinary program leaders, interdisciplinary team chairs, and program development, evaluation team members, and staff will identify programmatic outcomes that are shared by more than one program area, communicate these shared goals to staff, and encourage joint work when possible. For example, staff in virtually all disciplinary program areas share goals around economic viability, whether it is farm or forest product profitability, teaching youth and families to manage their money wisely, or increasing the number of new aquaculture operations in coastal New Hampshire. Although the educational programs and audiences are different, there are similarities in the ways they might be evaluated and synthesis of outcome data will provide a much more powerful and accurate report of the impact UNH Cooperative Extension programs have on the economic viability of the state.

IV. Stakeholder Input

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

- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder individuals
- Survey of selected individuals from the general public
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to selected individuals from general public

Brief explanation.

Stake holders were encouraged to provide input to UNH Cooperative Extension in a variety of ways and in a variety of locations.

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Each county held at least one face-to-face listening session and county and state staff, along with local advisory committees were asked to secure 20-30 key community members in each county to review issues and trends, current Extension work, and assist in identifying priorities. A web-based needs assessment survey was designed and each Extension staff member was asked to recruit two non-Extension users to complete this survey. Current drafts of the plans were shared locally and on the UNH Cooperative Extension web site for review and input as well.

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

- Needs Assessments
- Open Listening Sessions
- Use Surveys
- Use Advisory Committees

Brief explanation.

Identification of stakeholders and groups was 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 underserved audiences. Invitees to the state wide caucus were identified through a selection process that carefully engineered participation to include people from all counties and age groups; a variety industries, state agencies, education, law enforcement, tourism and non-Extension UNH faculty.

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

Brief explanation

{NO DATA ENTERED}

3. A statement of how the input will be considered

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

Brief explanation.

The data collected and complied via the gap analysis process has been used in a variety of ways. Interdisciplinary teams were created and staffed to address critical and emerging issues, grants have been developed to address needs, and local issues identified are being discussed in the context of UNH research and Extension programs at each county with the university president, legislators, state agency personnel and local advisory committee members in a series of "County Conversations". A survey of Extension staff during the gap analysis yielded data regarding interest and expertise of all staff within and without of their existing discipline and this data was used to assign interdisciplinary team membership and will be used to identify individuals that have an interest and aptitude to be retooled to meet changing organizational needs. 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.

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V. Planned Program Table of Content

S. NO.	PROGRAM NAME		
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	Program Development and Evaluation		
7	Natural Resource Business Institute		
8	Sea Grant and Water Resources		

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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 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
123	Management and Sustainability of Forest Resources	60%			
124	Urban Forestry	20%			
135	Aquatic and Terrestrial Wildlife	20%			
	Total	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, NH timberland 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

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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-I: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. - Improve 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. - 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

Vace	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2009	15.0	0.0	0.0	0.0
2010	14.0	0.0	0.0	0.0
2011	14.0	0.0	0.0	0.0
2012	14.0	0.0	0.0	0.0
2013	14.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

•Implement components of the NH Forest Resources Plan - Conduct, sponsor, co-sponsor or provide educational expertise for over 250 workshops, seminars or educational events. •Develop statewide and regional coordinated/standardized programs accomplished by Forestry and Wildlife staff working individually or in teams. •Develop messages and strategies using ownership size, watershed location or landscape location. Audiences, messages and strategies may differ by location in the state. •Develop key messages for landowners consistent with our public awareness strategy. •Develop a checklist of topics to cover on site visits •Landowner outreach to reach new clientele •Review and update standard operating procedures on staff approaches to landowner site visits. •Develop an evaluation and improvement process for follow-through on site visits. •Maintain contact with landowners through newsletters, web page, and special mailings. •Develop materials to help landowners make informed decisions when selling timber and disseminate these materials through town offices and other means. •Involve key family members in woodlot visits and woodlot planning •Reach clientele through training programs (Coverts - Tree Stewards) •Maintain volunteer's role as ambassadors of messages and programs and not as providers of technical expertise. •Work with Project Learning Tree and 4-H Youth Development to educate teachers and youth leaders on forest resource issues.

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

Extension				
Direct Methods	Indirect Methods			
One-on-One Intervention Workshop	 Public Service Announcement Web sites 			
 Group Discussion Education Class 	Other 1 (radio)Newsletters			

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 Contacts Adults Indirect Contacts Adults		Direct Contacts Youth	Indirect Contacts Youth	
Year	Target	Target	Target	Target	
2009	6700	22000	0	500	
2010	6700	22000	0	500	
2011	6700	22000	0	500	
2012	6700	22000	0	0	
2013	6700	22000	0	0	

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

Expected Patent Applications

2009:0

2010:0

2011:0

2012:0

2013:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

Number of people reached implementing components of the NH Forest Resources Plan

2009 2500

2010 2500

2011 :2500

2012 2500

2013 2500

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•	Number of workshops, seminars or educational events where educational expertise is offered						
	2009 400	2010 400	2011 :400	2012 400	2013 ±400		
•		evelopment of statewide and working individually or in tear	regional coordinated/standar ns	dized programs accomplishe	d by		
	2009 :12000	2010 12000	2011 :12000	2012 :12000	2013 :12000		
•	Number of people reached location	I through messages and strat	tegies around ownership size	, watershed location or lands	cape		
	2009 200	2010 200	2011 :200	2012 200	2013 200		
•	Number of landowners rec	eiving key messages consist	ent with our public awarenes	s strategy			
	2009 :150	2010 1 50	2011 :150	2012 :150	2013 :150		
•	Number of site visits where	e a check list of topics is used	d				
	2009 5 00	2010 500	2011 :500	2012 5 00	2013 500		
•	Number of one-on-one consultations with new landowners						
	2009 150	2010 1 50	2011 :150	2012 :150	2013 :150		
•	Number of staff who review	w, update, and evaluate stand	dard operating procedures on	landower site visits			
	2009 15	2010 14	2011 :14	2012 :14	2013 :14		
•	Number of people reached	I through newsletters, web pa	age, and special mailings				
	2009 40000	2010 40000	2011 :40000	2012 40000	2013 £40000		
•	Number of landowners who	o receive materials to help th	em make informed decisions	when selling timber			
	2009 100	2010 100	2011 :100	2012 :100	2013 :100		
•	Number of key family mem	nbers involved in woodlot visit	ts and woodlot planning				
	2009 125	2010 £125	2011 :125	2012 :125	2013 :125		
•	Number of clientele reached through training programs (Coverts and Tree Stewards)						
	2009 550	2010 550	2011 :550	2012 550	2013 550		
•	Number of volunteers who inappropriately	maintain role as ambassado	ors of messages and program	s, but don't provide technical	expertise		
	2009 500	2010 500	2011 :500	2012 500	2013 500		
•	Number of teachers and ed	ducators using Project Learni	ing Tree to teach youth about	t forest resource issues			
	2009 :175	2010 175	2011 :175	2012 :175	2013 :175		

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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				
12	Number of professional loggers in NH who increase their knowledge and market forest products to Sustainable Forestry Initiative companies requiring certified loggers through the Professional Loggers Program with NH Timberland Owners Association and the UNH Thompson School				

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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

2009 20000 **2010** : 20000 **2011** : 20000 **2012** 20000 **2013** : 20000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

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

2009 :75 **2010** : 75 **2011** : 80 **2012** 80 **2013** : 80

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

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

2009 50 **2010** : 50 **2011** : 100 **2012** : 100 **2013** : 100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

123 - Management and Sustainability of Forest Resources

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

2009 350 **2010** : 400 **2011** : 450 **2012** 500 **2013** : 500

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 124 - Urban Forestry

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• 135 - Aquatic and Terrestrial Wildlife

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

2009 :100 **2010** : 100 **2011** : 100 **2012** :100 **2013** :100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

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

2009 5000 **2010** : 5000 **2011** : 5000 **2012** 5000 **2013** : 5000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

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

2009:10 **2010**:10 **2011**:10 **2012**:15 **2013**:15

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 10000 **2010** : 10000 **2011** : 10000 **2012** 10000 **2013** : 10000

3. Associated Institute Type(s)

•1862 Extension

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4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

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

2009:100 **2010**:100 **2011**:200 **2012**:200 **2013**:200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

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

2009 :100 **2010** : 100 **2011** : 100 **2012** :100 **2013** :100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 124 Urban Forestry
- 135 Aquatic and Terrestrial Wildlife

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

2009 50 **2010** : 50 **2011** : 50 **2012** 50 **2013** : 50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

123 - Management and Sustainability of Forest Resources

Outcome #12

1. Outcome Target

Number of professional loggers in NH who increase their knowledge and market forest products to Sustainable Forestry Initiative companies requiring certified loggers through the Professional Loggers Program with NH Timberland Owners Association and the UNH Thompson School

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2. Outcome Type: Change in Knowledge Outcome Measure

2009 240 **2010** : 230 **2011** : 250 **2012** 250 **2013** : 250

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

123 - Management and Sustainability of Forest Resources

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

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

- Retrospective (post program)
- After Only (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

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

Description

{NO DATA ENTERED}

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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 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

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KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
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%			
	Total	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

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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. Both ecological and economic sustainability are needed to ensure long term viability of New Hampshire farms. A short growing season, along with high labor costs and land values make fruit and vegetable production far more costly in NH than in other parts of the U.S. and world. Further, an extremely variable and humid climate means that disease and insect pests are a constant threat to the profitability of NH farms. To compete with West Coast and international food producers, NH vegetable and fruit growers must produce unique and high value products. 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. UNHCE will provide research based information on technologies, production practices, and pest management strategies that will increase profitability and minimize ecological impact of fruit and vegetable production. UNHCE will undertake collaborative applied research to develop the needed information where it does not already exist.

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

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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.

Because of the acreage involved, forage crop production has the potential to affect soil and water quality in the state. By focusing educational programming on optimizing the use of on farm and imported nutrients and taking an integrated approach to pest management, we hope to minimize or eliminate detrimental effects on environmental quality. In addition, production and use of high quality perennial forages in a livestock system has the potential to garner new markets for the producer who wishes to engage in the market segment looking for grass based meats, milk and poultry products.

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 "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

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

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 conducing 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 & 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 the following sectors of NH agriculture:

•ornamental horticulture •commercial fruit and vegetable production •dairy, livestock, and equine •forage and field crops

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

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Year	Extension		Research		
rear	1862	1890	1862	1890	
2009	18.0	0.0	0.0	0.0	
2010	18.0	0.0	0.0	0.0	
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	

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 & twiglight 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			
 Group Discussion Education Class Workshop One-on-One Intervention Demonstrations Other 1 (phone consultations) 	 TV Media Programs Newsletters Other 1 (Displays at fairs and festivals) Web sites 			

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

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	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	5000	200000	0	0
2010	5000	200000	0	0
2011	5000	200000	0	0
2012	5000	200000	0	0
2013	5000	20000	0	0

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

Expected Patent Applications

2009:0

2010:0

2011:0

2012:0

2013:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

Number of people attending pasture walks

2009:100

2010 150

2011 :150

2012:150

2013 :150

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

2009 1200

2010 1200

2011:1200

2012:1200

2013 :1200

• Number of people reached through news releases, news letters, fact sheets and web page with agriculture information

2009:15000

2010 15000

2011:15000

2012:15000

2013 :15000

Number of people who visit and view on-farm and university-based applied research sites

2009 1000

2010 1000

2011 :1000

2012:1000

2013 :1000

 Number of people who attend agricultural festivals, county fairs, road races, and other miscellaneous events where Extension has agricultural displays

2009 6000

2010 6000

2011:6000

2012 £0000

2013 £000

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

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	2009 23000	2010 23000	2011 :23000	2012 23000	2013 23000
•	Number of people who atte	end twilight grower meetings			
	2009 600	2010 600	2011 :600	2012 600	2013 600
•	Number of phone consultat	tions regarding agricultural pr	ractices, home horticulture an	nd miscellaneous agriculture t	opics
	2009 6000	2010 6000	2011 :6000	2012 6000	2013 £0000
•	Number of Pesticide Applic	cators attending recertification	n training		
	2009 1500	2010 1500	2011 :1500	2012 :1500	2013 :1500
•	Number of soil and plant ar	nalyses conducted by diagno	stic labs		
	2009 :1250	2010 1 250	2011 :1250	2012 :1250	2013 :1250
•	Educational Workshops - S	Single & multi-day educationa	l events such as grower scho	ools, state-wide grazing event	s, etc.
	2009 #00	2010 400	2011 :400	2012 #00	2013 #00
•	Conferences: Farm & Fore	st, Producer Association Mee	etings		
	2009 8000	2010 8000	2011 :8000	2012 8 000	2013 £000
•	Number of arthropod identi	fication's conducted			
	2009 200	2010 200	2011 :200	2012 200	2013 200

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$\mathrm{V}(\mathbf{I}).$ 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, technolology
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.

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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

2009 :120 **2010** : 120 **2011** : 120 **2012** :120 **2013** :120

3. Associated Institute Type(s)

•1862 Extension

4. 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

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

2009:1000 **2010**:1000 **2011**:1000 **2011**:1000 **2012**:1000 **2013**:1000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 250 **2010** : 250 **2011** : 250 **2012** 250 **2013** : 250

3. Associated Institute Type(s)

•1862 Extension

4. 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

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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

2009:150 **2010**:150 **2011**:150 **2012**:150 **2013**:150

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 200 **2010** : 200 **2011** : 200 **2012** 200 **2013** : 200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 200 **2010** : 200 **2011** : 200 **2012** 200 **2013** : 200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #7

1. Outcome Target

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

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2. Outcome Type: Change in Knowledge Outcome Measure

2009 200 **2010** : 200 **2011** : 200 **2012** 200 **2013** : 200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 30 **2010** : 30 **2011** : 30 **2012** 30 **2013** : 30

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 6000 **2010** : 6000 **2011** : 6000 **2012** 6000 **2013** : 6000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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.

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2. Outcome Type: Change in Knowledge Outcome Measure

2009 :100 **2010** : 100 **2011** : 100 **2012** : 100 **2013** : 100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

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

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

Description

A survey tool will be used to sample a random population of clients who sent in tissue samples and another for those who sent in soil samples. Within these groups, homeowners will be sampled separately from commercial growers. The survey will be used to assess whether crop nutrition was based on soil or tissue tests.

A two tiered approach will be used to evaluate sustainable agriculture programs: 1) Agricultural program area staff will be surveyed on how many farm plans they developed with farmers. These farm plans will include nutrient management, succession plans, whole farm plans, pest management plans, conservation plans, and easements, amongst others. 2) Those ag staff who developed such plans with farmers will be asked to identify any behavior changes that resulted from these plans. Data will be collected in terms of action changes and will be anonymous, thus not linked to any specific farms.

Oral interviews and direct observation techniques will be used by agricultural resources staff to assess new practices adopted as a direct result of UNHCE educational efforts. This information will be collated at a county and statewide level.

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.

Participants at each Risk Management activity (about four to six per year) will be surveyed to see if they have, or if they intend to, adopt any of the practices taught. The survey will have a place for the participants to include their contact information if they intend to adopt any of the practices and if they are amenable to being contacted six months from the event. A random sample of those who provided their contact information will be surveyed via phone or electronically to see if any of the practices were adopted.

Participants of educational activities focused on forage production and quality will be surveyed electronically to see if their forage production increased and/or if their forage quality increased. Forage tests, livestock rate of gain, calving, weaning weight and other such indicators will be used in the survey.

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

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systems, season extension techniques and/or greenhouse lighting.

Participants at pesticide re-certification trainings (PAT), as well as at other pest management programs will be surveyed via in-session questionnaires to determine if they adopted any new pest management practices or diversified their pest management practices as a result of UNHCE educational programs.

A random sample of participants who attended marketing, pricing, and other relevant UNHCE educational activities will be electronically surveyed to determine if any of outcomes listed above were achieved.

Home horticultural program participants will be surveyed through end-of-session questionnaires, interviews by Master Gardeners and other volunteers, and through electronic questionnaires to determine the achievement of desired outcomes. The Family Home and Garden Center will coordinate the collection of this information, working with the appropriate specialists.

2. Data Collection Methods

- Observation
- On-Site
- Telephone
- Sampling
- Mail
- Unstructured
- Other (web surveys)

Description

{NO DATA ENTERED}

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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%			
	Total	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 9,900 in 2006 with a strong cadre of adult volunteers totaling 2,626 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

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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 21st 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. At minimum wage (\$5.15), a NH worker must work 122 hours/week to afford a two-bedroom unit at fair market rent. 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

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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.

Youth and adults collaborate and contribute to influence the quality of life in their communities.

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.

V(E). Planned Program (Inputs)

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

Year	Extension		Re	search
	1862	1890	1862	1890
2009	12.0	0.0	0.0	0.0
2010	15.0	0.0	0.0	0.0
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

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

Project/activity volunteer training-multiple delivery methods

Club/group organization, management, and reporting

4-H Foundation work (local and state-wide)

Marketing / PR, general 4-H, newsletters, specific events or activities

Fund raising events and activities

4-H club/group/session- youth leadership/citizenship development

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Event and activity development and management

Subject matter/life skill training-multiple delivery methods

Records, Resume, recognition opportunities

County Fair

4-H camp

4-H After school (includes coalitions, meetings, staff training, etc.)

CYFAR – (includes coalitions, meetings, staff training, etc.)

OMK - (includes coalitions, meetings, staff training, etc.)

Youth coalition development/participation

Technical support to youth serving agencies/organizations

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

Extension		
Direct Methods	Indirect Methods	
 One-on-One Intervention Demonstrations Group Discussion Other 1 (Competitive events) Education Class Workshop 	 Newsletters Web sites TV Media Programs Public Service Announcement 	

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 Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	2400	2000	23500	5000
2010	2500	2000	24000	5000
2011	2500	2000	24500	5000
2012	2500	2000	24500	5000
2013	2500	2000	24500	5000

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

Expected Patent Applications

2009:0

2010 :0

2011:0

2012:0

2013:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of middle managers supported and recognized

•	3 11	•		
2009 :100	2010 . 100	2011 :100	2012 :100	2013 :100
Number of	f new volunteers recruited, screened	, and provided with orientation		
2009 :100	2010 : 100	2011 :100	2012 :100	2013 :100
Number of	f volunteers supported and recognize	ed		
2009 £500	2010 3500	2011 :3500	2012 3500	2013 £500
Number of	f project/activity volunteers trained			
2009 #00	2010 4 00	2011 :400	2012 #00	2013 #00
Number of	f clubs/groups supported			
2009 #00	2010 4 00	2011 :400	2012 #00	2013 #00
Number of	f youth participating in 4-H camp			
2009 700	2010 700	2011 :700	2012 700	2013 700
Number of	f youth serving agencies/organization	ns provided with technical supp	port	
2009 25	2010 25	2011 :25	2012 25	2013 25
Number of	f youth participating in subject matter	r/life skill training		
2009 5000	2010 5000	2011 :5000	2012 5 000	2013 5000
Number of	f adults trained/supported through 4-	H After school (includes coaliti	ons, meetings, staff training,	etc.)
2009 :100	2010 100	2011 :100	2012 :100	2013 :100

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• Number of adults trained/supported through CYFAR (includes coalitions, meetings, staff training, etc.)

2009 35 **2010** 35 **2011** :35 **2012** 35 **2013** 35

• Number of youth serving on coalitions/boards in partnership with adults

2009 50 **2010** 50 **2011** :50 **2012** 50 **2013** 50

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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 NH 4-H YD new volunteers who demonstrate an increase in their understanding and use of positive youth development concepts when working with youth.
4	Number of NH 4-H YD middle management volunteers who gain knowledge and practice skills to master specific leadership roles.
5	Number of volunteers on UNHCE targeted boards, committees and collaborations who report increased recognition of the value of youth on their boards
6	Number of youth and adults surveyed on involvement in 4-H YD programs who increase knowledge and skills related to successful community action.
7	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.
8	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
9	Number of targeted partnerships, coalitions, and groups who report the sharing or acquisition of resources through significant Extension involvement.

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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

2009 900 **2010** : 900 **2011** : 900 **2012** 900 **2013** : 900

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 :1000 **2010** : 1000 **2011** : 1000 **2012** : 1000 **2013** : 1000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 806 - Youth Development

Outcome #3

1. Outcome Target

Number of NH 4-H YD new volunteers who demonstrate an increase in their understanding and use of positive youth development concepts when working with youth.

2. Outcome Type: Change in Knowledge Outcome Measure

2009 :150 **2010** : 150 **2011** : 150 **2012** :150 **2013** :150

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #4

1. Outcome Target

Number of NH 4-H YD middle management volunteers who gain knowledge and practice skills to master specific leadership roles.

2. Outcome Type : Change in Knowledge Outcome Measure

2009 D **2010** : 60 **2011** : 60 **2012** 60 **2013** : 60

3. Associated Institute Type(s)

•1862 Extension

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4. Associated Knowledge Area(s)

- 802 Human Development and Family Well-Being
- 805 Community Institutions, Health, and Social Services
- 806 Youth Development

Outcome #5

1. Outcome Target

Number of volunteers on UNHCE targeted boards, committees and collaborations who report increased recognition of the value of youth on their boards

2. Outcome Type: Change in Knowledge Outcome Measure

2009 60 **2010** : 60 **2011** : 60 **2012** 60 **2013** : 60

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

805 - Community Institutions, Health, and Social Services

Outcome #6

1. Outcome Target

Number of youth and adults surveyed on involvement in 4-H YD programs who increase knowledge and skills related to successful community action.

2. Outcome Type: Change in Knowledge Outcome Measure

2009:100 **2010**:100 **2011**:100 **2012**:100 **2013**:100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #7

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

2009 500 **2010** : 500 **2011** : 500 **2012** 500 **2013** : 500

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

806 - Youth Development

Outcome #8

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

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participating youth

2. Outcome Type: Change in Action Outcome Measure

2009 600 **2010** : 600 **2011** : 600 **2012** 600 **2013** : 600

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

806 - Youth Development

Outcome #9

1. Outcome Target

Number of targeted partnerships, coalitions, and groups who report the sharing or acquisition of resources through significant Extension involvement.

2. Outcome Type: Change in Knowledge Outcome Measure

2009 0 **2010** : 25 **2011** : 25 **2012** 25 **2013** : 25

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Economy
- 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.

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2. Data Collection Methods

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

Description

Selected life skill development (a different life skill will be the focus for each year of the POW) will be measured via youth, parent, volunteer surveys and/or judge's observations at various 4-H events to observe changes in life skill development. Use of CYFAR development instruments and After School surveys, instruments from community youth mapping will be administered in appropriate ways. Camp study on Social Skills development with Outdoor Education Dept.

•Year 1-3 – Teamwork – Surveys of youth and coaches of teams that compete in contests (county/state), youth technology team, community youth projects, Teen Council (county & state), and county-based events where youth are asked to work as a team •Year 1 & 2 – CYFAR sites, 1 afterschool site per county •Year 1,2, & 3 – Social Skills development and effectiveness of Summer Camp Programs •Review and potentially adopt new tools for measuring life skill development in: younger (under age 12) and adolescent youth •Youth demonstrate tolerance, respectful attitudes and non-discriminatory behavior. A check list will be developed for volunteers to complete annually along with their Annual Group Activity Report listing various behaviors they observe in youth representing "tolerance, respectful attitudes, and non-discriminatory behavior". Examine the use of an on-line, self-administered instrument that individuals can take to measure their own biases. This instrument may be made available at Teen Conference. • Year 4 - demonstrate healthy lifestyle choices, and positive life decisions (collaboration with other program areas)

Various methods will be used to measure youth and adult skills in distinct project/subject matter areas in different years:

•Year 1 – Natural Resources/Outdoor Rec – Survey and observation of: youth, parents and volunteers involved in Shooting Sports projects and at Barry Conservation Camp.

•Year 2 - Family & Consumer Resources – Use survey materials from CCS project manuals or find suitable instrument used by other states. High School Financial Planning Evaluation

•Year 3 – Science, Eng. & Technology – Include Sea Grant and GPS youth activities

•Year 4 - Animal Science – UWEX-developed retrospective survey will be modified (with permission) to use with animal science members – using both a paper survey (mailed) and form builder (web-based survey). Further quiz scores from dairy quiz bowl and the state dairy show and hippology and state horse show will be analyzed from previous years for average scores and individual scores as well. Because many of the youth participate in these scores from year to year, we can tract individuals and how their subject matter skills have changed – based on their performance over time.

•Year 5 – Other project areas

•A pre/post test will be developed to use with all new volunteers – administered during their screening orientation. A follow up (post test) will be used at (one and two years of volunteer experience, administered after an annual volunteer training session).

Middle management volunteers will be surveyed after training and orientation with a retrospective survey, asking about their knowledge and skills gained.

•The number of volunteers who take on these middle management roles (as well as those who take on leadership roles for the 2008 NE Regional Leader Forum) will be monitored with an expected increase over time. •Will look at and consider use of the post training evaluation instrument from Michigan State – Julie Chapin.

Evaluation tools from the national Youth as Partners curriculum will be used annually with youth and adult volunteers on UNHCE targeted boards, committees and collaborations. Years 1-3-5

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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 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 : Intermediate (One to 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%			
	Total	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 GAP assessments held in all 10 NH counties, as well as 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.

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- There is a lack of support for activities that encourage diverse participation in local decision-making processes.
- The percentage of individuals that vote is declining.
- 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

- The majority of community members care about the community they live in.
- 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.

Communities realize the importance of forming youth-adult partnerships to address community issues in a holistic and inclusive manner.

Groups and organizations effectively mobilize available resources – technical assistance, information, and contacts – to achieve their mission/goals.

Individuals and groups from communities gain new leadership skills that enable them to empower others to engage in community activities/projects.

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

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Year	Exte	nsion	Re	search
rear	1862	1890	1862	1890
2009	3.0	0.0	0.0	0.0
2010	3.0	0.0	0.0	0.0
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

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	
 Group Discussion Education Class Workshop	Web sitesNewsletters	

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).

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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 Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	1000	2000	0	0
2010	1000	2000	0	0
2011	1000	2000	0	0
2012	1000	2000	0	0
2013	1000	2000	0	0

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

Expected Patent Applications

2009:0

2010:0

2011:0

2012:0

2013:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

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

2009 20

2010 20

2011 :20

2012 20

2013 20

• Number of people receiving Global Positioning System (GPS) Training

2009 600

2010 600

2011:600

2012 £00

2013 £000

Number of people viewing web-based Inventory Citizen Engagement/Leadership Resources

2009 3000

2010 3000

2011 :3000

2012 3000

2013 3000

 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.

2009 2

2010 2

2011 :2

2012 2

2013 2

 Number of communities provided with technical assistance to enhance their decision making with regard to tourism and economic development plans, project, and activities.

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2009:10

2010 10

2011 :10

2012:10

2013 :10

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$\mathrm{V}(\mathbf{I}).$ 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
1	coalitions Number of community leaders who learn skills to more effectively lead groups/organizations
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
7	decision-making Number of communities that work with Extension to implement mechanisms/tools to analyze the surrent
/	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.

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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

2009 20 **2010** : 20 **2011** : 20 **2012** 20 **2013** : 20

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 20 **2010** : 20 **2011** : 20 **2012** 20 **2013** : 20

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

805 - Community Institutions, Health, and Social Services

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

2009 :15 **2010** : 15 **2011** : 15 **2012** :15 **2013** : 15

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

805 - Community Institutions, Health, and Social Services

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

2009 100 **2010** : 100 **2011** : 100 **2012** : 100 **2013** : 10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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805 - Community Institutions, Health, and Social Services

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

2009 :15 **2010** : 15 **2011** : 15 **2012** :15 **2013** : 15

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009:100 **2010**:100 **2011**:100 **2012**:100 **2013**:100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

805 - Community Institutions, Health, and Social Services

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

2009 :15 **2010** : 15 **2011** : 15 **2012** :15 **2013** :15

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

805 - Community Institutions, Health, and Social Services

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

2009 30 **2010** : 30 **2011** : 30 **2012** 30 **2013** : 30

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009:10 **2010**:10 **2011**:10 **2011**:10 **2012**:10 **2013**:10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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

2009 :15 **2010** : 15 **2011** : 15 **2012** : 15 **2013** : 15

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

805 - Community Institutions, Health, and Social Services

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

2009 :100 **2010** : 100 **2011** : 100 **2012** :100 **2013** : 100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #12

1. Outcome Target

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

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2. Outcome Type: Change in Action Outcome Measure

2009 :10 **2010** : 10 **2011** : 10 **2012** : 10 **2013** : 10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

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.

A leadership skills survey of community leaders will be administered to participants of facilitation/leadership workshops to determine how they used workshop skills in their communities. A statistical summary of survey responses will help refine the content of future leadership and facilitation workshops.

2. Data Collection Methods

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

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Description

{NO DATA ENTERED}

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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 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
703	Nutrition Education and Behavior	20%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	20%			
724	Healthy Lifestyle	20%			
801	Individual and Family Resource Management	20%			
802	Human Development and Family Well-Being	20%			
	Total	100%			

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

1. Situation and priorities

Diet Quality and Physical Activity

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.

Overall Health and Nutritional Quality of Food Stamp Recipients' Diet

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In the 2004 telephone survey, food stamp recipients were asked to describe the quality of both their general health and the nutritional quality of their diet. Over time, respondents have continually and consistently described their overall health less favorably than the general New Hampshire population. In 2004, 42% of respondents described the overall nutritional quality of their diet as excellent (16%) or very good (26%), an increase of 11 points since the 2003 study. By comparison, according to the 2000 Centers for Disease Control Behavioral Risk Factor Surveillance System Survey, general population residents in New Hampshire (63%) described their health as excellent or very good, and only (10%) described their health as fair or poor. Changing Health Status of New Hampshire Residents

The UNH Cooperative Extension State Advisory Council has requested that obesity prevention be a major focus in the 5 year plan of work. More than half of New Hampshire residents describe themselves as overweight or obese. Twenty-two percent of the state's school-age boys and 17 percent of girls are overweight, with another 20 percent at risk for overweight. Since mid-2003, an interdisciplinary team has been meeting and planning a statewide initiative called Lighten Up New Hampshire! that will identify and integrate the vast network of obesity prevention/reduction resources and programs throughout the Granite State. Shopping Behavior/Food Resource Management

Food resource management applies to the practices related to thrifty shopping for food and management of food dollars. These include such skills as making shopping lists, reading labels for nutritional value, planning menus, and basic cooking. Extremely low incomes can make it difficult for people to buy enough food to meet their minimum nutritional needs, thereby putting them at risk for under nutrition. A consumer's perception of the cost of various foods can also play a role in his or her choices.

Food Safety

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.

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. 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. 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. The demand for necessary child care services was met with a 25% increase in the number of licensed child care facilities in the state of New Hampshire between 1987 and 1997. 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. There is evidence which suggests that adults have significant gaps in their knowledge about children and developmental norms, and that general education may be beneficial for providers on many different levels.

Caring for New Hampshire's Aging Population

According to 2005-2025 Population Projections for NH and Counties by Age and Sex, prepared by the State Data Center, New Hampshire's population of elders (65-plus) will grow 150 percent over the next 20 years, as compared with an increase of 21 percent in the overall population. The 25-44 year age group will increase by only 6 percent during the same time. This group traditionally provides the pool of lower-wage workers who serve as hands-on professional healthcare providers. With no end in

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sight for escalating health care costs, with fewer employers each year offering health insurance, with insured families paying more out of pocket for health care, the additional resources needed to care for the rapidly-increasing group of elders will likely place tremendous new burdens on families.

Family Policy Education

Nationwide, there has been a call to strengthen the relationship between state universities and state legislatures. Recent national research indicates that at least 75% of legislators obtain most of their policy information from special interest groups such as grassroots organizations, lobbyists and groups representing ethnic populations. When asked where else they obtain information, only 5% of state legislators reported that they seek information from universities or think tanks. This represents a significant loss of opportunity for university researchers to help inform state-level policy, especially at a time when researchers are routinely questioned about the practice and policy implications of their research findings. One answer to this problem has been the implementation of Family Policy Impact Seminars-now in existence in 18 different states. Coordinated by Cooperative Extension specialists and staff, Family Impact Seminars provide research-based educational seminars on family policy issues to legislators, and help decision-makers to keep a family-oriented perspective in their policy-making.

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). 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). The Jump\$tart Coalition for Personal Financial Literacy 2004 survey found 12th graders' personal finance knowledge level to be 52.3% which is a failing grade based upon the typical grade scale. Many young people could establish bad financial management habits, and stumble through their lives learning by trial and error.

2. Scope of the Program

- In-State Extension
- Multistate Extension

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

1. Assumptions made for the Program

•A committed and skilled professional staff in Family and Consumer Resources will be retained. •Cooperative Extension has the capacity to address the educational needs of the residents of NH. •Cooperative Extension is a highly effective educational program development and delivery organization and is a non-biased research-based source of information and education. •Educational resources needed to achieve long term outcomes will be supported and developed. •Effective collaborations of agencies and organizations, and strategic partnerships will strengthen program development, delivery and evaluation. •Funding through CSREES, 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

•Adult children and others have the knowledge, motivation, skills, and tools to prepare emotionally and financially to address the needs of aging parents, relatives, and friends. •Children are safe and nurtured at home (parenting) and during out-of-school time (with day care providers). •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. •Public policy supports strong children and families. •Reduced rates of obesity and incidence of risk factors for chronic disease and other lifestyle-related health problems in New Hampshire. •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

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Year	Exte	nsion	Re	search
	1862	1890	1862	1890
2009	27.0	0.0	0.0	0.0
2010	27.0	0.0	0.0	0.0
2011	27.0	0.0	0.0	0.0
2012	27.0	0.0	0.0	0.0
2013	27.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Nutrition Connections - educational courses to income eligible New Hampshire residents' - ability to meet nutritional needs through available resources. Includes EFNEP (Expanded Food and Nutrition Education Program) and FSNEP (Food Stamp Nutrition Education Program.)

Lighten Up NH! - a statewide initiative of UNHCE that will identify, organize and integrate the diversity of human, educational, and environmental resources involving obesity prevention and reduction in New Hampshire. Specifically a new website will be developed and marketed.

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

Food safety programming in Nutrition Connections - educational courses to income eligible New Hampshire residents on how to eat healthier on a limited budget.

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.

Prepare for Eldercare - Cooperative Extension and AARP working together with local partners to develop effective delivery mechanisms to reach out to family caregivers with limited incomes and those whose care recipients may have limited incomes and resources

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

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

Extension			
Direct Methods	Indirect Methods		
 Education Class Demonstrations Group Discussion Workshop One-on-One Intervention 	 Web sites Newsletters Public Service Announcement TV Media Programs 		

3. Description of targeted audience

Parents, child care providers, policy makers, human service agencies, families, food service workers

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 Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	10000	200000	1750	0
2010	10000	200000	1750	0
2011	10000	200000	1750	0
2012	10000	200000	1750	0
2013	10000	20000	1750	0

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

Expected Patent Applications

2009:0 **2010**:0

2011:0

2012:0

2012 5

2013:0

2013 5

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

• Percent increase in web usage of Lighten Up! New Hampshire web site

2009:10 **2010**:5 **2011**:5

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2009 B000

Number of people who participate in ServSafe; workshops, SAFE (Safety Awareness in the Food Environment) 2009 1000 2011:1000 2013 :1000 2010 1000 2012:1000 Number of low-income adults participating in Nutrition Connections - educational courses to income eligible New Hampshire residents - Includes EFNEP (Expanded Food and Nutrition Education Program) and FSNEP (Food Stamp Nutrition **Education Program 2013** :1100 2009:1100 2010 1100 **2011** :1100 2012:1100 Number of people participating in Better Kid Care, Promoting the Social Emotional Competence of Young Children, Collaborations with NH Resource and Referral Agencies 2009 500 2010 500 2011:500 2012 500 2013 500 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 2009:1000 2010 1000 2011:1000 2012:1000 **2013** :1000 Number of adults participating in food safety programming through Nutrition Connections - educational courses to income eligible New Hampshire residents on how to eat healthier on a limited budget 2009 400 2010 400 2011:400 **2012 4**00 2013 400 Number of youth participating in food safety programming through Nutrition Connections - educational courses to income eligible New Hampshire residents on how to eat healthier on a limited budget 2009 875 2010 875 2011:875 2012 875 2013 900 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**

Number of youth participating in Making Money Work for You, Planning Ahead...Staying Ahead, Credit Check Up, Debt

2011:8000

2012 £000

2013 £000

Check Up, Starting Over Bankruptcy Education, Take the Road to Financial Security in Later Life, or Investing for Your Future

2010 8000

2009 4000 **2010** 4000 **2011** :4000 **2012** 4000 **2013** 4000

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$\mathrm{V}(\mathbf{I}).$ 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 report their intention to apply their understanding of general
	developmental milestones and progressions in ways that support their child's progress - socially, emotionally, physically, and intellectually
4	Number of participants who report an increase in their physical activity
5	Number of participants who report eating nearer to the recommended number of cup equivalents from the
	Fruits and Vegetable Group
6	Number of participants who adopt one or more healthier food/nutrition practices (choose foods according to
_	MyPyramid and the Dietary Guidelines
7	Number of participants who report eating nearer to MyPyramid amounts (unspecified)
8	Number of participants who report keeping food at safe temperatures
9	Number of participants who practice personal hygiene such as hand washing
10	Number of program participants who document an increase in their financial literacy on evaluation instruments
11	Number of resource and referral agencies that make Better Kid Care training available in NH
12	Number of youth who learn how to choose foods according to the Pyramid and Dietary Guidelines
13	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
14	Number of people who attend the parent education program and complete the pre- and post-survey report
	they intend to apply their understanding of general developmental milestones and progressions in ways that support their child's progress - socially, emotionally, and intellectually.
15	Number of people who attend the parent education program and complete the pre- and post-survey report
	they intend to apply their understanding of positive discipline techniques in ways that support their child's
	growth and development.

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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

2009 :100 **2010** : 100 **2011** : 100 **2012** :100 **2013** :100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 802 - Human Development and Family Well-Being

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

2009 875 **2010** : 875 **2011** : 875 **2012** 875 **2013** : 875

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 801 - Individual and Family Resource Management

Outcome #3

1. Outcome Target

Number of program participants who report their intention to apply their understanding of general developmental milestones and progressions in ways that support their child's progress - socially, emotionally, physically, and intellectually

2. Outcome Type: Change in Action Outcome Measure

2009 250 **2010** : 250 **2011** : 250 **2012** 250 **2013** : 250

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 802 - Human Development and Family Well-Being

Outcome #4

1. Outcome Target

Number of participants who report an increase in their physical activity

2. Outcome Type : Change in Action Outcome Measure

2009 :1750 **2010** : 1750 **2011** : 1750 **2012** :1750 **2013** : 1750

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 703 - Nutrition Education and Behavior

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• 724 - Healthy Lifestyle

Outcome #5

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

2009 200 **2010** : 200 **2011** : 200 **2012** 200 **2013** : 200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 703 Nutrition Education and Behavior
- 724 Healthy Lifestyle

Outcome #6

1. Outcome Target

Number of participants who adopt one or more healthier food/nutrition practices (choose foods according to MyPyramid and the Dietary Guidelines

2. Outcome Type: Change in Action Outcome Measure

2009 600 **2010** : 600 **2011** : 600 **2012** 600 **2013** : 600

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 703 Nutrition Education and Behavior
- 724 Healthy Lifestyle

Outcome #7

1. Outcome Target

Number of participants who report eating nearer to MyPyramid amounts (unspecified)

2. Outcome Type: Change in Action Outcome Measure

2009 300 **2010** : 300 **2011** : 300 **2012** 300 **2013** : 300

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 703 Nutrition Education and Behavior
- 724 Healthy Lifestyle

Outcome #8

1. Outcome Target

Number of participants who report keeping food at safe temperatures

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2. Outcome Type: Change in Action Outcome Measure

2009 400 **2010** : 400 **2011** : 400 **2012** 400 **2013** : 400

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #9

1. Outcome Target

Number of participants who practice personal hygiene such as hand washing

2. Outcome Type: Change in Action Outcome Measure

2009 550 **2010** : 550 **2011** : 550 **2012** 550 **2013** : 550

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 712 Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
- 802 Human Development and Family Well-Being

Outcome #10

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

2009 700 **2010** : 700 **2011** : 700 **2012** 700 **2013** : 700

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 801 - Individual and Family Resource Management

Outcome #11

1. Outcome Target

Number of resource and referral agencies that make Better Kid Care training available in NH

2. Outcome Type : Change in Knowledge Outcome Measure

2009:15 **2010**:15 **2011**:20 **2012**:20 **2013**:20

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 802 - Human Development and Family Well-Being

Outcome #12

1. Outcome Target

Number of youth who learn how to choose foods according to the Pyramid and Dietary Guidelines

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2. Outcome Type : Change in Knowledge Outcome Measure

2009 2200 **2010** : 2200 **2011** : 2200 **2012** 2200 **2013** : 2200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 703 Nutrition Education and Behavior
- 724 Healthy Lifestyle

Outcome #13

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

2009 700 **2010** : 700 **2011** : 700 **2012** 700 **2013** : 700

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #14

1. Outcome Target

Number of people who attend the parent education program and complete the pre- and post-survey report they intend to apply their understanding of general developmental milestones and progressions in ways that support their child's progress - socially, emotionally, and intellectually.

2. Outcome Type: Change in Knowledge Outcome Measure

2009:100 **2010**:100 **2011**:100 **2012**:100 **2013**:100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

802 - Human Development and Family Well-Being

Outcome #15

1. Outcome Target

Number of people who attend the parent education program and complete the pre- and post-survey report they intend to apply their understanding of positive discipline techniques in ways that support their child's growth and development.

2. Outcome Type : Change in Knowledge Outcome Measure

2009 :100 **2010** : 100 **2011** : 100 **2012** :100 **2013** :100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

802 - Human Development and Family Well-Being

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V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

- •Understanding of Family and Consumer Sciences 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 are challenged to balance personal, family and professional goals and often lack the time to participate in learning opportunities.
- Individuals will choose to make good decisions, be effective parents, choose quality child care, make healthy food choices, handle food safely, and manage their resources with skill if they have the awareness, knowledge, attitudes and skills to do so.

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

1. Evaluation Studies Planned

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

Description

A post-workshop survey will be administered to all participants of the Prepare for Eldercare Project. Participants will be asked to indicate to what degree they learned new information, whether the information that was presented was relevant to the caregiving they do, and to what degree and how they will be able to use the information learned in the educational session.

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.

Evaluations for Nutrition Connections include retrospective behavior surveys, pre/post food recalls (adults only), direct observation.

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.

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.

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2. Data Collection Methods

- Whole population
- On-Site
- Observation
- Journals

Description

{NO DATA ENTERED}

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V(A). Planned Program (Summary)

Program #6

1. Name of the Planned Program

Program Development and Evaluation

2. Brief summary about Planned Program

This plan is the work of the Program Development and Evaluation Team and the goals of the team are to support staff in program development, evaluation and reporting efforts and to make recommendations to Extension administration as appropriate regarding policy and procedures around these topics.

3. Program existence: Intermediate (One to 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
902	Administration of Projects and Programs	100%			
	Total	100%			

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

1. Situation and priorities

In 2001 the University of New Hampshire Cooperative Extension set a goal to increase measurement and documentation of programmatic outcomes. A small group of staff brainstormed and implemented actions to affect this organizational change. Five years later most of the team members have changed and a position has been created for an Extension Specialist in Program Development and Evaluation. Staff member surveys and facilitated discussions indicate the need for a greater understanding of basic program development and evaluation, but also more support and time to evaluate the programs we offer. Further, staff and stake holders have made it clear that the burden of reporting should be minimized for staff. Solid program planning and evaluation is essential to continue our funding and too make programmatic decisions that are supported by data.

A formal partnership has been formed with our neighboring states (Maine, Vermont, and Massachusetts) to develop a new, comprehensive electronic planning and reporting system that was implemented in 2006. Staff training and on-going support will be required so that the system will be used appropriately to report impacts.

2. Scope of the Program

- In-State Extension
- Multistate Extension

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

1. Assumptions made for the Program

- •Future resources available to UNHCE will be based on our ability to measure and communicate programmatic impacts.
- •There will be political pressure to continue some programs regardless of evaluation data and we will rely more on competitive grant funding to provide innovative and relevant educational programming.

 •The multi-state program planning and reporting system will provide outcome data that meets the needs of federal partners and stake holders.

 •Evaluation data will help staff improve existing programs and make decisions regarding the continuation of programs that yield little impact.

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2. Ultimate goal(s) of this Program

•Organizational changes in program reporting policies and procedures reduce staff time and stress and provide necessary, high quality outcome and impact data.
•UNHCE programs clearly demonstrate social, economic, civic and/or environmental impacts.

V(E). Planned Program (Inputs)

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

Voor	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2009	1.0	0.0	0.0	0.0
2010	1.0	0.0	0.0	0.0
2011	1.0	0.0	0.0	0.0
2012	1.0	0.0	0.0	0.0
2013	1.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Provide in-service opportunities and training using the logic model to develop outcome-based programs, evaluation methods/tools, use of new on-line system, and writing impact statements

Web-based support for outcome-based program development, evaluation and reporting

One-on-one consultations with staff requiring assistance in outcome-based program development, evaluation tools, data analysis, using the on-line planning and reporting system; and writing impact reports

Email tips/newsletter on program development and evaluation topics; reporting system use; and updates to web page support

Evaluation of various organizational policies and programs - report results to Extension Administration. (Graduate Assistant Funding, Interdisciplinary Team policies, County Conversations with University President)

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

Extension			
Direct Methods	Indirect Methods		
Group Discussion Education Class	NewslettersWeb sites		
Workshop One-on-One Intervention			

3. Description of targeted audience

Extension professional staff

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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 Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	80	180	0	0
2010	80	180	0	0
2011	80	180	0	0
2012	80	150	0	0
2013	80	150	0	0

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

Expected Patent Applications

2009:0

2010:0

2011:0

2012:0

2013:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of staff attending in-service opportunities and training using the logic model to develop outcome-based programs, evaluation methods/tools, use of new on-line system, and writing impact statements

2009 20

2010 20

2011:20

2012 20

2013 20

Number of staff who use web-based support for outcome-based program development, evaluation and reporting

2009:100

2010 100

2011 :100

2012:100

2013 :100

 Number of one-on-one consultations with staff requiring assistance in outcome-based program development, evaluation tools, data analysis, using the on-line planning and reporting system; and writing impact reports

2009 50

2010 50

2011:25

2012 25

2013 25

 Number of staff receiving email tips/newsletter on program development and evaluation topics; reporting system use; and updates to web page support

2009:180

2010 180

2011 :180

2012:180

2013 :180

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V(I). State Defined Outcome

O. No	Outcome Name
1	Percent of UNHCE staff attending professional development workshops who use program development
	resources to develop, submit, and implement evaluation plans that can accomplish measuring formative
	and summative data for their programs.
2	Percent of staff who report using data for reports, improving programs, making decisions about future
	programs, or other uses
3	Percent of UNHCE Extension Educator staff who submit outcome-based plans and evaluation data
	according to the plans
4	Percent of UNHCE staff who attend PD and E professional development functions who show an increase in
	skills and knowledge on a post-workshop test designed to measure knowledge and skills in developing
	outcome-based programs and using appropriate evaluation methodology
5	Percent of staff using the on-line planning and reporting system who report having the appropriate skills and
	knowledge to plan and report outcome data using the system

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Outcome #1

1. Outcome Target

Percent of UNHCE staff attending professional development workshops who use program development resources to develop, submit, and implement evaluation plans that can accomplish measuring formative and summative data for their programs.

2. Outcome Type: Change in Action Outcome Measure

2009 :70 **2010** : 70 **2011** : 70 **2012** :80 **2013** :80

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

902 - Administration of Projects and Programs

Outcome #2

1. Outcome Target

Percent of staff who report using data for reports, improving programs, making decisions about future programs, or other uses

2. Outcome Type: Change in Action Outcome Measure

2009 35 **2010** : 40 **2011** : 50 **2012** 50 **2013** : 50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 902 - Administration of Projects and Programs

Outcome #3

1. Outcome Target

Percent of UNHCE Extension Educator staff who submit outcome-based plans and evaluation data according to the plans

2. Outcome Type : Change in Action Outcome Measure

2009 95 **2010**:100 **2011**:100 **2012**:100 **2013**:0

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

902 - Administration of Projects and Programs

Outcome #4

1. Outcome Target

Percent of UNHCE staff who attend PD and E professional development functions who show an increase in skills and knowledge on a post-workshop test designed to measure knowledge and skills in developing outcome-based programs and using appropriate evaluation methodology

2. Outcome Type: Change in Knowledge Outcome Measure

2009 :75 **2010** : 75 **2011** : 75 **2012** : 75 **2013** : 75

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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902 - Administration of Projects and Programs

Outcome #5

1. Outcome Target

Percent of staff using the on-line planning and reporting system who report having the appropriate skills and knowledge to plan and report outcome data using the system

2. Outcome Type: Change in Knowledge Outcome Measure

2009 95 **2010** : 95 **2011** : 95 **2012** 95 **2013** : 95

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

902 - Administration of Projects and Programs

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Programmatic Challenges

Description

Federal partners and local stakeholders will continue to require Extension to report outcome data.

As a result of shrinking budgets, staff will have less time to devote to reporting requirements.

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)
- Retrospective (post program)

Description

Retrospective and post-workshop knowledge surveys will be developed and administered after staff development workshops and six month follow-up surveys (via a web survey) will be used to collect data on how staff apply their knowledge and skills in program development and evaluation.

An annual web survey will be used to ascertain how staff perceive the new planning and reporting system and modifications will be made accordingly. Further staff will be asked to share how they are using the report data from the system

Program leaders will be asked to report on an aggregate basis how many staff are submitting plans that reflect outcome-based programming and on the quality of evaluation data they are receiving from program staff.

2. Data Collection Methods

- Other (web survey)
- Portfolio Reviews
- Whole population
- Observation

Description

{NO DATA ENTERED}

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V(A). Planned Program (Summary)

Program #7

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: New (One year or less)

'4. Program duration: Medium Term (One to 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
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%			
	Total	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

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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

Vasa	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2009	0.5	0.0	0.0	0.0
2010	1.0	0.0	0.0	0.0
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

V(F). Planned Program (Activity)

1. Activity for the Program

Conduct 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

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	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	40	0	0	0
2010	40	0	0	0
2011	40	0	0	0
2012	40	0	0	0
2013	40	0	0	0

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

Expected Patent Applications

2009:0

2010:0

2011:0

2012:0

2013:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of people completing the Natural Resource Business Institute

2009 20

2010 20

2011 :20

2012 20

2013 20

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V(I). State Defined Outcome

O. No	Outcome Name
1	Percent of participants who start, expand or modify a business enterprise
2	Percent of participants who are active in groups that advocate for an improved natural resource business environment
3	Percent of participants who report completing a planning worksheets on a regular basis
4	Percent of participants who indicate on a post institute survey they gained information and/or experiences to help reach their personal goals

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Outcome #1

1. Outcome Target

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

2. Outcome Type : Change in Action Outcome Measure

2009 :10 **2010** : 10 **2011** : 10 **2012** : 10 **2013** : 10

3. Associated Institute Type(s)

•1862 Extension

4. 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

Outcome #2

1. Outcome Target

Percent of participants who are active in groups that advocate for an improved natural resource business environment

2. Outcome Type : Change in Action Outcome Measure

2009 25 **2010** : 25 **2011** : 25 **2012** 25 **2013** : 25

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 601 Economics of Agricultural Production and Farm Management
- 605 Natural Resource and Environmental Economics

Outcome #3

1. Outcome Target

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

2. Outcome Type : Change in Action Outcome Measure

2009 50 **2010** : 50 **2011** : 50 **2012** 50 **2013** : 50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #4

1. Outcome Target

Percent of participants who indicate on a post institute survey they gained information and/or experiences to help reach their personal goals

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2. Outcome Type: Change in Knowledge Outcome Measure

2009 40 **2010** : 40 **2011** : 40 **2012** 40 **2013** : 40

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

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. •Limitations may be imposed by the

geographic dispersion of team members and businesses.

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

- Mail
- Whole population
- On-Site

Description

{NO DATA ENTERED}

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V(A). Planned Program (Summary)

Program #8

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 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
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 Production Management Systems	5%			
903	Communication, Education, and Information Delivery	10%			
	Total	100%			

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

1. Situation and priorities

COMMERCIAL FISHERIES

In 2003, the Northeast had landings of 664 million pounds of fish, worth nearly \$91 million. The single most economically important species for the region continues to be the American Lobster, with landings of 70.5 million pounds valued at \$278

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million. Sea scallops, at \$116 million, ranked second in value, followed by mixed groundfish and flounder at \$97 million.

The commercial fishing industry in New Hampshire is composed of nearly 140 commercial vessels, consisting of 100 lobster and 40 groundfish boats. In 2003, New Hampshire had landings of 27.4 million pounds of fish, worth just over \$15 million. The single most economically important species for New Hampshire continues to be the American lobster, with landings of 2 million pounds valued at \$9 million. Atlantic cod, at \$1.8 million, ranked second in value, followed by Atlantic herring, \$1.2 million, and goosefish at just over \$1 million. 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 scientists 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, in many ways it 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

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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

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

Land and Water Conservation

•The plan will receive UNHCE administrative support •We will continue working relationships with partner groups •NF citizens will recognize the expertise of UNH Cooperative Extension •Working across disciplines will improve our ability to achieve the desired outcomes - programmatic and institutional

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

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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 and improve production methods for cold water marine species that will lead to a sustainable aquaculture industry in northern New England

Reduce the rate of open space loss by increasing the level of land conservation that ensures working landscapes

Lands are managed in a way that does not degrade soil or water resources

Biodiversity is maintained and protected over the long-term

Water quality in lakes, streams and estuaries improves or is maintained at acceptable levels

Decision makers use scientifically-based information to create and implement plans, practices, and policies for sustainable development in coastal areas

Identify and link specific land use practices within the coastal watershed that significantly threaten and degrade Gulf of Maine water quality through nutrient, pathogenic and toxic contaminant inputs

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

Create and sustain effective marine and aquatic science-based educational programs for both formal K-12 audiences and informal family and adult audiences

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

V(E). Planned Program (Inputs)

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

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Year	Exte	nsion	Research	
	1862	1890	1862	1890
2009	6.0	0.0	0.0	0.0
2010	6.0	0.0	0.0	0.0
2011	6.0	0.0	0.0	0.0
2012	6.0	0.0	0.0	0.0
2013	6.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Provide educational workshops on the following:

•Economic benefits of fish handling strategies aimed at enhancing product freshness and shelf-life •Mobil fishing gear and methods to reduce sea-bed impact in the fishing industry

Assist fishermen with cooperative research projects as necessary -Act as a "match maker" to identify potential partners among commercial fishermen and researchers and assist fishermen in developing research ideas that can be incorporated into joint fishermen/scientist proposals

Conduct dockside or on-water demonstrations of innovative gear technologies and of low impact mobile fishing gear innovations

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

Produce printed, presentation, web and other educational materials

Conduct workshops for garden clubs, community groups, watershed associations and others interested in sustainable landscaping practices and water resources protection - workshops will include a presentation and when possible, a practical assessment of the property where the workshop is held

Conduct activity-based Great Bay Discovery Cruisesto provide citizens with the opportunity to learn about the estuary aboard the University's research vessel

Continue to write scripts, record and monitor a low power radio station (Great Bay Area Radio) dedicated to informing the 30,000 motorists passing by the Estuary daily. Scripts focus on natural history, research, educational opportunities and Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET). Share CICEET derived research and resources relevant to coastal communities

Work with the Natural Resource Outreach Coalition (NROC) to recruit communities and develop marketing materials 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

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

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

In partnership with schools and UNH, develop new programs that engage in-service and pre-service teachers directly with researchers, faculty, and graduate students

Hold water quality monitoring training sessions for new and existing volunteers - conductfield 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

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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	
 Group Discussion Workshop Education Class One-on-One Intervention 	 TV Media Programs Public Service Announcement Other 1 (radio) Web sites 	
Demonstrations	Newsletters	

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 Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2009	1700	210000	0	0
2010	1700	210000	0	0
2011	1700	210000	0	0
2012	1700	210000	0	0
2013	1700	210000	0	0

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

Expected Patent Applications

2009:0 **2010**:0 **2011**:0 **2012**:0 **2013**:0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0

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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 20095 2010 5 2011:5 20125 2013 5 Number of motorists passing by the Great Bay estuary exposed to a low power radio station (Great Bay Area Radio) dedicated to informing them with recorded messages on natural history, research, educational opportunities and Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) 2009 30000 2010 30000 2011:30000 2012 30000 2013 30000 Number of water quality monitoring training sessions held for new and existing volunteers 2009 2 2010 2 2011:2 20122 2013 2 Number of annual lake reports and coastal reports published on water quality assessments from volunteer monitoring efforts 2009:10 2010 10 **2011** :10 2012:10 **2013** :10 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 2009:10 2010 10 2013 :10 2012:10 Number of hours NH Lakes Lay Monitoring Program volunteers contribute toward conducting water quality monitoring and analysis activities in their local watersheds 2012 £500 2009 £500 2010 8500 2011:8500 2013 £500 Number of towns and conservation groups provided with direct assistance regarding land and water conservation 2009 20 2010 20 2011:20 2012 20 2013 20 Number of new marine education K-12 Sea Trek programs that reflect emerging national scientific issues and address prioritized education standards **2009** 3 **2010** 3 2011:3 **2012** 3 **2013** 3 Number of marine science education 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 20095 **2010** 5 **2011 :**5 **2012** 5 2013 5 Number of guides developed to existing curricular and program materials that identify how the marine context can be used to address core content standards 20092 2010 2 2011:2 20122 2013 2 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 20092 2011:2 20122 2010 2 2013 2 Number of new programs developed in partnership with schools and UNH, that engage in-service and pre-service teachers directly with researchers, faculty, and graduate students 20092 2013 2 2010 2 2011:2 20122

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

	2009 2	2010 2	2011 :2	2012 2	2013 2
•	and increasing selectivity of	•	rmen on the following topics: orts on reducing sea-bed imp fishermen and scientists.	•	• .
	2009 B	2010 8	2011 :8	2012 ß	2013 ß
•	•		ews, and web pages which de pacts and enhance gear selec	0.0	and
	2009 7	2010 7	2011 :7	2012 7	2013 :7
•	Number of Safety-at-Sea p	rograms held.			
	2009 2	2010 2	2011 :2	2012 2	2013 2
•	Number of homeowners pricontamination of water research		t home and yard care practic	es that prevent or minimize	
	2009 100	2010 100	2011 :100	2012 :100	2013 :100
•	Number of communities and development professionals provided information to encourage the use of more innovative stormwater management.				
	2009 25	2010 25	2011 :25	2012 25	2013 25
•	Number of fishermen traine	ed in safe welding practices			
	2009 20	2010 20	2011 :20	2012 20	2013 20

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V(I). State Defined Outcome

O. No	Outcome Name			
1	Number of residents, decision makers or visitors who report gaining knowledge about NH coastal			
	ecosystems, research, sources of land and water degradation or improved yard care practices.			
2	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			
3	Number of teachers who learn to utilize marine science concepts and contexts to support teaching core			
	science and other content standards in their classrooms			
4	Number of fishermen who choose non-mandatory conservation-minded gear over traditional equipment			
5	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			
6	Number of fishermen who choose soft-bottom fishing gear over traditional equipment			
7	Number of fishermen who successfully complete cooperative research projects			
8	Number of communities to develop action plans for making progress in community based natural resource protection projects.			
9	Number of K-12 teachers who adopt marine science concepts and contexts learned through Sea Grant			
	/UNHCE programs that support teaching of core sciences and other content standards			
10	Number of K-12 students who improve performance in content areas as a result of teachers incorporating			
	marine science into their lesson plans			
11	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			
12	Number of fishermen who gain knowledge increase knowledge of new conservation fishing gear that			
	reduces benthic habitat impact.			
13	Number of fishermen who become certified as safety drill conductors.			
14	Number of communities to implement or start to implement a natural resource protection project.			
15	Number of community decision makers, conservation groups or development professionals who report			
	gaining knowledge about preventing degradation from storm water runoff.			

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Outcome #1

1. Outcome Target

Number of residents, decision makers or visitors who report gaining knowledge about NH coastal ecosystems, research, sources of land and water degradation or improved yard care practices.

2. Outcome Type: Change in Knowledge Outcome Measure

2009 :100 **2010** : 100 **2011** : 100 **2012** :100 **2013** :100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #2

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

2009 0 **2010** : 0 **2011** : 25000 **2012** 25000 **2013** : 25000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #3

1. Outcome Target

Number of teachers who learn to utilize marine science concepts and contexts to support teaching core science and other content standards in their classrooms

2. Outcome Type: Change in Knowledge Outcome Measure

2009 30 **2010** : 30 **2011** : 30 **2012** 30 **2013** : 30

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

903 - Communication, Education, and Information Delivery

Outcome #4

1. Outcome Target

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

2. Outcome Type: Change in Action Outcome Measure

2009 :10 **2010** : 10 **2011** : 10 **2012** :10 **2013** :10

3. Associated Institute Type(s)

•1862 Extension

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4. Associated Knowledge Area(s)

• 135 - Aquatic and Terrestrial Wildlife

Outcome #5

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

2009 5 **2010** : 5 **2011** : 5 **2012** 5 **2013** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 135 - Aquatic and Terrestrial Wildlife

Outcome #6

1. Outcome Target

Number of fishermen who choose soft-bottom fishing gear over traditional equipment

2. Outcome Type : Change in Action Outcome Measure

2009 10 **2010** : 10 **2011** : 10 **2012** 10 **2013** : 10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 135 - Aquatic and Terrestrial Wildlife

Outcome #7

1. Outcome Target

Number of fishermen who successfully complete cooperative research projects

2. Outcome Type : Change in Action Outcome Measure

2009 5 **2010** : 5 **2011** : 5 **2012** 5 **2013** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #8

1. Outcome Target

Number of communities to develop action plans for making progress in community based natural resource protection projects.

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2. Outcome Type: Change in Action Outcome Measure

2009 2 **2010** : 2 **2011** : 2 **2012** 2 **2013** : 2

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #9

1. Outcome Target

Number of K-12 teachers who adopt marine science concepts and contexts learned through Sea Grant /UNHCE programs that support teaching of core sciences and other content standards

2. Outcome Type: Change in Action Outcome Measure

2009 :100 **2010** : 100 **2011** : 100 **2012** : 100 **2013** : 100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 903 - Communication, Education, and Information Delivery

Outcome #10

1. Outcome Target

Number of K-12 students who improve performance in content areas as a result of teachers incorporating marine science into their lesson plans

2. Outcome Type: Change in Action Outcome Measure

2009 500 **2010** : 500 **2011** : 500 **2012** 500 **2013** : 500

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 903 - Communication, Education, and Information Delivery

Outcome #11

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

2009 :70 **2010** : 70 **2011** : 70 **2012** :70 **2013** :70

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 903 - Communication, Education, and Information Delivery

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Outcome #12

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

2009 30 **2010** : 30 **2011** : 30 **2012** 30 **2013** : 30

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 135 - Aquatic and Terrestrial Wildlife

Outcome #13

1. Outcome Target

Number of fishermen who become certified as safety drill conductors.

2. Outcome Type : Change in Action Outcome Measure

2009 20 **2010** : 20 **2011** : 20 **2012** 20 **2013** : 20

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 903 - Communication, Education, and Information Delivery

Outcome #14

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

2009 2 **2010** : 2 **2011** : 2 **2012** 2 **2013** : 2

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #15

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

2009:12 **2010**:12 **2011**:12 **2012**:12 **2013**:12

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

112 - Watershed Protection and Management

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V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

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. 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. 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

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

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- New industry members will be surveyed to determine sources of start-up capital and harvesting information
- · Results of permit applications will be tracked through NH Fish and Game

LAND AND WATER CONSERVATION

- Short term individual program & event evaluations (at the time of the programs)
- Long term (follow-up) evaluations on programs
- · Observation of client behavior by staff

Periodic staff evaluation of programs as part of ongoing program planning

Evaluation techniques will include:

- post-session questionnaires
- on-line surveys
- progress notes gathered at community based meetings
- observations
- interviews with key contacts 12-18 month after program start 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
- Participation at (Gulf of Maine Marine Education Association (GOMMEA) and National Marine Education Association (NMEA)events will be monitored and participants will be surveyed to determine if the outcomes of the objective are being achieved
- The Web site will be monitored for use, and users will be surveyed to determine the usefulness of the site surveys will be used to determine the impact of the use of the site on user marine literacy, or use in supporting teaching and learning
 - Student pre- and post- program assessments will be used to determine if an increase in performance has occurred 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
- The Natural Resources Outreach Coalition (NROC) program has an ongoing long-term evaluation protocol recently modified as the result of a Nonpoint Education for Municipal Officers (NEMO) Network Program Enhancement Grant (CT Sea Grant). The protocols include collecting information about community progress through pre-program group interviews,

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post-session questionnaires, observation and reporting from follow up groups and 12-18 month interviews with key contacts. For additional statewide and regional efforts the plan will include the use of pre and post meeting assessments, questionnaires, estimates staff time saved (vs. "re-inventing the wheel") and documentation of efficiencies

2. Data Collection Methods

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

Description

{NO DATA ENTERED}

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