

2010 Montana State University Extension Plan of Work

Status: Accepted
Date Accepted: 06/30/09

I. Plan Overview

1. Brief Summary about Plan Of Work

A profile of Montana shows trends Extension must consider when developing education offerings. It must also be noted that education is not the answer to all concerns, but it certainly can impact many. Therefore, MSU Extension, with limited resources, has selected six major initiatives around which programming will be designed.

Youth Development – will contribute to Montana youth developing the confidence, competence and character to become critical thinkers, active citizens, caring human beings, innately curious, self-sufficient, adaptable to change, and connected to community.

Agriculture Sustainability and Profitability – will ensure that Montana farm and ranch owner/operators know how to sustain profitability and maintain land stewardship at a level that provides for continual production and a desirable quality of life.

Natural Resources and Environments – will contribute to Montanans supporting and understanding good land and natural resource stewardship.

Family Issues, Resources and Environments – will empower Montana individuals/ families so they can manage their finances, build sound relationships and attain a home environment that establishes and maintains strong and healthy families.

Nutrition-Food Safety-Healthy Lifestyles – will contribute to all Montanans having access to a safe and adequate food supply, adopting healthy lifestyles, and living in communities that promote good nutrition.

Community and Economic Development – will assist Montana communities in using proven economic and community development strategies that will improve the conditions impacting business and family life.

Montana's profile shows a state that is stable in almost all sectors and looking to the future with a slow but continued growth indicated. The 2007 population of the state is 957,861 (44th in the nation), an increase of 1% from a year ago. (Montana Department of Commerce). It is interesting to note that these people are:

- 90.8% white; 6.5% Native American
- 23.1% under the age of 18; 76.9% 18 & over; 13.8% are 65 and over
- 50% are male; 50% are female

Further population highlights show:

\$30,886 is the average personal income

13.6% live in poverty

17.1% do not have health insurance coverage

(US Bureau of Economic Analysis)

In 2010, it is predicted that Montana's population will be 968,598 and top 1,000,000 in 2020. The Census Bureau projects that Montana's 65 and older population will increase by 64% between 2005 and 2020. Economic issues associated with the aging population may include increased healthcare costs, increased healthcare jobs, potential reluctance of the aging population to support school funding, and Social Security and Medicare insolvency. (Montana Economy at a Glance) In general, the population is shifting from east to west, impacting both sides of the state.

The economy continues a stable, steady upward growth. In 2005, economic activity increased by 4.6%, earning a rank of ninth in the nation. (Census and Economic Information Center, MT Dept of Commerce)

Agriculture continues as the largest basic industry followed by tourism, mining and gas/oil production. It must be recognized that Montana is a natural resource based state and shares common problems and issues with neighboring states. A snapshot of Montana agriculture reveals what entities make it number one in the state's economy.

Top Agriculture Commodities:

Cattle and Calves

Wheat

Barley

Top Livestock Inventory

Cattle and Calves

Layers (20 weeks old +)

Sheep/lambs

Hay
Bee Colonies

Hogs/pigs

<u>Top Agricultural Exports</u>	<u>Top Crop Items</u>
Wheat and wheat products	All Wheat for grain
Feeds	Forage
Vegetables	Barley
Sugar beets (for sugar)	Feed grains and products
Corn for silage	

According to the Office of Public Instruction, there are 96,938 elementary students, a decrease of about 1.6% reflecting a 10 year trend. The high school numbers have not declined as much, but have dropped about 3,000 in the past six years to a 47,480 enrollment in 2006-07. The state has a 3.9% high school drop out rate, 24th in the nation.

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

Year	Extension		Research	
	1862	1890	1862	1890
2010	37.0	0.0	0.0	0.0
2011	37.0	0.0	0.0	0.0
2012	37.0	0.0	0.0	0.0
2013	37.0	0.0	0.0	0.0
2014	37.0	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 University Panel
- Expert Peer Review

2. Brief Explanation

Programs delivered by MSU Extension will be reviewed by the merit review committee according to the process outlined in the Plan of Work. The committee, composed of Dr. LeRoy Luft, Jim DeBree, and Jim Johannes provided written and oral feedback following their review of the Annual Report/Plan of Work. The feedback will be compiled into one letter and then sent back to the review committee for revision, edit and acceptance.

The comments made by the Merit Review Committee will be used in planning and conducting programs for the next 5 year planning cycle. Following are examples of their suggestions:

- In the program area of Natural Resources and Environment, the situation is well defined, the programs are carefully explained and the results well documented. However, Extension should consider programming in topics such as public policy on federal lands affecting natural resources – water quality, timber management involving recreational uses such as ATV’s and hazardous fuel reduction in the Wild land Urban Interface and the threat by wolves in the fringe areas of wooded lands. The goals in the area of Agriculture Sustainability and Profitability are excellent being descriptive, relevant and show positive impacts. Extension should consider however, placing more emphasis on the "sustainability" portion of the program area offering assistance to agriculturalists wanting to explore or actually make the transition to true sustainable agriculture.
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As in the past, the Merit Review process will provide valuable information and suggestions that make Extension's programs better. While the process will remain the same, one person on the review committee has been changed. Don Addy will be replaced by Jim Johannes. Because of Don's unexpected and untimely death, another recently retired person who has the perspective of the reservation population has been selected. Jim Johannes served as the coordinator for the FRTEP programs with Montana Extension since they began. He has worked closely with all 7 reservations in both FRTEP and 1994 Tribal Land Grant colleges.

This Merit Review team recognizes the limitations MSU Extension has with limited resources to cover a very large and sparsely populated state. While their expectations may be tempered by this knowledge, they still challenge the organization to stretch its educational efforts to address emerging issues important to people in the state.

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?

Montana is active in planning and delivering programs in collaboration with other states in the region and nationally. The state is situated among other rural states that share similar issues, so partnering on program development and delivery makes sense. The stakeholder input process used by Montana Extension is not designed to cross state lines, but continual communication by professional faculty in neighboring counties serves as a check point for common program needs and concerns. It is not unusual to find clientele from "across the borders" using the closest county office for a resource; this may not be in their own state.

Additionally, specialists from states around the country form collaborations to address shared concerns. It is a specialist's role to stay abreast of emerging issues and develop educational efforts that address current situations and to apprise county faculty and clientele about these new trends. Specialists also interface with state, regional and national organizations to stay current in their respective fields.

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

A multi state collaboration can share techniques that have been effective in reaching under served or under represented audiences. These "best practices" are proven techniques that work and armed with these ideas, planned programs can be more targeted to particular audiences. Examples of programs currently targeting an under-served or under-represented audience are the Food Stamp Nutrition education (FSNE) program and Small Acreage Land Owner and American Indian Probate Reform Act (AIPRA) workshops. The new Indian Probate Act will have significant impact on ownership of tribal lands and "kitchen table" discussions (small, more intimate groups) are planned to spread information on that topic. Youth Ag Loans for reservation youth will provide resources to start a heard of cattle or sheep.

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

Using the "logic model" as the primary planning tool, outcomes and impacts are identified at the beginning of the process. This method is becoming the accepted way of planning Extension programs all across the country, so multi state or joint collaborations start their work with the end result in mind.

Training on the use of effective evaluation tools to determine outcomes and impacts is becoming more common. Again, the "how" to collect the "what", is being established during the planning process. States commonly share successful evaluation techniques and/or replicate studies that describe the impact of program efforts. Montana Extension continues to put a priority on this type of training for both state and county personnel.

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

Like Montana, many of its neighboring states have limited resources to apply to any single issue. Past experience has shown that by planning across state lines, it is possible to bring needed expertise to bear on a particular problem. Experience has also shown that this approach is often more comprehensive and thorough in program design and delivery while at the same time, eliminating duplication of time and money.

IV. Stakeholder Input

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

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

Brief explanation.

The stakeholder input process for MSU Extension gives citizens an opportunity to identify issues and needs that can be addressed through education. In an effort to be thorough in gathering data, both local and state level stakeholders are asked for input.

At the local level, every County and Reservation Extension unit in the state has a process to gather input that involves a cross-section of local leadership and citizens (community and organizational) to:

- Provide advice about current and emerging local issues to ensure continued relevance of Extension programs.
- Assist with identification of program delivery and evaluation methods to ensure effectiveness.
- Identify new partners and strengthen relationships with existing partners.
- Communicate the impact and relevance of MSU Extension's educational programs.

Local stakeholders are chosen because they represent clientele interests within the county/reservation, including the underserved and under-represented, understand Extension and believe education can assist in solving problems and improving the quality of life.

The local stakeholder process uses a variety of formats to gather input including but not limited to advisory committees, focus groups, town hall meetings, on-line survey, strategic planning, consultations with partner organizations' citizen boards, organizational forums. MSU Specialists also provide these groups with information about trends and new developments that may impact Montana. This information drives local Extension programs and determines educational efforts from the County/Reservation Offices.

Information gathered through the local process is combined at each of the three Extension Regions so those issues and needs that are common may be addressed through a collaborative approach. When appropriate, Issue Teams are formed to plan and conduct educational activities that will address concerns.

At the state level, the purpose of the Montana Extension Advisory Council (MEAC) is to assist MSU Extension in developing sound, long-range outreach educational programs based on priority needs of local Montana Communities. Specifically, the Council's charge is to help Extension faculty and administrators to:

•Validate state priorities based on educational needs identified by local communities •Review on-going programs in light of identified state priorities •Identify new programs that should be developed to address state priorities •Evaluate the effectiveness and impact of Extension programs, particularly newly developed programs in response to stakeholder input processes. •Stimulate communication and cooperation among county, state and national Extension-advisory committees and all other organizations or groups interested in outreach education. •Foster delivery and acceptance of MSU Extension education and to promote Extension programs throughout Montana. •Inform decision makers about the value of Extension programs.

MEAC members are selected because of their understanding of local and state issues and their interest in education

through MSU Extension programs. They are chosen to reflect Montana's economic, geographic and racial diversity to assure a balance of interests and views.

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
- Use Surveys
- Open Listening Sessions
- Use Internal Focus Groups
- Use Advisory Committees
- Use External Focus Groups

Brief explanation.

MSU Extension will use each of the methods noted depending on the program area and/or the specific situation. At the county level, faculty and their supervisor will determine the most appropriate way to gather information from residents in the county. They will decide, based on county population and its diversity, geographic configuration and other such factors, which can best provide useful feedback for program development and priority setting. Selection for participation in the advisory process will be based on the following criteria. A participant must:

- represent clientele interests within the county/reservation
- represent the diversity of the county population including underserved and under-represented.
- have a general understanding of Extension and its purpose
- believe education can assist in solving problems and improving the quality of life.

A portion of an MSU Specialist FTE has been allocated to assist with the development of advisory committees.

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

1. Methods for collecting Stakeholder Input

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

Brief explanation

Create a basis for additional resources

3. A statement of how the input will be considered

- In the Action Plans
- To Set Priorities
- Redirect Extension Programs
- Other (Create a basis for additional resources)
- To Identify Emerging Issues

Brief explanation.

Generally speaking, the MSU Extension program is determined locally. Through the advisory process, Extension faculty learns about the needs Montanans have which can be addressed through education. It is critical then, for Extension to have the flexibility to develop programs that can respond to those needs when they are determined to be a priority. In Montana Extension,

this may mean faculty must retool or broaden their scope beyond their immediate discipline. If input is used and programs are delivered that address citizen priorities, a basis for additional resources can be developed.

V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Nutrition, Food Safety and Healthy Lifestyles
2	Youth Development
3	Ag Sustainability and Profitability
4	Family Issues, Resources and Environments
5	Community and Economic Development
6	Natural Resources and Environment

V(A). Planned Program (Summary)

Program #1

1. Name of the Planned Program

Nutrition, Food Safety and Healthy Lifestyles

2. Brief summary about Planned Program

The Nutrition, Food Safety and Healthy Lifestyle program addresses concerns from stakeholders who said they are worried about their health and view nutrition and exercise as key to achieving a healthy lifestyle. Specifically, stakeholders listed nutrition, food safety, physical activity and health as significant issues facing adults and youth in the state. This input is substantiated with information from the 2000 census, which indicates there are many health problems that can be attributed to nutritional deficiencies and poor food choices. Through education, MSU Extension has been committed to helping Montanans establish and maintain healthy lifestyles. The focus of these programs has largely been on food, nutrition and related decision making.

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 : No

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	55%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	35%			
724	Healthy Lifestyle	10%			
	Total	100%			

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

1. Situation and priorities

The societal costs of poor health due to lack of good nutritional decisions, using safe food handling practices and lack of physical activity are on the rise. When considering annual obesity-attributable medical expenditures alone, the costs are estimated today at \$125 billion annually in the US. Additional health concerns such as diabetes and heart disease only compound the problems. To help address these issues, Montana Extension continues an educational program that helps youth and adults make well informed decisions about their health as it relates to nutrition and food safety. There are four primary areas of concentration for this education: Obesity, Food Safety Practices, Nutrition and Food Resource Management

Obesity is the most widespread, serious and complex nutrition-related health problem facing Americans, including people who live in sparsely populated states like Montana. Through changes in health-related attitudes and behaviors, the rising obesity rates can be reversed.

One out of 65 Montanans experience an illness related to unsafe food handling practices. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5414a2.htm>) To address this concern, there are three major efforts underway: Basic Food safety training for food service employees, ServSafe Food Protection Manager Certification Courses and

Hazard Analysis and Critical Control (HACCP) training for the Food Industry. Food safety is a growing concern for the food service industry, public and private agencies. Many food service groups require food safety training including the Montana school systems that must comply with the mandatory USDA policy to implement a School Food Safety Plan.

Stretching the food dollar is a challenge for limited resource families and impacts the health and well-being of youth and adults alike. Almost 20% of all Montana children live in poverty. Working low-income families often lack the time, knowledge and skill to prepare and serve family meals, which are tasty, low-cost and healthful. Studies show people who run out of food or miss meals because they cannot afford them are among the most obese.

Nutrition plays a critical role the aging process. However, there is a high rate of malnutrition among older adults because they experience a large number of related individual and environmental risk factors. Seventy-three percent of older adults reported eating fewer than the recommended daily intake of fruits and vegetables. Sixteen percent reported having been told by a doctor that they had diabetes, double from the 1998 findings. According to the 2000 census, over the past 10 years, there has been a 14% increase in the number of people living in Montana who are over the age of 65. While all youth and adults need to be concerned about nutrition, those who qualify as seniors are among those who are in most in need.

2. Scope of the Program

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

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

1. Assumptions made for the Program

Employing a healthy-centered (rather than a weight-centered) approach to well-being, people can improve their health by developing positive lifestyle habits rather than by trying to achieve a specific body size, shape or weight. Past programming has resulted in impact data that indicates this is the most acceptable and successful approach.

Based on research, it is known that nutrition is an important component to addressing chronic disease issues as well a healthy lifestyle.

Funding will remain available for nutrition education for limited resource families. Funding has been available for many years and resulting programs have shown significant impacts.

Foodborne illnesses are a substantial health burden in the United States and will remain so into the near future.

2. Ultimate goal(s) of this Program

To reduce obesity among adults and children by changing attitudes related to food, physical fitness/activity and body image.

To help limited resource families in acquiring the knowledge, skills, attitudes and changed behavior necessary for nutritionally healthy diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being. Specifically, low-income families will show measurable improvements in their nutritional intake, knowledge and skills when managing their food budget and resources. Low-income youth will show increased nutrition knowledge and skills. Interagency cooperation will provide more effective nutrition education opportunities for limited income adults and youth.

To reduce the incidence of food borne illness through education within the foods service operations. (Targeted audience includes: Food service employees, managers, professionals)

To raise the ability of youth and adults to make sound decisions related to nutrition, food choices and physical activity to achieve a healthy lifestyle.

To slow the decline of muscle mass in women, especially those over age 30.

Home food preservers will practice safe food preservation practices.

V(E). Planned Program (Inputs)

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

Year	Extension		Research	
	1862	1890	1862	1890
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
2014	3.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

- Conduct train the trainer workshops
- Conduct workshops
- Facilitate meetings
- Develop local and state partnerships
- Provide training

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

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● One-on-One Intervention ● Education Class ● Workshop 	<ul style="list-style-type: none"> ● Web sites ● Newsletters

3. Description of targeted audience

Low income adults and children under the age of 19
 Low income youth, ages 5-12
 Adults that are FSP eligible
 Youth from FSP eligible households
 Restaurant & other Foods Service Managers/Employees; volunteers are food service operations
 Teachers in the Montana School System
 Middle to older aged women, especially those living in rural areas
 Home food preservers and food preparation people

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
2010	11000	3800	3100	6000
2011	11000	4000	3150	6000
2012	11000	4000	3200	6500
2013	11000	4000	3200	6500
2014	14000	10000	3200	7000

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

Expected Patent Applications

2010 :0 2011 :0 2012 :0 2013 :0 2014 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	1	1
2011	0	1	1
2012	0	1	1
2013	0	1	1
2014	0	1	1

V(H). State Defined Outputs

1. Output Target

- EFNEP/FSNP: The NEP curriculum will be used to teach three series of 8-12 sessions to adults who are enrolled. The NEP youth curriculum will be used to teach 6-7 lessons to youth in workshops (after school, in school, summer camps, park programs). Develop and maintain local and state partnerships and collaborations.
 2010 :6500 2011 :6750 2012 :7000 2013 :7000 2014 :7500
- Steps to a New You: Provide 2 train the trainer sessions for 10 County Extension Agents who in turn, can implement county Steps to a New You program. Provide 20 sets of training materials to County Extension Agents who will be presenting programs.
 2010 :300 2011 :350 2012 :400 2013 :500 2014 :750
- Food Safety: Provide 3 train the trainer sessions for County Extension Agents so they can conduct 25 food safety education for audiences such as county sanitarians, school food service personnel, volunteers, food banks and so forth. Provide training and updates to County Extension Agents so they can implement County based programs. Provide training for home food preservers.
 2010 :1250 2011 :1300 2012 :1400 2013 :1400 2014 :1500
- Strong Women: To certify 10 county agents so they are qualified to conduct strength training classes. These 10 agents will provide 1-14 week strength training sessions in their local county.

2010 75 **2011** 100 **2012** 100 **2013** 100 **2014** 400

- **Healthy Lifestyles:** To reach adult and youth audiences in rural communities with health fairs and school/community based programs that will provide medical screenings and classes on stress management, nutrition, obesity, fitness, osteoporosis, cardiovascular disease, diabetes, prostate cancer, etc. Number of people having medical screenings at health fair type activities and attending related classes as a result. Number of people following up with a physician or professional as a result of the tests conducted at the health fair activity.

2010 2600 **2011** 2800 **2012** 2800 **2013** 2900 **2014** 1000

V(I). State Defined Outcome

O. No	Outcome Name
1	<p>EFNEP/FSNP: Number of adults gaining awareness and knowledge regarding the importance of: Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Number of adults: Improving the family diets by choosing/preparing healthier choices(more fruits and vegetables, hole grains) Improving food safety practices storing and thawing foods properly) Improving food resource management practices (meal planning shopping with list) Improving nutrition practices (reading food labels) Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Participants will: Decrease their risk of developing diet-related chronic disease, obesity, osteoporosis, cardiovascular disease and diabetes. Decrease the risk for illness and death associated with foodborne illness. Increase their confidence in the ability to manage food resources, as well as other resources.</p>
2	<p>STEPS TO A NEW YOU: Participants will learn about facts, attitudes, behavior change techniques and specific behaviors related to physical activity, nutrition, body image that will allow them to live healthier lifestyles and prevent or reduce obesity. Number of children: Eating a variety of foods Improving practices in food preparation and food safety Select low cost nutritious foods</p>
3	<p>FOOD SAFETY: The participants will learn about safe food handling, specifically facts and skills related to the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing The participants will improve safe food handling, specifically the behaviors supporting the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing. Participants will adopt healthy attitudes related to a healthy lifestyle approach to prevention or reduction of obesity. Participants will improve their eating behaviors related to a healthy lifestyle approach to obesity. Participants will increase their level of physical activity related to a healthy lifestyle approach to preventing or reducing obesity. There will be a decline in the economic and health consequences of foodborne illnesses.</p>
4	<p>HEALTHY LIFESTYLES: Number of people having medical screenings at health fair type activities. Number of people following up with physician or health professional. Number of people making better nutrition and food choices and engaging in regular physical activity.</p>
5	<p>STRONG WOMEN: Number of people improving physical measurements (maintaining or lowering BMI) and reducing resting heart rate. Amount of increase in weight resistance over the course of the program as measured by specific exercises (bicep curl) and amount of weight lifted 2# increasing to 5#).</p>

Outcome #1

1. Outcome Target

EFNEP/FSNP: Number of adults gaining awareness and knowledge regarding the importance of: Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Number of adults: Improving the family diets by choosing/preparing healthier choices(more fruits and vegetables, hole grains) Improving food safety practices storing and thawing foods properly) Improving food resource management practices (meal planning shopping with list) Improving nutrition practices (reading food labels) Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Participants will: Decrease their risk of developing diet-related chronic disease, obesity, osteoporosis, cardiovascular disease and diabetes. Decrease the risk for illness and death associated with foodborne illness. Increase their confidence in the ability to manage food resources, as well as other resources.

2. Outcome Type : Change in Condition Outcome Measure

2010 6000 **2011** : 6750 **2012** : 7000 **2013** 7000 **2014** :7500

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

Outcome #2

1. Outcome Target

STEPS TO A NEW YOU: Participants will learn about facts, attitudes, behavior change techniques and specific behaviors related to physical activity, nutrition, body image that will allow them to live healthier lifestyles and prevent or reduce obesity. Number of children: Eating a variety of foods Improving practices in food preparation and food safety Select low cost nutritious foods

2. Outcome Type : Change in Knowledge Outcome Measure

2010 300 **2011** : 350 **2012** : 400 **2013** 500 **2014** :750

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

Outcome #3

1. Outcome Target

FOOD SAFETY: The participants will learn about safe food handling, specifically facts and skills related to the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing The participants will improve safe food handling, specifically the behaviors supporting the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing. Participants will adopt healthy attitudes related to a healthy lifestyle approach to prevention or reduction of obesity. Participants will improve their eating behaviors related to a healthy lifestyle approach to obesity. Participants will increase their level of physical activity related to a healthy lifestyle approach to preventing or reducing obesity. There will be a decline in the economic and health consequences of foodborne illnesses.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :1250 **2011** : 1300 **2012** : 1400 **2013** :1400 **2014** :1500

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 #4

1. Outcome Target

HEALTHY LIFESTYLES: Number of people having medical screenings at health fair type activities. Number of people following up with physician or health professional. Number of people making better nutrition and food choices and engaging in regular physical activity.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 2600 **2011** : 2800 **2012** : 2800 **2013** 2900 **2014** :1000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

Outcome #5

1. Outcome Target

STRONG WOMEN: Number of people improving physical measurements (maintaining or lowering BMI) and reducing resting heart rate. Amount of increase in weight resistance over the course of the program as measured by specific exercises (bicep curl) and amount of weight lifted 2# increasing to 5#).

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :75 **2011** : 100 **2012** : 100 **2013** :100 **2014** :400

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

Economy
 Appropriations Changes
 Competing Programmatic Challenges

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Other (focus groups)

Description

Data Collection Methods:

Survey – on-site

Interview

Structured

Observation

Pre-post tests

2. Data Collection Methods

- Unstructured
- Sampling
- Whole population
- Telephone
- Mail
- Structured
- Observation
- On-Site

Description

{NO DATA ENTERED}

V(A). Planned Program (Summary)

Program #2

1. Name of the Planned Program

Youth Development

2. Brief summary about Planned Program

Young people grow up with or without our help. Youth development should be seen as an ongoing, inevitable process in which all youth are engaged and all youth are invested. It includes maturing and developing one’s capacities, and it’s far too important to be left to chance. Positive youth development occurs from an intentional process that promotes positive outcomes for young people by providing opportunities, choices, relationships, and the support necessary for youth to fully participate. Youth development takes place in families, peer groups, schools and in neighborhoods and communities.

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

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

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

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

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

1. Situation and priorities

During the stakeholder input process, youth issues surfaced to be a priority of Montanans. Within the broad area of youth issues, the number one priority is providing a way for young people to learn skills they will be able to use throughout their lives. Stakeholders recognize the 4-H program has proven to be an effective venue for this to occur. They know, from personal experience that 4-H teaches youth to be more responsible, get higher grades, speak more articulately to mention a few of the many benefits. A recent research study substantiates these opinions. Additionally, the Positive Development of Youth study conducted by Tufts University (2008), names 4-H as a successful youth development program helping youth become confident, competent, caring, connected and of character.

Leadership, volunteerism and community service surfaced as a high priority as well. Parents know that youth learn how to lead, follow and be a contributing member of a team if they belong to 4-H. They can apply this knowledge to contribute to the community in which they live. Teaching young people the skills so they can be effective community leaders and develop a sense of volunteerism is important to Montanans.

Because of the increased awareness of the problems associated with meth, programs that help adults and youth understand the issue so wise decisions can be made regarding it, are requested. Education is an important component in addressing the basic issues associated with drug use.

2. Scope of the Program

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

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

1. Assumptions made for the Program

There is a continuing need for youth to learn skills they can use over time. For over 100 years, the 4-H program has been providing positive youth development and teaching life skills to young people. The success 4-H has had is supported by research conducted in Montana and replicated in several other states that have recorded the same results.

Youth learn best by being involved in hands-on experiences. Youth need safe places and relationships with caring adults. Knowledge can change behavior. Competition is most appropriate for older youth. Young children learn best through cooperative learning. All youth need recognition. In Montana, distances and transportation are barriers to participation. Rural families have less disposable income than urban families.

Individuals and families do not operate in a vacuum but are impacted by the neighborhood, community, and societal-level influences. Bronfenbrenner’s Ecological Theory (1979, 1989) provides a framework for working with individuals and families addressing how the influences are affected at each level. For example, with the methamphetamine epidemic in western states, individuals are impacted if they become meth users which, in turn leads to problems within the family. Family finances are affected, children are abused and neglected, grandparent retirement is impacted, and community health is threatened. From here, laws and public policies must be changed to address the crisis. Support for using this framework to address the issue has come from constituent input, statistical reports, needs assessments, surveys, and qualitative interviews.

2. Ultimate goal(s) of this Program

- Competence – advanced skills in some important subjects of interest
- Character – clear consistent moral precepts that effectively guide behavior
- Caring – willingness to respond to the needs and concerns of others
- Confidence – willingness to take on new challenges, and expect success
- Connections – making a difference in the lives of others through service
- To reduce meth use and manufacturing in Montana
- To create greater community awareness of meth's health, economic and disposal impacts
- To encourage agricultural producers, landlords, rental property managers, highway workers, and other who have access to property to regularly examine their properties with an eye toward the discovery of materials and signs of meth production
- To involve parents and youth in understanding meth and its appeal and dangers

V(E). Planned Program (Inputs)

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

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

V(F). Planned Program (Activity)

1. Activity for the Program

- Conduct Workshops, Clinics that provide active learning in subject matter related to projects
- Conduct/facilitate Meetings that focus on facilitation and leadership skills
- Develop Curriculum and supporting Teaching Tools for volunteers to use
- Provide training for youth and adult volunteers
- Partner with youth serving groups on state and local levels

Provide/develop web based education and information access

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

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● Workshop ● Group Discussion ● Education Class ● One-on-One Intervention ● Other 2 (Camps) ● Other 1 (Field trips) 	<ul style="list-style-type: none"> ● Web sites ● Newsletters ● Public Service Announcement

3. Description of targeted audience

Youth ages 5-19

Parents of youth involved in 4-H

Adult volunteers involved in Youth Development Work: 4-H program and other group volunteers.

Professionals involved in Youth Development Work: 4-H program and other agencies, schools and organization professionals

School administration and teachers

Individuals who have access to property where meth can be made

Youth who live on reservations and are between the ages of 9-21.

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
2010	4000	2500	12500	8500
2011	4000	2500	13000	9000
2012	4000	2500	13000	9000
2013	4200	2500	13000	9000
2014	4200	2500	13000	9000

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

Expected Patent Applications

2010 :0

2011 :0

2012 :0

2013 :0

2014 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	2	2
2011	0	2	2
2012	0	2	2
2013	0	2	2
2014	0	1	1

V(H). State Defined Outputs

1. Output Target

- Life Skill Development: Statewide, 10,000 youth will be involved in 300 experiential learning activities including workshops, clinics, seminars and club meetings. On a statewide basis, 300 youth will attend 15 camps to develop enhance life skill development.

2010 21000 **2011** 22000 **2012** :22000 **2013** 22000 **2014** 22000

- Leadership/Volunteer Development: An estimated 250 youth and 450 adults will be able to apply leadership skills and positive youth development practices in their roles of organizational, project or other leadership positions. Professional and volunteer staff in at least 1/3 of the counties will follow and adhere to established financial and audit guidelines. Teenage youth will exhibit leadership and communications skills within the 4-H program and at other times outside 4-H program.

2010 4000 **2011** 4000 **2012** :4000 **2013** 4000 **2014** 4200

- Methamphetamines: Provide materials and training on meth to retailers, store managers, homeowners, agricultural producers. Distribute 100 Tools for Schools Meth Prevention materials to school administrators/teachers. Distribute 500 Toolkits on Meth to tribal communities and non-tribal communities.

2010 2450 **2011** 2500 **2012** :2500 **2013** 2500 **2014** 2500

- JUNIOR AGRICULTURE LOAN PROGRAM: Approximately 8 reservation youth will apply for the Montana Department of Agriculture - Junior Ag Loan Program to borrow money to purchase livestock to start their own herd. They will receive the necessary training to complete the process.

2010 8 **2011** 10 **2012** :10 **2013** :10 **2014** :10

V(I). State Defined Outcome

O. No	Outcome Name
1	<p>LIFE SKILL DEVELOPMENT 100% of 4-H members will show an increase in knowledge and skills 100% of 4-H members will report improved practices learned 50% of 4-H members will re-enroll 85% of the youth involved in the experiential learning activities through 4-H will gain knowledge and skills about the topic they have selected. (Example: plants, animals/quality assurance, aerospace, vet science, foods, public speaking, leadership, etc.) 200 youth select new project literature or participate in new educational programs 80% of the youth involved in the experiential learning activities through the 4-H program will show improvement in life skills. 75% of youth selecting new project literature or participating in new programs successfully complete project records or program requirements. 50% of agents and leaders will promote and market new curriculum and program initiatives Youth involved in 4-H will make contributions to their communities, be less likely to be involved in illegal activity and be more likely to perform better in school. Youth involved in 4-H will exhibit having more confidence, feeling more competent and self-assured, and feeling more connected to their families and communities. As a result of participating in 4-H programs for at least 2 years, members are less likely than other kids: To shoplift or steal (3 times less likely) To use illegal drugs of any kind to get high (2 times less likely) To ride in a car with someone else who has been drinking To smoke cigarettes To damage property for the fun of it (2 times less likely) To skip school or cut classes without permission 4-H members are more likely than non-members To succeed in school, getting more A's than other kids To be involved as leaders in their school and the community To be looked up to as role models by other kids To help others in the community</p>
2	<p>LEADERSHIP/VOLUNTEER DEVELOPMENT Eighty percent (80%) of Extension agents attending professional development opportunities will increase knowledge in volunteer management. Sixty percent of the 4-H volunteers participating in trainings will learn the duties of an organizational leader, project leader and other leadership positions within the program so 4-H Clubs and activities will use positive youth development practices. Fifty percent of the county 4-H Councils will learn the established financial and audit procedures for handling public money. Eighty percent (80%) of participating youth will increase their self-perception of leadership development skills. 50% of Extension professionals will adopt best management practices in the areas of volunteer identification, selection, orientation, training, utilization, recognition and evaluation. Fifty percent (50%) of volunteers attending trainings will adopt practices that support the 8 critical elements on 4-H educational programs. Over the next year, at least one-third of 4-H Councils in Montana will adopt the established financial and audit guidelines. Fifty percent (50%) of participating youth will apply developed practices of leadership. Agents and volunteers participating in professional development opportunities will provide a safe, positive environment for youth to gain life skills and meet developmental needs through participation in 4-H programs in Montana. Montanan's will have a more accurate and positive impression of the 4-H Youth Development Program.</p>
3	<p>METHAMPHETAMINES Percent of students who can identify the ingredients used to manufacture meth Percent of students who can identify the effects of taking meth Participants will become involved in community meth awareness and prevention outreach activities.</p>
4	<p>JUNIOR AGRICULTURE LOAN PROGRAM Youth will complete the finance and beef management trainings needed to complete the livestock loan application. Youth will make application to borrow money for the purchase of livestock so they can start or expand their herd.</p>

Outcome #1

1. Outcome Target

LIFE SKILL DEVELOPMENT 100% of 4-H members will show an increase in knowledge and skills 100% of 4-H members will report improved practices learned 50% of 4-H members will re-enroll 85% of the youth involved in the experiential learning activities through 4-H will gain knowledge and skills about the topic they have selected. (Example: plants, animals/quality assurance, aerospace, vet science, foods, public speaking, leadership, etc.) 200 youth select new project literature or participate in new educational programs 80% of the youth involved in the experiential learning activities through the 4-H program will show improvement in life skills. 75% of youth selecting new project literature or participating in new programs successfully complete project records or program requirements. 50% of agents and leaders will promote and market new curriculum and program initiatives Youth involved in 4-H will make contributions to their communities, be less likely to be involved in illegal activity and be more likely to perform better in school. Youth involved in 4-H will exhibit having more confidence, feeling more competent and self-assured, and feeling more connected to their families and communities. As a result of participating in 4-H programs for at least 2 years, members are less likely than other kids: To shoplift or steal (3 times less likely) To use illegal drugs of any kind to get high (2 times less likely) To ride in a car with someone else who has been drinking To smoke cigarettes To damage property for the fun of it (2 times less likely) To skip school or cut classes without permission 4-H members are more likely than non-members To succeed in school, getting more A's than other kids To be involved as leaders in their school and the community To be looked up to as role models by other kids To help others in the community

2. Outcome Type : Change in Condition Outcome Measure

2010 21000 2011 : 22000 2012 : 22000 2013 22000 2014 :22000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 806 - Youth Development

Outcome #2

1. Outcome Target

LEADERSHIP/VOLUNTEER DEVELOPMENT Eighty percent (80%) of Extension agents attending professional development opportunities will increase knowledge in volunteer management. Sixty percent of the 4-H volunteers participating in trainings will learn the duties of an organizational leader, project leader and other leadership positions within the program so 4-H Clubs and activities will use positive youth development practices. Fifty percent of the county 4-H Councils will learn the established financial and audit procedures for handling public money. Eighty percent (80%) of participating youth will increase their self-perception of leadership development skills. 50% of Extension professionals will adopt best management practices in the areas of volunteer identification, selection, orientation, training, utilization, recognition and evaluation. Fifty percent (50%) of volunteers attending trainings will adopt practices that support the 8 critical elements on 4-H educational programs. Over the next year, at least one-third of 4-H Councils in Montana will adopt the established financial and audit guidelines. Fifty percent (50%) of participating youth will apply developed practices of leadership. Agents and volunteers participating in professional development opportunities will provide a safe, positive environment for youth to gain life skills and meet developmental needs through participation in 4-H programs in Montana. Montanan's will have a more accurate and positive impression of the 4-H Youth Development Program.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 3000 2011 : 3500 2012 : 3500 2013 3500 2014 :3500

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 806 - Youth Development

Outcome #3

1. Outcome Target

METHAMPHETAMINES Percent of students who can identify the ingredients used to manufacture meth Percent of students

who can identify the effects of taking meth Participants will become involved in community meth awareness and prevention outreach activities.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :500 **2011** : 500 **2012** : 750 **2013** :750 **2014** :500

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 806 - Youth Development

Outcome #4

1. Outcome Target

JUNIOR AGRICULTURE LOAN PROGRAM Youth will complete the finance and beef management trainings needed to complete the livestock loan application. Youth will make application to borrow money for the purchase of livestock so they can start or expand their herd.

2. Outcome Type : Change in Action Outcome Measure

2010 :8 **2011** : 10 **2012** : 10 **2013** :10 **2014** :10

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes
- Public Policy changes

Description

Montana youth are leaving the state to find employment opportunities. Volunteer time is spread thin as parent's work requires time and energy.

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)
- Comparisons between program participants (individuals,group,organizations) and non-participants
- During (during program)

Description

Among other techniques, Montana 4-H is using the Life Skills Evaluation System to collect and compile data from participants involved in activities focused on life skill development. This is a statewide, electronic system that allows information to be gathered locally and then compiled at the state level.

In addition, 4-H members are required to keep a 4-H Record Book (journal), which describes their involvement from beginning to end. They record the things they learn from the activities in which they have participated. These records are a source of information about the knowledge youth have gained, what behaviors they have learned and what changes they have made over time.

A national study on The Positive Development of Youth has been conducted by Tufts University. It has data that indicates the 4-H programs help youth.

2. Data Collection Methods

- Unstructured
- Tests
- Journals
- Mail
- On-Site
- Observation
- Portfolio Reviews
- Structured
- Telephone

Description

{NO DATA ENTERED}

V(A). Planned Program (Summary)

Program #3

1. Name of the Planned Program

Ag Sustainability and Profitability

2. Brief summary about Planned Program

The changes in Montana’s profile is making it more difficult for families involved in production agriculture to keep their business profitable, yet agriculture remains the most significant economic basis in the state with a net farm income of over \$721 million dollars annually. Producers have become increasingly aware of the need to analyze their individual situations so they can make decisions that keep their operations viable. The fluctuation in costs to do business as well as in the market place keeps farmers/ranchers in a constant state of change. Planning for the future is becoming more stressful each year. Progressive producers have learned that education is one of the most important elements they can turn to for help in making wise decisions and Extension is the best source of that information.

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 : No

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	20%			
205	Plant Management Systems	10%			
213	Weeds Affecting Plants	20%			
216	Integrated Pest Management Systems	20%			
301	Reproductive Performance of Animals	10%			
307	Animal Production Management Systems	10%			
311	Animal Diseases	10%			
	Total	100%			

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

1. Situation and priorities

Montana production agriculture is largely dependent on small grains and livestock. Small grain producers face challenges with higher fuel, fertilizer, machine inputs, pest damage resulting from sawfly or Hessian fly, increased irrigation costs. Producers know profit margins fluctuate as they face roller coaster income and expenses over the years. Operators must gain proficiency not only at producing a commodity, but also at marketing systems, environmental regulations, market quality requirements, financial/business management.

The beef industry has become more consumer-focused and as a result, specific quality and consistency targets have been established in all segments of the industry. To meet consumer expectations for safe beef and return additional revenue to cattle producers, a systems network is necessary to ensure that a quality and consistent product is being produced. Central to this networking approach is the exchange of information from the producer to the end user.

Most land managers agree the spread of invasive plants is the primary environmental threat to western wildlands. Noxious weed invasion reduces the ecological integrity of land and water, alters ecosystems, impacts wildlife habitat and threatens survival of native plants. Small ruminant production can provide land managers an alternate tool to eliminate invasive plants that is more economically feasible and environmentally sensitive compared to traditional weed control methods. Currently, sheep grazing represents the only economically and environmentally sound alternative to address large infestations of invasive plants however, availability of sheep has limited their use.

Plant management, whether for weed control in crop or range lands, or for family or commercial gardens and yards, is important to land owners. Management plans assist owners in determining best practices to enhance production while addressing other issues specific to their property. The largest expense for ranchers in this region is the winter feeding program. Perennial forages such as alfalfa provide advantages for nutrient recycling and disrupting pest cycles in crop rotations. Growing annual crops for pasture or hay provides excellent opportunities for low-cost forage production, weed control and water conservation in dry land systems. In irrigated forage systems, there continues to be a need for efficient forage rotations that reduce fuel, fertilizer or other inputs.

Chemicals are used to control pests of all kinds but to be safe and effective, application procedures and protocols must be followed. Diagnosing the problem and making recommendations to address it are important first steps in pesticide education.

The health of rangelands is vital to economic sustainability of farms and ranches and helps to preserve the open space natural environment and historical sites found on public-private agricultural lands. Technical assistance to agricultural businesses about establishing or expanding tourist-related enterprises provides opportunities to inform tourists about the compatibility of agriculture and environmental values.

2. Scope of the Program

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

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

1. Assumptions made for the Program

Research indicates that small ruminant production can provide land managers an alternative tool in their efforts to address invasive plants and that is it more economically feasible and environmentally sensitive when compared to traditional weed control methods. Using sheep as a tool to assist in addressing the invasive plant issue will stimulate the return of a sustained and profitable sheep industry. Using the systems approach to beef production has proven to be successful as evidenced by the Montana Beef Network. Producers will need to respond to consumer demands of a consistent, high quality product while at the same time, keeping their operations sustainable and profitable.

Past experience has proven that producers must understand and use best practices related to pest management, crop nutrient requirements, production management, and financial risk management to make decisions that will keep their operations viable.

It is possible to train lay people to address technical questions related to horticulture as evidenced by the success of the Master Gardener Program.

Chemicals remain an effective tool for controlling pests, but applicators need to know the accepted methods to safely and effectively use them.

2. Ultimate goal(s) of this Program

The Montana Beef Network has three primary goals:

- To provide educational programs aimed at promoting beef quality assurance standards, production, and marketing goals.
- To certify feeder calves that have met defined health management protocols in an attempt to reduce sickness.
- To provide information feedback from the feedlot and/or packing plant to the cow-calf producer showing if the feeder calves met industry requirements for quality grade, safety and red meat yield.

The goals of the Montana Sheep Institute are 1.) to incorporate controlled sheep grazing as a tool in integrated natural resource management, specifically in controlling established infestations of non-native/noxious weeds and 2.) to create an educational environment that facilitates improved wool quality to so it is a product that will directly enter the global marketplace

To increase the knowledge of skilled and unskilled individuals in the area of botany, soils and plant nutrition, turf grass management, and vegetable and fruit productions. Increase knowledge of adapted woody and herbaceous plant materials; basic instruction in entomology and plant problem diagnosis.

Increase the sustainability, efficiency, and profitability and optimize production practices to reduce costs for farm operators.

To control and contain noxious weeds on land that has been identified as infested and to protect adjoining lands from noxious weed invasion.

To provide producers with efficient production practices of home-grown, high quality roughages and feeds, including the use of alternative annual forages such as cereal hay

To provide farm managers with guidelines and management tools that will assist them in evaluation of farm records, enterprise analysis, lease arrangements, machinery operating costs and purchases, as well as expansion opportunities and consequences.

V(E). Planned Program (Inputs)

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

Year	Extension		Research	
	1862	1890	1862	1890
2010	9.0	0.0	0.0	0.0
2011	9.0	0.0	0.0	0.0
2012	9.0	0.0	0.0	0.0
2013	9.0	0.0	0.0	0.0
2014	9.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

- Interactive video conferencing from campus on beef related issues. Workshops aimed at meeting beef quality assurance standards, production and marketing goals. Montana Beef University provides producers with information on a variety of topics via newsletter, seminars, workshops, and interactive TV. Develop, test and implement management strategies that reduce production costs by capitalizing on the sheep’s ability to favorably manipulate natural resources To develop, implement and evaluate controlled sheep grazing strategies for managing large infestations of leafy spurge and knapweed. Develop and facilitate the implementation of selection, nutritional and marketing management strategies for sheep. MSU Master Gardener program will be delivered live and by internet. Attendees will receive in depth resources to assist with questions. Increase knowledge of adapted woody and herbaceous plant materials; basic instruction in

entomology and plant problem diagnosis. Conduct workshops on records, decision making aids, leasing alternatives/marketing, lease agreements for land, machinery and livestock, farm financial record guidelines and computer applications, machinery cost summaries, and cost of production worksheets and summaries.

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- Number of ranches certified as Undaunted Land Stewards

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

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

3. Description of targeted audience

Livestock Producers, especially beef, swine and sheep
 Commodity Associations
 Land Managers/Owners (small and large)
 Weed Control Professionals
 Gardening Club members/people interested in gardening
 Small Grain Producers (Dry Land and Irrigated)

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
2010	10000	20000	900	1700
2011	10000	20000	900	1700
2012	10500	20000	900	1700
2013	10500	20000	900	1700
2014	11000	20000	900	1700

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

Expected Patent Applications

2010 :0 2011 :0 2012 :0 2013 :0 2014 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	3	3
2011	0	3	3
2012	0	3	3
2013	0	3	3
2014	0	3	3

V(H). State Defined Outputs

1. Output Target

- Montana Beef Network: Number of people attending beef quality assurance, production and marketing programs. Number of classes provided. Number of people participating in the interactive-video conference programs. Number of producers becoming BQA certified. Participation in interactive television short courses (4). Number of hits on the web site. Number of people participating in demonstration/tour opportunities.

2010 :3000 2011 :3500 2012 :3500 2013 :4000 2014 :4000

- Montana Sheep Institute: Number of people attending workshops teaching innovative ways of using sheep. Number of projects being conducted with sheep grazing invasive plants. Number of sheep producers involved with sheep grazing projects. Number of landowners involved in sheep grazing projects. Number of acres where weeds were controlled and documentation of vegetative composition trends. Number of wool growers involved in developing larger, more marketable clips. Number of people attending workshops related to using 'best practices' in sheep production and marketing of wool.

2010 :1200 2011 :1200 2012 :1200 2013 :1200 2014 :1200

- Weed Control: Number of producers participating in workshops on weed control. Number of producers and landowners attending tours. Number of people attending meetings on pesticide control and applicator training. Number of people being recertified for pesticide use.

2010 :2000 2011 :2000 2012 :2000 2013 :2500 2014 :3000

- Crops: Number of producers attending cropping systems workshops. Number of producers adopting soil moisture conservation practices. Number of producers adopting an annual crop rotation focused on profitability and soil health.

2010 :2250 2011 :2300 2012 :2400 2013 :2500 2014 :2500

- Master Gardener: Number of people who become certified Master Gardeners.

2010 200	2011 200	2012 :200	2013 200	2014 200
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- Profitability: Number of producers attending farm management workshops. Number of producers using pulse crops in the cropping rotation.

2010 900	2011 900	2012 :1000	2013 :1000	2014 :1000
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- Range Management - Undaunted Stewardship Number of ranches certified as Undaunted Land Stewards

2010 50	2011 50	2012 :50	2013 50	2014 50
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V(I). State Defined Outcome

O. No	Outcome Name
1	Montana Beef Network: Number of people using and understanding Beef Quality Assurance protocols for raising beef. Number of people learning about new practices in livestock production. The percent of increase in the value of calves sold at weaning. Number of people who made changes in the way records are kept on ranches. Percent of breeding programs that are meeting the needs of the consumer in terms of quality and yield grade of calves. Add value to weaned calves
2	Montana Sheep Institute: Number of people who learned about using sheep to control invasive plants Increase in the number of Wool Pool consolidation. Increased number of grazing management programs initiated and monitoring programs developed. Increase in the number of Wool Pools organized and wool delivery and marketing of consolidated pools implemented. Number of producers who developed plans to implement technology in their own production unit. (Ribeye program) Acres of infested landscape controlled by small ruminant grazing. Wool from smaller growers prepared and marketed on the international market. Producers improving production efficiency of their sheep enterprise.
3	Weed Control: People learn about noxious weed identification and weed management. People learn how to map their property with a GIS device. Landowners will be able to recognize weed problems, determine control techniques, and improve their weed control skills. An increase in the number of acres mapped for purposed of weed identification and location. An increase in the number of weed infested acres being controlled by accepted practices. Producers will implement weed management plans/areas on their land. Integrated Pest management techniques will be put into practice. Agricultural and public lands will be conserved for future production and use. The spread of noxious weeds will be reduced.
4	Master Gardener: Participants learn about plants and how to grow them successfully. Participants' volunteer hours of service to their communities in answering questions about horticultural issues.
5	Crops: Producers improve their understanding of nutrient cycling, weed control, variety selection and alternative crop possibilities. Producers will plant short water varieties when moisture conditions are low, plant sawfly resistant varieties to minimize losses, and forage varieties that will improve production. Pounds of fertilizer used in faming systems will be reduced. Producers will adopt weed, crop and forage management strategies that sustain agricultural crop production and lessen environmental damage. Farm operators who implement best practices will increase their profitability and enhance long-term sustainability.
6	Profitability: Ag producers gain knowledge associated with development of standard financial statements, and track machinery costs as well as fixed and variable costs associated with crop enterprises. Producers will adopt financial management programs that will provide financial statements for business analysis and bank lending requirements. Producers will analyze enterprise cost of production that will aid in cropping decisions, marketing, leasing, machinery and land purchases. Successful farm and ranch businesses provide stability and continuity for local communities, businesses and schools.
7	Range Management - Undaunted Stewardship * Producers learn about best practices in management; specifically for grazing lands. * Tourists learn that environmental stewardship, historical site preservation and Montana agriculture can be compatible and are often mutually dependent. * Producers become Undaunted Land Steward Certified which recognizes farms and ranches that practice sustainable environmental stewardship on their private and public lands. * Landowners, policymakers, urban citizens and others engage in cooperative conservation strategies that are used to sustain and enhance the environment, historical and economic values of agricultural landscapes. * Private/public landowners and others understand that agriculture and environmental values can be compatible.

Outcome #1**1. Outcome Target**

Montana Beef Network: Number of people using and understanding Beef Quality Assurance protocols for raising beef. Number of people learning about new practices in livestock production. The percent of increase in the value of calves sold at weaning. Number of people who made changes in the way records are kept on ranches. Percent of breeding programs that are meeting the needs of the consumer in terms of quality and yield grade of calves. Add value to weaned calves

2. Outcome Type : Change in Condition Outcome Measure

2010 :3000 **2011** : 3500 **2012** : 3500 **2013** :4000 **2014** :4000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 311 - Animal Diseases

Outcome #2**1. Outcome Target**

Montana Sheep Institute: Number of people who learned about using sheep to control invasive plants Increase in the number of Wool Pool consolidation. Increased number of grazing management programs initiated and monitoring programs developed. Increase in the number of Wool Pools organized and wool delivery and marketing of consolidated pools implemented. Number of producers who developed plans to implement technology in their own production unit. (Ribeye program) Acres of infested landscape controlled by small ruminant grazing. Wool from smaller growers prepared and marketed on the international market. Producers improving production efficiency of their sheep enterprise.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :1200 **2011** : 1200 **2012** : 1200 **2013** :1200 **2014** :1200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 307 - Animal Production Management Systems

Outcome #3**1. Outcome Target**

Weed Control: People learn about noxious weed identification and weed management. People learn how to map their property with a GIS device. Landowners will be able to recognize weed problems, determine control techniques, and improve their weed control skills. An increase in the number of acres mapped for purposes of weed identification and location. An increase in the number of weed infested acres being controlled by accepted practices. Producers will implement weed management plans/areas on their land. Integrated Pest management techniques will be put into practice. Agricultural and public lands will be conserved for future production and use. The spread of noxious weeds will be reduced.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 2000 **2011** : 2000 **2012** : 2000 **2013** 2500 **2014** :3000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 213 - Weeds Affecting Plants

Outcome #4

1. Outcome Target

Master Gardener: Participants learn about plants and how to grow them successfully. Participants' volunteer hours of service to their communities in answering questions about horticultural issues.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 200 **2011** :200 **2012** : 200 **2013** 200 **2014** :200

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants

Outcome #5

1. Outcome Target

Crops: Producers improve their understanding of nutrient cycling, weed control, variety selection and alternative crop possibilities. Producers will plant short water varieties when moisture conditions are low, plant sawfly resistant varieties to minimize losses, and forage varieties that will improve production. Pounds of fertilizer used in farming systems will be reduced. Producers will adopt weed, crop and forage management strategies that sustain agricultural crop production and lessen environmental damage. Farm operators who implement best practices will increase their profitability and enhance long-term sustainability.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 2250 **2011** :2300 **2012** : 2400 **2013** 2500 **2014** :2500

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants

Outcome #6

1. Outcome Target

Profitability: Ag producers gain knowledge associated with development of standard financial statements, and track machinery costs as well as fixed and variable costs associated with crop enterprises. Producers will adopt financial management programs that will provide financial statements for business analysis and bank lending requirements. Producers will analyze enterprise cost of production that will aid in cropping decisions, marketing, leasing, machinery and land purchases. Successful farm and ranch businesses provide stability and continuity for local communities, businesses and schools.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 900 **2011** : 900 **2012** : 1000 **2013** :1000 **2014** :1000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 205 - Plant Management Systems

Outcome #7**1. Outcome Target**

Range Management - Undaunted Stewardship * Producers learn about best practices in management; specifically for grazing lands. * Tourists learn that environmental stewardship, historical site preservation and Montana agriculture can be compatible and are often mutually dependent. * Producers become Undaunted Land Steward Certified which recognizes farms and ranches that practice sustainable environmental stewardship on their private and public lands. * Landowners, policymakers, urban citizens and others engage in cooperative conservation strategies that are used to sustain and enhance the environment, historical and economic values of agricultural landscapes. * Private/public landowners and others understand that agriculture and environmental values can be compatible.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 50

2011 : 50

2012 : 50

2013 50

2014 :50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 205 - Plant Management Systems

V(J). Planned Program (External Factors)**1. External Factors which may affect Outcomes**

- Public Policy changes
- Government Regulations
- Appropriations changes
- Natural Disasters (drought,weather extremes,etc.)
- Populations changes (immigration,new cultural groupings,etc.)
- Other (High cost of fuel, fertilizer)
- Economy

Description

Population shift

V(K). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

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

Description

Many of the programs in this area are connected to research efforts which have specific and expected outcomes. This is especially true for the Montana Beef Network, The Sheep Institute, Undaunted Stewardship and cereal forage efforts.

2. Data Collection Methods

- Observation
- On-Site
- Case Study
- Mail
- Telephone
- Structured
- Unstructured
- Journals

Description

{NO DATA ENTERED}

V(A). Planned Program (Summary)

Program #4

1. Name of the Planned Program

Family Issues, Resources and Environments

2. Brief summary about Planned Program

Regardless of the community, families are concerned about economic development, better paying jobs, business opportunities and health care. They are concerned about giving their youth the skills necessary to become competent, contributing and caring members of the community in which they live. They are concerned about being good parents/grandparents who know how to guide their youth through the challenges of being a young person today. They are concerned about the elderly and having adequate health care, housing and other infrastructure necessities to accommodate a shift in population. They are concerned about having adequate resources to maintain a desirable quality of life and they are interested in how they can pass their accumulated holdings on to future generations, which most recently has become an urgent issue for tribal members.

In short, Montana citizens are concerned about the quality of life for their families and look to Extension for education and help so they can make wise decisions and choices.

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

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

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

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	45%			
802	Human Development and Family Well-Being	45%			
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures	10%			
	Total	100%			

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

1. Situation and priorities

In Montana, over 16,800 individuals have been diagnosed with Alzheimer’s disease with no estimate of future numbers who may be affected. Montana has 50 counties listed as frontier counties. According to the Montana Chapter of the Alzheimer’s Association, this means residents in these locations have greater obstacles (distance, terrain, climate, lack of providers, and fewer available specialty services) in accessing care for families affected by Alzheimer’s. Many older individuals, as well as those with chronic disease, require a certain level of caregiving – either direct care or managed care.

Between 1990-2000, the state has seen a 53% increase in the number of grandparents responsible for caring for their grandchildren (9th nationally). The US census (2000) reported 6,053 grandparents in Montana hold the primary responsibility for the basic needs of their grandchildren, while 11,098 grandparents live in households with one or more grandchild under the age of 18. Grandparents are faced with this responsibility for a variety of reasons: death of the parent, parental child abuse, neglect,

abandonment, teen pregnancy, issues of divorcing parents, parental issues with alcohol/drugs, financial difficulties, illness and military deployment.

Montanans are interested in the wise use and handling of their financial resources. Statistics reveal that 70% of Montanan's die without a will. The state legislature continues to change the intestate succession (dying without a will law) and contract laws that impact beneficiaries of real and personal property. Montana farmers/ranchers/owners of closely held businesses continue to be interested in inter-generational transfers. Congress has made changes in the federal estate and gift tax laws that are being phased in through 2010. Education is needed to provide families, including those living on reservations, with information about the impact of state and federal laws.

The personal savings rate for October 2005 was a negative 0.8 percent, the lowest rate since the depression. (Commerce Dept., Bureau of Economic Analysis) The 2005 Retirement Confidence Survey found most workers say they are behind schedule in saving for retirement. Montanans need information on why and how to save for their futures while paying for increased utility costs and other bills.

In Montana, consumers, real estate professionals, county health officers and others report alarming incidences and health effects related to home environmental issues. The state's radon level ranks 3rd highest in the US, asthma has increased due to poor home environments, molds have forced homeowners from their homes. Home environmental issues also include asbestos in vermiculate insulation, drinking water contamination, improperly installed and maintained septic systems, carbon monoxide from faulty heating systems, and lead-based paint.

2. Scope of the Program

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

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

1. Assumptions made for the Program

Families have continuing concerns about having enough money for their families to live comfortably through retirement years. Estate planning is difficult for many and is likely avoided by some, yet is so important. Taking care of aging or aligning family members will likely increase over time, so finding resources is a must. Alzheimer's will continue to be a concern of families. They will seek assistance in finding ways to provide adequate and appropriate care while maintaining their own health and well being. The number of grandparents serving in the primary responsible role for their grandchildren is most likely going to increase or, at best, remain stable. Health issues related to home environments will continue to result from mold, radon, asbestos, and a variety of other problems. Many people are unaware of the health hazards brought about by these factors.

2. Ultimate goal(s) of this Program

- To assist unpaid caregivers of Alzheimer's patients in learning about the disease, planning for the future as the disease progresses, and learning how to care for themselves as they care for their loved one.
- Montana farmers/ranchers will develop a transfer plan for passing their operation to the next generation.
- Montana families will write a will to name guardianship and conservatorship for their children.
- Montana families will take advantage of contract laws such as beneficiary designations, payable on death designations, and transfer on death designations when appropriate.
- Tribal members will write a will to transfer trust lands to reduce fractionation of trust lands within their families.
- Tribal member farmers/ranchers will develop a transfer plan for passing their operation to the next generation.
- Tribal members will take advantage of contract laws for non trust property such as beneficiary designations, payable on death designations, and transfer on death designations when appropriate.
- Individuals will develop a saving plan and save for their financial goals of higher education, retirement and long term care.
- To provide education, support and resources to grandparents who are raising grandchildren.
- To assist Montanan's in reducing their home energy bills.
- To increase the number of homes tested/assessed and mitigated for household molds and excessive moisture, radon, asbestos containing materials, drinking water quality, carbon monoxide and other combustion gases related to home fossil fuel appliances, furnaces and water heaters, lead-based paint.
- To reduce home asthma triggers.

V(E). Planned Program (Inputs)

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

Year	Extension		Research	
	1862	1890	1862	1890
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
2014	3.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

- Conduct Workshops in all areas.
- Develop support groups where and when necessary.
- Partner with Agencies, Associations, Organizations, Real Estate Personnel, County Health Officials, Montana Building Industry Association.
- Develop Fact Sheets on AIPRA for Tribal Members.
- Develop curriculum on AIPRA for Tribal Members, estate planning in general; indoor air quality and record keeping systems; Well maintenance folders.
- Conduct Seminars on Estate Planning Healthy Indoor Environments.
- Revise MontGuides (fact sheets) to reflect the changes in state and federal laws related to estate planning.
- Develop publications on Asthma Awareness and lead-based paint

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

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Workshop ● Group Discussion ● Education Class 	<ul style="list-style-type: none"> ● Web sites ● Newsletters ● TV Media Programs

3. Description of targeted audience

- Caregivers of Alzheimer Patients
- Home Health Care Providers
- Certified Nursing Assistants
- Tribal Members who own undivided interests in trust lands on a reservation
- Farmers/Ranchers
- Montana Financial Educational Coalition Partners
- 4-H Leaders
- State Agency Employees
- Home Builders, housing authorities, real estate professionals
- Remodeling Contractors
- Weatherization Contractors
- Homeowners
- Senior Citizens

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
2010	3750	3500	30	100
2011	3800	3600	30	100
2012	3800	3600	30	100
2013	3800	3600	30	100
2014	4000	3600	30	100

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

Expected Patent Applications

2010 :0 2011 :0 2012 :0 2013 :0 2014 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	2	2
2011	0	2	2
2012	0	2	2
2013	0	2	2
2014	0	2	2

V(H). State Defined Outputs

1. Output Target

- Alzheimer's Mini Series: Conduct two mini series in the state. Based on past experience, 60 people could participate in each of the sessions. Conduct one Tools for Caregivers class reaching 30 people.

2010 :100 2011 :100 2012 :200 2013 :200 2014 :200

- Estate Planning, Passing of Reservation Lands: An estimated 1000 people will attend an in-depth seminar on estate planning and promotion and will begin to make plans. Distribute the revised MontGuide on state and federal law changes to 1400 participants who have purchased Estate Planning: The Basics packet. Reprint the curriculum "Track'n Your Saving Goals Register" MontGuide and develop materials with ideas on how to save. Prepare materials for presentation and seminars on AIPRA on reservations that request it; an estimated 200. Prepare a series of fact sheets that explain AIPRA and distribute them to tribal members; approximately 300.

2010 :900 2011 :1000 2012 :1000 2013 :1000 2014 :1000

- Grandparents Raising Grandchildren: Produce and distribute a bimonthly newsletter to all Extension Offices, grandparents, and others on the mailing list; currently 150 names. Provide support and assistance to start educational/support groups in local communities for grandparents who are parenting children. Currently, there are 15 in the state.

2010 :250 2011 :250 2012 :250 2013 :300 2014 :300

- Housing and Environmental Quality Number of publications/fact sheets distributed. Number of participants attending home environmental workshops/programs. Number of people testing their wells, doing radon tests.

2010 :1000 **2011** :1000 **2012** :1000 **2013** :1000 **2014** :1000

- Home Energy Costs: Number of people learning methods to save home energy, including purchasing Energy Star products. Number of people using energy saving practices in new and remodel construction. Number of people practicing weatherization techniques.

2010 :1000 **2011** :1000 **2012** :1000 **2013** :1000 **2014** :1000

V(I). State Defined Outcome

O. No	Outcome Name
1	Alzheimer's Mini Series: Seventy-five participants in the Alzheimer's Mini Series will learn about financial planning issues, nutrition, home modifications, and family interactions related to caring for an Alzheimer's patient. Seventy percent (70%) of the participants will cope with caring for an Alzheimer's patient more effectively. Participants will feel more comfortable in their care-giving role and will have a greater understanding of how they can assist a loved one afflicted with Alzheimer's.
2	Estate Planning, Passing of Tribal Lands, Savings: The percent of people who reviewed their property titles and made changes in them, who had an attorney write a will, who reviewed their will and had an attorney update it, who began a gifting program, who made a list of tangible personal property, who reviewed beneficiaries on their life insurance policies, who discussed estate planning with family members, who learned that Montana law would not distribute their property as they desire, who learned that their estate is not large enough that federal estate taxes would apply. Number of participants who attended the educational sessions to learn about AIPRA. Number of feature articles on AIPRA printed in the local newspapers, newsletters and aired over the radio and requests for additional information as a result. Number of tribal members who shared the fact sheets with relatives and talked about estate planning with friends and relatives. Number of parents who open a savings account for their children, discuss saving with family members, and complete a savings goal worksheet. The percent of people who actually did the list of items under short term (the things they learned about). The percent of people who used POD and TOD designations. Number of people who request a copy of an Informational Title Report from the Bureau of Indian Affairs. The number of people who drew a family generational tree to determine to whom their property will pass upon their death; who wrote a will in their own handwriting, retitled property into joint tenancy with right of survivorship, who decided to establish a life estate, who wrote a will, who talked with an attorney about writing a will, who shared the fact sheets with an immediate family member. The number of people who start saving with a financial institution, open an IRA, 401 k or 403 b plan, and whose children are beginning to save. Farms and ranches will be able to be transferred intact without being sold to provide equally to all heirs or to pay death costs. More Montana families will be financially secure at retirement
3	Grandparents Raising Grandchildren: Number of grandparents who gain information to assist them in their parenting role, become aware of services available to support them, and learn about methamphetamine and how it affects the user. Number of grandparents who begin to use current parenting strategies, prepare nutritious meals for themselves and their grandchildren, seek information to assist with their financial and legal issues related to parenting their grandchildren. Number of grandparents and their families will experience reduced stress and grandchildren will have a safe and nurturing environment in which to grow.
4	Home Energy Costs: Number of participants who learn common methods to save home energy by applying measures to new or existing homes. Number of participants who are using high performance, resource efficient building materials and construction techniques in remodeling and new construction. Number of participants who increase their purchase of EnergyStar products and appliances resulting in an energy saving of at least 30% annually per appliance. Number of participants who experience an energy savings due to weatherizing and remodeling of existing homes resulting in an annual 13-65% energy savings per household.
5	Housing and Environmental Quality: Number of participants who learn about environmental health concerns common to new and existing homes - molds, water quality, lead-based paint, radon, etc. Number of people requesting information related to home/environmental concerns. Homes in Montana will routinely be tested/assessed and mitigated for environmental health issues (molds, radon, asbestos, drinking water, carbon monoxide)

Outcome #1**1. Outcome Target**

Alzheimer's Mini Series: Seventy-five participants in the Alzheimer's Mini Series will learn about financial planning issues, nutrition, home modifications, and family interactions related to caring for an Alzheimer's patient. Seventy percent (70%) of the participants will cope with caring for an Alzheimer's patient more effectively. Participants will feel more comfortable in their care-giving role and will have a greater understanding of how they can assist a loved one afflicted with Alzheimer's.

2. Outcome Type : Change in Condition Outcome Measure

2010 :100

2011 : 100

2012 : 200

2013 :200

2014 :200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #2**1. Outcome Target**

Estate Planning, Passing of Tribal Lands, Savings: The percent of people who reviewed their property titles and made changes in them, who had an attorney write a will, who reviewed their will and had an attorney update it, who began a gifting program, who made a list of tangible personal property, who reviewed beneficiaries on their life insurance policies, who discussed estate planning with family members, who learned that Montana law would not distribute their property as they desire, who learned that their estate is not large enough that federal estate taxes would apply. Number of participants who attended the educational sessions to learn about AIPRA. Number of feature articles on AIPRA printed in the local newspapers, newsletters and aired over the radio and requests for additional information as a result. Number of tribal members who shared the fact sheets with relatives and talked about estate planning with friends and relatives. Number of parents who open a savings account for their children, discuss saving with family members, and complete a savings goal worksheet. The percent of people who actually did the list of items under short term (the things they learned about). The percent of people who used POD and TOD designations. Number of people who request a copy of an Informational Title Report from the Bureau of Indian Affairs. The number of people who drew a family generational tree to determine to whom their property will pass upon their death; who wrote a will in their own handwriting, retitled property into joint tenancy with right of survivorship, who decided to establish a life estate, who wrote a will, who talked with an attorney about writing a will, who shared the fact sheets with an immediate family member. The number of people who start saving with a financial institution, open an IRA, 401 k or 403 b plan, and whose children are beginning to save. Farms and ranches will be able to be transferred intact without being sold to provide equally to all heirs of to pay death costs. More Montana families will be financially secure at retirement

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :900

2011 : 1000

2012 : 1000

2013 :1000

2014 :1100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 801 - Individual and Family Resource Management

Outcome #3**1. Outcome Target**

Grandparents Raising Grandchildren: Number of grandparents who gain information to assist them in their parenting role, become aware of services available to support them, and learn about methamphetamine and how it affects the user. Number of grandparents who begin to use current parenting strategies, prepare nutritious meals for themselves and their grandchildren, seek information to assist with their financial and legal issues related to parenting their grandchildren. Number of grandparents and their families will experience reduced stress and grandchildren will have a safe and nurturing environment in which to grow.

2. Outcome Type : Change in Knowledge Outcome Measure**2010** :250**2011** : 250**2012** : 250**2013** :300**2014** :300**3. Associated Institute Type(s)**

- 1862 Extension

4. Associated Knowledge Area(s)

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

Outcome #4**1. Outcome Target**

Home Energy Costs: Number of participants who learn common methods to save home energy by applying measures to new or existing homes. Number of participants who are using high performance, resource efficient building materials and construction techniques in remodeling and new construction. Number of participants who increase their purchase of EnergyStar products and appliances resulting in an energy saving of at least 30% annually per appliance. Number of participants who experience an energy savings due to weatherizing and remodeling of existing homes resulting in an annual 13-65% energy savings per household.

2. Outcome Type : Change in Knowledge Outcome Measure**2010** :1000**2011** : 1000**2012** : 1000**2013** :1000**2014** :1000**3. Associated Institute Type(s)**

- 1862 Extension

4. Associated Knowledge Area(s)

- 801 - Individual and Family Resource Management
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

Outcome #5**1. Outcome Target**

Housing and Environmental Quality: Number of participants who learn about environmental health concerns common to new and existing homes - molds, water quality, lead-based paint, radon, etc. Number of people requesting information related to home/environmental concerns. Homes in Montana will routinely be tested/assessed and mitigated for environmental health issues (molds, radon, asbestos, drinking water, carbon monoxide)

2. Outcome Type : Change in Knowledge Outcome Measure**2010** :1000**2011** : 1000**2012** : 1000**2013** :1000**2014** :1000**3. Associated Institute Type(s)**

- 1862 Extension

4. Associated Knowledge Area(s)

- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

V(J). Planned Program (External Factors)**1. External Factors which may affect Outcomes**

- Government Regulations
- Economy
- Public Policy changes

Description

{NO DATA ENTERED}

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

1. Evaluation Studies Planned

- During (during program)
- After Only (post program)
- Other (Surveys)
- Before-After (before and after program)

Description

Each program has designed evaluation tools to gather data indicating outcome/impacts. Many have 3-6 year follow-up strategies to track the actions of participants.

2. Data Collection Methods

- On-Site
- Other (FCS Evaluation System)
- Observation
- Mail
- Telephone
- Tests

Description

The Family Consumer Science and Youth Evaluation System is a computer based data collection and analysis process that has been implemented in the state. Programs have been using this system for 3 years with some degree of success at identifying program impacts.

V(A). Planned Program (Summary)

Program #5

1. Name of the Planned Program

Community and Economic Development

2. Brief summary about Planned Program

Montana people have indicated they want to improve conditions for their families and communities, but this is not easy in a state as large and diverse as Montana. The major initiatives for this planned program are business retention/expansion, tourism, adult education, leadership development, community planning, effective service on boards, councils and committees, and renewable/alternative energy policies and opportunities. Agent and specialist developed programs provide both technical support and leadership in helping communities set and achieve their goals. Extension is viewed as a resource by decision makers and community leaders for unbiased education on issues impacting their communities and the people who live there.

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

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

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

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	60%			
723	Hazards to Human Health and Safety	10%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	10%			
805	Community Institutions, Health, and Social Services	20%			
	Total	100%			

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

1. Situation and priorities

Depending on the area of the state, issues facing families and communities differ. The eastern part of Montana must address problems related to declining populations and shrinking communities. On the other hand, people who live in the western section of the state are working hard to plan for fast growth and an increasing and changing population. Extension programs are helping families and communities address needs brought on by these changes.

Business acquisition, retention and/or expansion are all important to community well being. A viable business community provides work for families and keeps a community sustained.

Adult education activities, such as leadership development, in rural communities provide an opportunity for people to learn new skills or just gain new information. Extension provides a link to the University which can assist in acquiring classes and

instructors.

Serving on public boards, whether at the county or municipal level, is a critical component of good governance. Training for the people who serve on boards is critical to the success of any board.

Citizens need to be aware of local/community emergency plans and services available if a disaster should occur. How to access those services and become part of the solution is key for individuals and communities to survive a disaster.

Many areas of the central and eastern portions of Montana are being considered for large-scale wind project development. While many resources exist to aid individuals in understanding wind energy, constituents often find these resources confusing to navigate and difficult to apply to their situations. Additionally, bio-fuels are surfacing as an alternative energy source. Information on the pros and cons of the various types of bio-fuels is needed to make cost effective and lasting decisions.

2. Scope of the Program

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

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

1. Assumptions made for the Program

There is evidence that communities can develop leadership and take control of their future by setting goals and developing strategic plans to accomplish a vision. Adults are interested in continuing education. Adult Education activities have been well attended in many communities across the state. People are interested in learning about renewable/alternative energy sources. Both private and public entities want to see if there are energy opportunities they could consider given their individual set of circumstances. Training for people serving on boards, councils and committees can lead to better local governance.

2. Ultimate goal(s) of this Program

- To maximize community and economic development efforts, matching local needs, attributes, goals with business needs, resulting in effective development strategies including success with targeted industry efforts.
- To engage entities within a community in identifying community values and assets and to create a long range community vision which will become a guiding document for addressing issues facing the community.
- To provide a way for adults in rural settings to continue to expand their knowledge and skills without leaving their jobs, homes and families. Adult education opportunities can offer a variety of classes from the most technical to recreational.
- To reduce accidents and loss of property and human life due to disasters.
- To improve leadership systems and reduce poverty in small rural communities of less than 5,000 population.
- To provide unbiased information that will aid in decision making on the use of renewable/alternative energy sources including but not limited to bio-fuels, wind and solar.
- To train people serving on local boards so they can be effective in executing the responsibilities of the board.

V(E). Planned Program (Inputs)

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

Year	Extension		Research	
	1862	1890	1862	1890
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
2014	6.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Community meetings will be held to determine community values, attitudes, and vision on which to develop strategies and action plans.

Partner with local economic development entities, agencies, businesses/industry and organizations to implement goals and plans of action.

Partner with local Adult Education entities to identify class offerings.

Television PSA's announcing EDEN (extension Disaster/Emergency Network).

Television PSA's discussing drought/wild fires or other disasters that may occur.

Community meetings will be held to discuss renewable/alternative energy possibilities in both public and private sectors.

Training opportunities will be available for people serving on boards, councils and committees in both the public and private sectors.

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

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Group Discussion ● Workshop 	<ul style="list-style-type: none"> ● Newsletters ● Web sites ● Other 1 (Publications) ● Public Service Announcement

3. Description of targeted audience

- Adults interested in education
- Business and Community Leaders
- Local Development Entities
- Local Economic Development Entities
- Chamber of Commerce Members
- Tourism Leadership – local/state
- County Government
- Individuals interested in start-up and expansion of business
- Individuals interested in start-up & expansion of business
- County DES, Law Enforcement, Emergency Response Coordinators
- Current Community Leadership/Potential Community Leaders
- Landowners
- City Government
- Adults/Youth serving on boards

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
2010	6000	140000	200	100
2011	6000	140000	200	100
2012	6000	140000	200	100
2013	6000	140000	200	100
2014	6500	10000	200	100

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

Expected Patent Applications

2010 :0 2011 :0 2012 :0 2013 :0 2014 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	1	1
2011	0	2	2
2012	0	2	2
2013	0	2	2
2014	0	2	2

V(H). State Defined Outputs

1. Output Target

- Community Resource Development: Number of Extension lead activities such as facilitation services, assistance in feasibility studies, strategic planning processes, development of business retention and expansion plans/programs. Number of partnerships and existing relationships utilized to strengthen sustainability of county and private efforts in community and economic development.

2010 :8000 2011 :9000 2012 :9000 2013 :10000 2014 :9000

- Adult and Community Education Number of collaborations with community organizations to identify and establish classes to be offered in adult educational settings. Number of adult education classes offered during the year. Number of people attending classes.

2010 :1000 2011 :1000 2012 :1000 2013 :1000 2014 :1000

- EDEN (Extension Disaster Emergency Network): Number of hits on the EDEN WEB Site. Number of workshops/presentations/activities focused on disaster mitigation. Number of responses from PSA's to emergency service entities.

2010 :140000 2011 :140000 2012 :140000 2013 :140000 2014 :10000

- Horizons Program: Number of Study Circle and Leadership Plenty meetings conducted. Number of people who have not been involved in community problem solving activities in the past. Number of community members trained and serving as

facilitators for programs. Number of community members involved in Study circles and Leadership Plenty process.

2010 850 **2011** 900 **2012** :950 **2013** :1000 **2014** :1000

- Renewable/Alternative Energy: Number of people attending workshops/presentations and/or accessing the web site for information about wind energy. Number of people attending workshops/presentations on the pros and cons of various types of bio-fuels or alternative energy sources.

2010 350 **2011** 400 **2012** :500 **2013** 500 **2014** :1000

- CITIZEN LEADERSHIP AND GOOD GOVERNANCE: Number of people attending workshops/presentations focused on board responsibilities and authorities.

2010 :1000 **2011** :1000 **2012** :1000 **2013** :1000 **2014** :1000

V(I). State Defined Outcome

O. No	Outcome Name
1	EDEN: Number of PSA's produced to increase public awareness and knowledge of disasters and increase consumer awareness of local emergency services. The public will understand how they access local emergency services and take steps to prepare for a disaster (number of disaster survival kits made) Reduction of accidents, loss of property and human life due to disasters
2	COMMUNITY RESOURCE DEVELOPMENT: Number of community leaders, agency personnel, organization members and other citizens that will gain an understanding of the value of creating a community development/economic development plan. Number of community leaders, agency personnel, organization membership that will collaborate on economic development strategies. Number of communities that will utilize an inclusive process to establish goals and action plans. Counties will establish and maintain a sustainable population with a viable and diversified economy. Communities will be prepared and able to deal with and direct change so it will reflect its goals, values and vision.
3	ADULT/COMMUNITY EDUCATION Number of people who gained knowledge through adult education classes. Number of participants who tried a new activity as a result of attending a class. Number of participants who used a new skill, practice or technique as a result of attending a class.
4	HORIZONS: Communities demonstrate awareness and interest in poverty reduction. Community members become aware of opportunities, tools and techniques available to engage in poverty reduction. Communities begin to recognized and own poverty as a community issue about which they can take action. Communities begin to recognize and own leadership as a community issue about which they can take action. Communities demonstrate an interest in poverty reduction and begin the process of learning to recruit and mobilize others. Communities are mobilized to create and adopt a shared vision for poverty reduction. Communities will directly engage people living in poverty in leadership training and action planning. Communities will define leadership for poverty reduction as collective, rather than individual actions. Communities will implement inclusive processes and decision-making methods. Leadership base of communities will mirror the demographics of their community. Communities have a commitment to poverty reduction. Communities will implement and sustain changes that contribute to poverty reduction in the community. Communities will be able to demonstrate progress toward reducing poverty. Number of communities conducting Study Circles and Leadership Plenty activities and involve people new to the community problem solving. Number of people trained as facilitators for the Study Circle and Leadership Plenty process and are able to assist community groups. Number of people who develop or enhance their leadership skills and are able to apply those newly acquired skills and techniques
5	RENEWABLE/ALTERNATIVE ENERGY: Number of communities/cities making decisions about revenue generation with wind based on MSU Extension model. Number of people making decisions about the use of bio-fuels and other alternative energy opportunities.
6	CITIZEN LEADERSHIP AND GOOD GOVERNANCE: Number of boards, councils and committees being successful with assigned responsibilities/authorities.

Outcome #1

1. Outcome Target

EDEN: Number of PSA's produced to increase public awareness and knowledge of disasters and increase consumer awareness of local emergency services. The public will understand how they access local emergency services and take steps to prepare for a disaster (number of disaster survival kits made) Reduction of accidents, loss of property and human life due to disasters

2. Outcome Type : Change in Condition Outcome Measure

2010 :12000 **2011 :** 12000 **2012 :** 12000 **2013 :**12000 **2014 :**10000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 723 - Hazards to Human Health and Safety

Outcome #2

1. Outcome Target

COMMUNITY RESOURCE DEVELOPMENT: Number of community leaders, agency personnel, organization members and other citizens that will gain an understanding of the value of creating a community development/economic development plan. Number of community leaders, agency personnel, organization membership that will collaborate on economic development strategies. Number of communities that will utilize an inclusive process to establish goals and action plans. Counties will establish and maintain a sustainable population with a viable and diversified economy. Communities will be prepared and able to deal with and direct change so it will reflect its goals, values and vision.

2. Outcome Type : Change in Condition Outcome Measure

2010 :7500 **2011 :** 7600 **2012 :** 7700 **2013 :** 8000 **2014 :**9000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

Outcome #3

1. Outcome Target

ADULT/COMMUNITY EDUCATION Number of people who gained knowledge through adult education classes. Number of participants who tried a new activity as a result of attending a class. Number of participants who used a new skill, practice or technique as a result of attending a class.

2. Outcome Type : Change in Action Outcome Measure

2010 :300 **2011 :** 325 **2012 :** 350 **2013 :**1000 **2014 :**100

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #4

1. Outcome Target

HORIZONS: Communities demonstrate awareness and interest in poverty reduction. Community members become aware of opportunities, tools and techniques available to engage in poverty reduction. Communities begin to recognize and own poverty as a community issue about which they can take action. Communities begin to recognize and own leadership as a community issue about which they can take action. Communities demonstrate an interest in poverty reduction and begin the

process of learning to recruit and mobilize others. Communities are mobilized to create and adopt a shared vision for poverty reduction. Communities will directly engage people living in poverty in leadership training and action planning. Communities will define leadership for poverty reduction as collective, rather than individual actions. Communities will implement inclusive processes and decision-making methods. Leadership base of communities will mirror the demographics of their community. Communities have a commitment to poverty reduction. Communities will implement and sustain changes that contribute to poverty reduction in the community. Communities will be able to demonstrate progress toward reducing poverty. Number of communities conducting Study Circles and Leadership Plenty activities and involve people new to the community problem solving. Number of people trained as facilitators for the Study Circle and Leadership Plenty process and are able to assist community groups. Number of people who develop or enhance their leadership skills and are able to apply those newly acquired skills and techniques

2. Outcome Type : Change in Action Outcome Measure

2010 :850 **2011** : 900 **2012** : 950 **2013** :1000 **2014** :1000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development

Outcome #5

1. Outcome Target

RENEWABLE/ALTERNATIVE ENERGY: Number of communities/cities making decisions about revenue generation with wind based on MSU Extension model. Number of people making decisions about the use of bio-fuels and other alternative energy opportunities.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :350 **2011** : 400 **2012** : 500 **2013** :500 **2014** :1000

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #6

1. Outcome Target

CITIZEN LEADERSHIP AND GOOD GOVERNANCE: Number of boards, councils and committees being successful with assigned responsibilities/authorities.

2. Outcome Type : Change in Condition Outcome Measure

2010 :400 **2011** : 450 **2012** : 500 **2013** :500 **2014** :500

3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

•There will be a continual decline in populations in Eastern Montana resulting in a more depressed atmosphere for families and communities. •Growth in Western Montana will continue with absentee land owners being the largest increase in population. •Leadership systems in small rural communities need to be revitalized. •People who live in rural Montana will continue to seek opportunities to enhance and develop skills and knowledge in many areas.

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

1. Evaluation Studies Planned

- During (during program)
- Before-After (before and after program)

Description

Several of the programs in this area are relatively new and are in the process of designing appropriate tools to gather impact data.

2. Data Collection Methods

- Mail
- On-Site
- Telephone
- Unstructured
- Observation
- Structured

Description

{NO DATA ENTERED}

V(A). Planned Program (Summary)

Program #6

1. Name of the Planned Program

Natural Resources and Environment

2. Brief summary about Planned Program

For decades, Montana landowners have made use of abundant natural resources in order to make a living and survive on the land. Today, society desires to preserve and protect these same resources that have made Montana a unique and thriving state. However, the majority of the state's citizens lack knowledge of how agriculture works to ensure the sustainability of natural resources even though their livelihood depends on it. For example, many livestock operations and other industries have chosen locations to build based on the proximity to nearby water sources which was the most economical and efficient. However, there have been examples where the locations of these facilities have been devastating to the environmental quality. As a result, management techniques have been devised to make these industries compatible with their locations.

Forests and rangelands are also an important natural resource in Montana because they contribute to the economic base of the state. Both require continual management and stewardship to maximize their potential outputs. Additionally, wildlife habitat and its interface with agriculture and non-agricultural entities are critical components to the state's natural resource and environmental issues. Water quality cuts across all entities and is an extremely important resource requiring intentional management.

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

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

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

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	20%			
123	Management and Sustainability of Forest Resources	20%			
135	Aquatic and Terrestrial Wildlife	20%			
136	Conservation of Biological Diversity	20%			
605	Natural Resource and Environmental Economics	20%			
	Total	100%			

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

1. Situation and priorities

Forests are an important resource in Montana because they provide clean water, timber products, recreation and wildlife habitat. To be able to reach the highest potential of this resource however, appropriate management systems need to be in place. Private forest landowners need to understand the intricacies of timber sales so they can capitalize on this resource.

Publicity has raised the awareness of and concerns about water quality. Specifically, arsenic and nitrates have been noted as being at potentially dangerous levels in some wells. People need to feel comfortable that their drinking water is safe for their families and regularly test their wells to obtain this assurance. There are several aspects of water quality that require attention and understanding and some of them are controversial in nature. Interest in Coal Bed Methane is increasing along with the need for accurate and unbiased information to use in decision making. Safe drinking water is also becoming more of an issue as information about contamination become more known.

Small acreages are being purchased by people who are unfamiliar with appropriate stewardship practices for the land. These people need to gain an understanding of weed and pest controls as well as establishing a plan for appropriate and effective use of their property. Similarly, agricultural enterprises also need to develop environmentally friendly practices while making their business sustainable and profitable.

2. Scope of the Program

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

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

1. Assumptions made for the Program

Based on the demographics of Montana, no one argues the background and values of citizens are changing. Development of rural areas poses growth challenges. Increasing influence of environmental groups are changing policy and land use philosophies and perspectives. Environmental restrictions related to water, air, and pesticides are increasing. Endangered species concerns and restrictions on land use because of them are increasing.

1. Natural Resources and Environmental issues will continue to be a strong influence on the economy, development and social and political decisions in Montana.

2. Most Montanans are strongly opinioned about environmental issues.

3. Extension Natural Resource and Environmental programs must continue to use scientific information to help the general public and decision makers understand the complex interrelationships and consequences of natural resource and environmental management. As Extension audiences continue to expand beyond traditional clientele, we will be challenged to be an unbiased source of information for all citizens while continuing to address the needs of traditional clientele.

2. Ultimate goal(s) of this Program

To educate non-industrial private forest landowners in how they can implement the stewardship plans for their forested property.

To provide private forest landowners the necessary knowledge to conduct a successful timber sale, which in turn supports the sustainability of managed forests.

To provide managers with the necessary tools and knowledge to effectively manage resources for economic and ecologic benefit.

To educate rural Montanan's about testing their well water.

To decrease the number of acres infested with noxious weeds or other pests and improve range land conditions.

To enhance effective resource stewardship of private landowners who own small acreages or who are new-to-the-land.

To increase awareness of management techniques that can be used by small acreage landowners to maintain or improve their crops, lawns and animals, while protecting their natural resources such as water, soil and plants.

To educate new landowners to natural resources and threats to them from plant, animal and insect pests. (IPM)

To increase the level of non-point source pollution awareness and knowledge for animal feeding operations and small acreages.

To increase implementation of water quality best management practices related to livestock production and animal agriculture across Montana.

To provide accurate, researched information on the effects and impacts of Coal Bed Methane development.

To increase the number of well tests that are done in the state along with the interpretations and recommendations.

V(E). Planned Program (Inputs)

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

Year	Extension		Research	
	1862	1890	1862	1890
2010	5.0	0.0	0.0	0.0
2011	5.0	0.0	0.0	0.0
2012	5.0	0.0	0.0	0.0
2013	5.0	0.0	0.0	0.0
2014	5.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

•Conduct workshops that will address specific topics such as forest stewardship and controlling pests for example for Extension Professionals and clientele. •Provide training so people learn will be able to calibrate spray equipment and making management plans for example. •Work with the media to educate the public on natural resource topics. •Partner with local associations, agencies and organizations with common interests and goals. •Prepare MontGuides (Fact Sheets) on related topics. •Conduct tours and demonstrations when appropriate teaching method for topic. •Conduct workshops on water quality and safety.

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

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Workshop ● Other 1 (Field Days) ● One-on-One Intervention ● Education Class ● Demonstrations 	<ul style="list-style-type: none"> ● Other 1 (Newspaper articles) ● Newsletters

3. Description of targeted audience

- Private Forest Land Owners
- Graduates of the Forest Stewardship Program
- County Weed Boards
- Farmers and Ranchers – Ag producers
- Private Land Owners
- Small Acreage Land Owners
- Producers who operate Animal Feeding Operations
- Professional loggers/foresters

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
2010	7000	10000	200	150
2011	7500	10000	200	150
2012	7500	10000	200	150
2013	7500	10000	200	150
2014	7500	10000	200	150

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

Expected Patent Applications

2010 :0 2011 :0 2012 :0 2013 :0 2014 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	1	1
2011	0	1	1
2012	0	1	1
2013	0	1	1
2014	0	1	1

V(H). State Defined Outputs

1. Output Target

- Forestry: Number of private forest owners who attend one/two workshops so they will understand the timber sale process allowing them to complete a successful timber sale. Number of people attending the forestry mini-college, a one-day educational program that includes 10 forestry related courses that provide attendees with knowledge or sources of assistance necessary to implement their forest stewardship plans.

2010 :350 2011 :375 2012 :375 2013 :375 2014 :375

- Small Acreage Lands: Number of one-on-one consultation and group workshops for small acreage land owners on pest control, weed management and other topics. Number of people who participate in Field Days and demonstration opportunities for land owners to observe techniques and best practices. Number of subscribers to Big Sky Small Acres Publication.

2010 :400 2011 :500 2012 :500 2013 :500 2014 :500

- Environmentally Sensitive Management Systems: Provide one-on-one assistance for developing management plans. (Forestry, Animal Feeding Operations, etc.) Number of consultations. Number of demonstrations of sprayer calibrations, GPS usage, and other technical practices that provide environmental protection. To provide up-to-date guidance for operators through an AFO/CAFO website and electronic library, MontGuides publications, and field days.

2010 :500 2011 :500 2012 :500 2013 :500 2014 :500

- **WATER QUALITY:** Number of people starting a file to track water quality Number of people attending Well Educated program To guide private well owners through the process of testing their water quality complete with materials to help interpret results and insight on ways to help protect ground water resources. To educate land owners and the public about the effects and impacts of Coal Bed Methane Development using resources such as the documentary Prairies & Pipelines: Issues in Coal Bed Methane Development, MontGuides, news articles and educational forums

2010 350

2011 375

2012 375

2013 375

2014 400

V(I). State Defined Outcome

O. No	Outcome Name
1	Forestry: Participants will learn the necessary steps for selling timber and what resources are available to them for assistance. Attendees will receive information they can use to meet their individual forest stewardship objectives. Landowners will develop a plan and implement activities that will enhance the sustainability of their forests. Landowners will implement activities for their individual stewardship objectives. Montana's private landowners will be managing their forests to meet their individual stewardship objectives and so the forests lands continue to provide environmental, economic and social benefits to Montana citizens.
2	Small Acreages: Producers and small acreage landowners will become aware of insect, weed and disease infestations as they are developing so they can make management decisions in a timely manner. Applicators will learn the risks associated with applying pesticides and safety precautions recommended to mitigate those risks, while at the same time, learn techniques in applying chemical appropriately. Producers will learn to use the GPS in locating weed or other problem areas.
3	Environmentally Sensitive Management Systems: Producers will understand the current rules and regulations relative to animal feeding operations and how to evaluate their own operation. This also applies to forestry plans, grazing land plans and any other plans appropriate to the individual operation. Producers will learn to identify and manage their particular IPM issue or natural resource concern. Landowners will implement best management practices in addressing weed issues. Number of producers/small landowners who have adopted weed, crop, pest and forage management strategies. Local landowners will become more profitable while protecting the environment Producers/Landowners will adopt practices outlined in their CNMP plans. (applies to other planning efforts) Producers/landowners will adopt practices that will address their specific IPM problem. All operations that develop and implement a CNMP protect ground and surface water, apply manure at agronomic rates, and utilize technologies that allow them to better operate and/or monitor their operation. All operations will remain economically viable and environmentally friendly.
4	Water Quality: Participants will learn the importance of and steps to do well testing. Percent of forage producers/participants who learn proper timing and implementation of control techniques and methods appropriate to their operations. Number of wells tested and recommendations followed as a result. Distribution of information from water projects, such as Water Monitoring Activities, Well and Septic DVD and Prairie and Pipelines: Issues in Coal Bed Methane Development as well as information retrieved from the accompanying mail in survey.

Outcome #1**1. Outcome Target**

Forestry: Participants will learn the necessary steps for selling timber and what resources are available to them for assistance. Attendees will receive information they can use to meet their individual forest stewardship objectives. Landowners will develop a plan and implement activities that will enhance the sustainability of their forests. Landowners will implement activities for their individual stewardship objectives Montana's private landowners will be managing their forests to meet their individual stewardship objectives and so the forests lands continue to provide environmental, economic and social benefits to Montana citizens.

2. Outcome Type : Change in Condition Outcome Measure

2010 350	2011 : 375	2012 : 375	2013 375	2014 :375
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 123 - Management and Sustainability of Forest Resources
- 605 - Natural Resource and Environmental Economics

Outcome #2**1. Outcome Target**

Small Acreages: Producers and small acreage landowners will become aware of insect, weed and disease infestations as they are developing so they can make management decisions in a timely manner. Applicators will learn the risks associated with applying pesticides and safety precautions recommended to mitigate those risks, while at the same time, learn techniques in applying chemical appropriately. Producers will learn to use the GPS in locating weed or other problem areas.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 400	2011 : 500	2012 : 500	2013 500	2014 :500
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3. Associated Institute Type(s)

- 1862 Extension

4. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 136 - Conservation of Biological Diversity
- 605 - Natural Resource and Environmental Economics

Outcome #3**1. Outcome Target**

Environmentally Sensitive Management Systems: Producers will understand the current rules and regulations relative to animal feeding operations and how to evaluate their own operation. This also applies to forestry plans, grazing land plans and any other plans appropriate to the individual operation. Producers will learn to identify and manage their particular IPM issue or natural resource concern. Landowners will implement best management practices in addressing weed issues. Number of producers/small landowners who have adopted weed, crop, pest and forage management strategies. Local landowners will become more profitable while protecting the environment Producers/Landowners will adopt practices outlined in their CNMP plans. (applies to other planning efforts) Producers/landowners will adopt practices that will address their specific IPM problem. All operations that develop and implement a CNMP protect ground and surface water, apply manure at agronomic rates, and utilize technologies that allow them to better operate and/or monitor their operation. All operations will remain economically viable and environmentally friendly.

2. Outcome Type : Change in Knowledge Outcome Measure**2010** 500**2011** : 500**2012** : 500**2013** 500**2014** :500**3. Associated Institute Type(s)**

- 1862 Extension

4. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 136 - Conservation of Biological Diversity
- 605 - Natural Resource and Environmental Economics

Outcome #4**1. Outcome Target**

Water Quality: Participants will learn the importance of and steps to do well testing. Percent of forage producers/participants who learn proper timing and implementation of control techniques and methods appropriate to their operations. Number of wells tested and recommendations followed as a result. Distribution of information from water projects, such as Water Monitoring Activities, Well and Septic DVD and Prairie and Pipelines: Issues in Coal Bed Methane Development as well as information retrieved from the accompanying mail in survey.

2. Outcome Type : Change in Knowledge Outcome Measure**2010** 350**2011** : 375**2012** : 375**2013** 375**2014** :400**3. Associated Institute Type(s)**

- 1862 Extension

4. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 136 - Conservation of Biological Diversity

V(J). Planned Program (External Factors)**1. External Factors which may affect Outcomes**

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

Description

{NO DATA ENTERED}

V(K). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- Comparison between locales where the program operates and sites without program intervention
- During (during program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Case Study

Description

Programs (2) in this area are connected to research projects that have specific targets established and strategies outlined for collecting data. Water quality and environmentally sensitive management reflect this approach. The small acreage and alternative energy efforts are still developing protocols for collecting data.

2. Data Collection Methods

- Mail
- Journals
- Telephone
- Observation
- On-Site
- Unstructured
- Case Study
- Tests

Description

Because of the close relationship established in these programs, data collection can often be less formal in nature.