

2014 Montana State University Extension Plan of Work

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I. Plan Overview

1. Brief Summary about Plan Of Work

Montana State University (MSU) Extension has recently completed a strategic plan which closely aligns with a new strategic plan created and approved by the University in 2012. The new MSU strategic plan focuses on engagement within Montana communities as a strong priority and the integration of learning (teaching) and discovery (research) with outreach (engagement) as the ultimate goal.

MSU Extension is already successful throughout the state in meeting and excelling at this tripartite mission. With the new MSU strategic plan, MSU Extension has a clear leadership role in helping the rest of the university establish itself statewide as a key resource for collaborating to solve the state's greatest challenges.

Like the rest of Extension, MSU Extension faces budget challenges at the local and federal levels. The 2014-2018 Plan of Work reflects limitations created by these issues, while focusing on collaborations and efficiencies that can be made to continue to address the priorities and program needs of the organization.

By examining demographic information, trends can be used to help determine concerns that can be addressed through education. Extension uses demographic data as part of the formula to determine program priorities and design and implement relevant, timely and high value resources for constituents and stakeholders.

The 2014-2018 Plan of Work for MSU Extension uses available statistics, advisory groups, public input and historical trends to develop a focus for future activities. These programs benefit youth, families, clientele groups, business enterprises and communities across the state.

Montanan's demographic profile shows a state that is stable in almost all sectors as indicated by the slow but steady growth. While the population has increased slightly, the state has ranked 44th in the nation for the past several years. The age of the state's population is steadily increasing, a factor that could have significant impacts over the next several decades.

The demographics of the population, outside of age, have not changed significantly:

*	2009	2010	2011	2012
White	90.8%	90.3%	89.4%	89.9%
Native American	6.5%	6.4%	6.3%	6.4%
Under the Age of 18	23.1%	22.5%	22.6%	22.3%
Over the age of 65	13.8%	14.6%	14.8%	15.2%
Living in Poverty	13.6%	15.1%	14.5%	14.6%

Agriculture continues to be the largest industry. A snapshot of Montana agriculture reveals the top 5 commodities are wheat, cattle/calves, barley, other crops (beans, peas, potatoes, lentils, sugar beets etc), and hay. Oil and gas development is increasing as a result of the Bakken Oil Formation and tourism continues to be a major industry.

As programs are developed, MSU Extension takes into consideration the profile of the people and realizes education can address only a portion of their concerns. With this in mind, and based on the new MSU and MSU Extension strategic plans, MSU Extension has reorganized the framework around six clear program areas to which valuable resources (personnel and financial) will be expended. These areas are:

AGRICULTURE: As Montana's number one economic industry, as well as the cultural identity for many Montanans, agriculture will remain a primary focus of Extension. Programming to ensure that Montana farm and ranch owner/operators have the latest scientific information available to help them produce adequate and safe food while making a profit and achieving a desirable quality of life is a strong priority. In addition, Extension is focused on sharing best practices and the latest knowledge around sustainability and environmentally sound methods.

ENERGY AND NATURAL RESOURCES: According to the Montana Department of Commerce, Montana has more potential for energy development from existing and untapped diversified sources than any other state in the nation. From coal deposits and oil to wind farms and geothermal energy potential, energy and natural resources have played a vital role in Montana's history and continue to be a priority for MSU Extension into the future. Education and unbiased, scientific information are critical to Montana's ability to form good policy and decisions in this area. Extension is a trusted and dependable source for this information.

YOUTH AND ADULT DEVELOPMENT: Montana 4-H is the largest youth development organization in the state and has been a trusted source of education, skill building and activities for youth and volunteers for over 100 years. Focused on citizenship, healthy living and science, 4-H members learn life skills that are enhanced through participation and lead to youth who are competent, connected, confident, caring, with character, and who contribute to their communities. Adults who are faced with parenting and caregiving issues have clear needs, and with Extension already deeply involved in the family unit through youth, there is a natural bridge connecting Extension with adult development as well. Education in these areas empowers Montanans so they grow up to be strong citizens, who can manage their finances and build strong families to be supported through their aging years. This continues to be a high priority.

HEALTHY LIVING, NUTRITION and FOOD SAFETY: Statistics show that the American population is becoming more sedentary and heavier in weight. From children to the elderly, costs related to obesity have dramatically increased in the last 10 years as quality of life has decreased with problems including high blood pressure, heart disease and chronic illness increasing. Education and outreach is critical to the well-being of Montanans and MSU Extension will continue to focus efforts in this area. In addition, MSU Extension has become and will continue to be the primary place Montanans look to ensure food safety and security and to learn about food preservation.

HOUSING AND BUILT ENVIRONMENTS: Education and outreach in the area of housing and residential energy has been shown to significantly reduce energy costs and consumption. MSU Extension will continue to play a key role in weatherization and safe housing for Montana's residents.

COMMUNITY DEVELOPMENT: MSU Extension provides the only extensive education and training for Montana's elected and government officials at the local and county level. Over the next 10 years a large transfer of wealth will be taking place across Montana and the future of many towns and communities is at stake. MSU Extension will assist Montana communities to use proven economic and community development strategies that will improve the conditions impacting business and family life and the health of the community as a whole.

It is the goal of MSU Extension to be a vital and valued resource to the citizens of Montana. These six program areas will be evaluated annually to be sure that we have the most appropriate priorities in place.

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

Year	Extension		Research	
	1862	1890	1862	1890
2014	33.0	0.0	0.0	0.0
2015	35.0	0.0	0.0	0.0
2016	35.0	0.0	0.0	0.0
2017	35.0	0.0	0.0	0.0
2018	35.0	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

The Merit Review process identified by Montana State University Extension involves an external university panel and an expert peer review. Those who have been asked to serve on the review panel are people who fit both categories well.

Three people will conduct the review process, each bringing a wealth of knowledge about Extension, Montana and how Extension can serve the needs of the state's citizens.

The panel has access to a copy of the 5 year plan of work and the annual report of accomplishments to use in reviewing program plans and tracking the resulting impacts. These documents will also serve as a basis for the panel to follow the planning process into the next year so they can assess sequential educational efforts, progress on program goals and plans for gathering impact data.

Jim DeBree, Jim Knight and Charles Rust have agreed to serve on the Merit Review Panel. They have been selected because of their understanding of the mission of Extension and what outreach from the land-grant university can mean to youth and adults throughout the state. Each one has had experiences that are important to developing a comprehensive review of the MSU Extension program.

Jim DeBree is a retired Director of Extension from Wyoming, a neighboring state of Montana. Wyoming is a state much like Montana in that it is largely dependent on the natural resources for its economic base. With Jim's background in Wyoming, he is well equipped to understand the opportunities and pressures on a state like Montana.

Dr. Jim Knight retired from the Montana Extension Service. During his 40 years of professional experience, Knight developed strategies and techniques for helping landowners become better wildlife managers. He has extensive knowledge of every part of Montana's vast terrain. Jim served as the Extension wildlife specialist for 25 years before becoming MSU

Extension's Associate Director. Jim continues to do post-retirement work for the organization. With his breadth of Extension experience, Jim will be able to offer valuable suggestions and feedback.

Dr. Charles Rust is a retired Montana Extension employee who began his career as an agricultural economist. His administrative experience included several years as the program leader for agriculture after which he assumed the Extension Director position on an interim basis. Dr. Rust has a wide understanding of the needs of Montana citizens and will provide a keen eye in reviewing Extension plans and reports from that perspective.

While the process for the MSU Extension Merit Review is not complicated, it will provide valuable feedback for program considerations. This is largely due to the people who have been selected to serve on the panel and the knowledge they possess, both individually and collectively, about Extension programming.

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 MSU Extension is a continual communication by professional faculty in counties of neighboring states serving 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; that may not be in their own state.

Additionally, specialists from states around the country form collaborations to address common and shared concerns. It is a specialist's role to stay abreast of emerging issues and develop educational efforts that bring them to the attention of those who will be impacted. Specialists also design educational opportunities that address current situations and work with county faculty and clientele so they can effectively address problems or take advantage of opportunities close at hand. 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 SNAP-Ed and EFNEP. On reservations, Youth Ag Loans provide resources to start a herd 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 planning process. This method has become 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 using effective evaluation tools to determine outcomes is a continuing

process. 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 State University and MSU Extension have recently updated institutional strategic plans and both incorporate measuring the impact of engagement in the community as a priority. As new tools and processes are developed, increased training for both state and county personnel will occur. Specialists are encouraged to provide evaluation processes/tools to be used with programs offered on a statewide basis.

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

Throughout Extension, resources are limited and efforts are made on a daily basis to be as efficient and streamlined as possible. 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

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

Brief explanation.

Personal contact has been the most successful way for Extension to gain stakeholder participation. The clientele who use Extension regularly are willing to provide input when asked. People who attend programs or are referrals from other agencies are asked to indicate which issues are important to them, their families and communities.

While less effective, radio, newsletters, newspapers and electronic distribution lists are used to inform clientele about the opportunity to make requests for Extension assistance. Informational booths are set up at agricultural trade shows, home and garden shows and health fairs allowing for discussions with people who often are not regular clientele of Extension. These conversations reveal concerns/issues that might not be heard in the usual process. When common issues surface through these methods and the advisory process, they are considered in the program planning process.

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

1. Method to identify individuals and groups

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

Brief explanation.

Membership on county advisory groups is generally achieved by sending an invitation to traditional stakeholder groups requesting the name of an individual who can represent their views and provide input for Extension programming. A similar invitation is sent to non-traditional groups. However, in these cases, personal contact is made to explain the role of the representative. During programs targeted at certain audiences such as SNAP-Ed and EFNEP, attendees are asked directly for input or may be asked to serve on a specific advisory committee for the program area.

Membership on the Montana Extension Advisory Council (MEAC) is based on geographic representation, areas of interest and some previous relationship with Extension. Recruitment from specific sectors such as health care, government agencies and community development, are also targeted. County Extension agents and state specialists, Extension program leaders and regional department heads are asked to make recommendations for membership to MEAC. Those who are selected serve a 3 year term.

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

1. Methods for collecting Stakeholder Input

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

Brief explanation.

The most common method of gathering stakeholder input is from conversations with the regular clientele of MSU Extension. While they are contacted on a less formal basis, they are systematically asked for input into program priorities. Often this occurs in intentional program planning sessions to which these people are invited, requested to attend or are required to be present by their role or position. Examples of groups that fall into this category

are county/reservation councils, 4-H councils, livestock associations, weed boards, human resource coalitions, local and state agricultural organizations, Ag Research Center advisory committees and special interests groups. Some of these groups have offices or directing boards that are asked for specific input.

County and state advisory committees are also used to gather input. Advisory groups are generally comprised of a cross section of the leadership and citizens in the county. Efforts are made to involve the under-served and under-represented clientele by contacting agencies and organizations that work with this audience regularly. They are asked for input and/or for names of people who could provide input directly. Local Extension agents follow up with personal conversations to explain the goals and process. Two annual MEAC meetings serve as another venue for gathering valuable stakeholder input.

At the state level, one of the most valuable sources of input is the Montana Association of Counties (MACo). Extension makes presentations during MACo's Annual Meeting, followed by an open session for mutual dialog. These types of discussions also happen during the newly elected county commissioner's orientation and have proven very beneficial. Extension administration, through the regional department heads (RDH's), also gathers stakeholder input from county commissioners during the regular and systematic visits at the county level between the RDH's and county commissioners.

Surveys are used to gather information at either the local or state level. They may be hard copy, although electronic formats are being used in some program areas.

3. A statement of how the input will be considered

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

Brief explanation.

Information gathered through the stakeholder input process is used to determine program needs and direction. In some cases, cross-county educational teams made up of county extension agents, specialists, clientele and researchers are formed to develop and implement programs. At times, county agents are able and equipped to address the issue with resources from his/her office. At other times and when issues are determined to be statewide, specialists will become more involved with program development and direction than if they are responding to a single request for information.

The statewide advisory committee (Montana Extension Advisory Council) meets twice a year, once on campus and once out in the state. The campus meeting is often focused on campus based activities and the educational outreach of specialists. The off-campus meeting focuses on programming at the county level. The Director of Extension also provides a system wide update and discusses program priorities and funding.

Montana stakeholders indicate that they are concerned about similar issues receiving attention across the nation. Many worry about job security and accessing health care in their rural community. Agriculture producers are concerned about holding a positive profit margin. Rural families wonder if local schools will remain open,

or conversely if overcrowding and transiency will continue to cause issues. In those areas where education can help address the issue, Montanans look to Extension as a resource so they can make choices and decisions that are best for their families, businesses and communities.

Budgets and staffing decisions are influenced, and aligned accordingly, by the input provided by the above mentioned groups.

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Agriculture
2	Energy and Natural Resources
3	Youth and Adult Development
4	Healthy Living, Nutrition and Food Safety
5	Housing and Built Environments
6	Community Development

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

Agriculture

2. Brief summary about Planned Program

Agriculture is a fundamental part of Montana's history and heritage and continues to be Montana's number one industry. Ranked second in the nation for the amount of acres in farm and ranchland, and in the top 10 nationally for the inventory of beef cattle and sheep, and production agriculture including: calf crop, lamb crop, honey, all wheat, barley, all hay, alfalfa hay, beans, peas, lentils, sugarbeets, flaxseed, safflower and canola, Montana plays a key role in the nation's agricultural economy, as well.

Global economic changes, fertilizer prices, drought and fire, weeds and pests, expanding export markets, market volatility and cultural changes all contribute to a challenging path for producers to remain profitable and sustainable in the industry. To be effective, many producers recognize the need to have the latest scientific-based information at their finger tips. Montana State University Extension fills a critical role in connecting the most current knowledge and best practices with the producer. The ability of specialists to collaborate with other research entities to find solutions and proactively address concerns, and for Extension to deliver that information to farmers and ranchers in their fields is critical to the ongoing success of Montana Agriculture.

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
112	Watershed Protection and Management	5%			
121	Management of Range Resources	10%			
205	Plant Management Systems	15%			
213	Weeds Affecting Plants	10%			
216	Integrated Pest Management Systems	15%			
301	Reproductive Performance of Animals	10%			
307	Animal Management Systems	10%			
311	Animal Diseases	5%			
601	Economics of Agricultural Production and Farm Management	5%			
602	Business Management, Finance, and Taxation	5%			
603	Market Economics	5%			
604	Marketing and Distribution Practices	5%			
	Total	100%			

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

1. Situation and priorities

Livestock production results in the greatest share of agriculture cash receipts in Montana. Volatile cattle and feed markets, as well as rising input costs and persistent drought conditions provide challenges to sustainable beef cattle production. The sheep industry has similar challenges; and has additional complications related to wool harvesting and marketing and the use of sheep for grazing and weeds management. Livestock producers seek out MSU Extension for the latest scientific-based information on how to adapt and remain profitable.

Small grain producers face challenges with higher input costs (fuel, fertilizer, and equipment), pest control and damage and increased irrigation costs. Producers know profit margins fluctuate over the years as they face roller coaster income and expenses. Operators must gain proficiency, not only at producing a commodity, but also at marketing systems, environmental regulations, market quality requirements and financial/business management. MSU Extension is a lifeline and partner in the success of Montana farmers.

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. With rangeland covering the majority of Montana's landscape, landowners and property managers need to have the latest knowledge related to appropriate management and MSU Extension fills that role across the state.

Most land managers agree the spread of invasive plants is the primary environmental threat to western wildlands/ranges. Noxious weed invasion reduces the ecological integrity of land and water, alters ecosystems, impacts wildlife habitat and threatens survival of native plants. MSU Extension manages the Private Pesticide Applicator Training Program for the State Department of Agriculture with both agencies actively participating in research projects on the subject, and widely interacting with producers, landowners and property managers to share the latest scientific-based information.

Cultural changes have led to more people growing their own gardens and sharing their produce within their communities in support of grow-local efforts. Gardening and horticulture have become a vital part of MSU Extension's work to provide consumers with up-to-date reliable information.

Farming and ranching are part of the heritage of many Montanans. Nowhere is this more important than on Montana's reservations where focus on improving quality of life is centered around agriculture and related traditions. The ability for youth and newcomers, as well as longstanding producers to be involved in sustaining and expanding the agriculture industry is important economically and culturally. MSU Extension programs assist youth and newcomers in establishing new operations.

2. Scope of the Program

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

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

1. Assumptions made for the Program

The Agriculture industry will continue to be a high priority for Montana and for MSU Extension.

Livestock and crop production challenges, including rising input costs, volatile markets, natural disaster and more, will continue and Extension will be needed to bring the latest knowledge to the fields where farmers and ranchers do their work.

Small acreage properties will continue to be purchased by newcomers with little knowledge about appropriate stewardship practices for the land. Extension will continue to fill a primary role in helping these newcomers create sound management practices for their property.

Without intervention efforts, the spread of weeds on public land will continue. Many public agencies are underfunded in the area of noxious weed control. The cost of agricultural inputs is increasing and as a result, producers may choose to ignore, rather than manage, noxious weeds. Extension is needed to help educate landowners, land managers and the public.

Producers are more likely to adopt suggested practices when demonstrations prove they are economically worthwhile.

2. Ultimate goal(s) of this Program

- 1. Livestock - increase profitability and knowledge and use of environmentally sustainable practices
- 2. Crops - increase profitability and knowledge and use of environmentally sustainable practices
- 3. Range - increase knowledge and use of environmentally sustainable practices and profitability as appropriate
- 4. Weed and Pest Control - increase knowledge and use of environmentally sustainable practices and improve profitability
- 5. Master Gardener/Horticulture - increase knowlege and use of environmentally sustainable practices and increase local food production
- 6. Junior Ag Loan Program - provide opportunities for youth to become involved in production agriculture
- 7. Increased educational opportunities in agricultural production and management specifically supporting reservation goals of strengthening youth and families through agriculture and leading to prosperity, food security and equity of resources.

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
2014	10.0	0.0	0.0	0.0
2015	10.0	0.0	0.0	0.0
2016	10.0	0.0	0.0	0.0
2017	10.0	0.0	0.0	0.0
2018	10.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

MSU Extension agents and specialists will work one-on-one with producers, landowners and consumers to identify and address individual problems and solutions. They will regularly answer specific questions through phone calls and emails and are a first contact for many Montanans. Agents and specialists will also offer classes, workshops, group discussions, demonstrations, field tours/trials and more. Agents, specialists and volunteers disseminate knowledge through farmer's markets, fairs and other community events.

MSU Extension also utilizes PSA's, newsletters, MONTGuides, Television, eXtension, listservs, blogs, radio and other media.

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 ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (Field trials/tours) 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (ublications)

3. Description of targeted audience

- Livestock Producers
- Commodity Associations
- Land Managers/Owners (small and large)
- Weed Control Professionals
- County Weed Boards
- Gardening Club members/people interested in gardening
- Small Grain Producers
- Native American Youth interested in agriculture

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Livestock: Number of producers attending meetings/workshops/clinics aimed at increasing profitability and knowledge of environmentally sustainable practices. Number of producers utilizing ration-balancing.
 - Crops: Number of producers attending workshops, field days, research plot sites and research center summaries. Number of people adopting conservation practices. Number of producers using pulse crops in rotation.
 - Range: Number of people participating in range monitoring programs and the Range Management Institute. Number of requests to identify or record new weeds found.
 - Weed and Pest Control: Number of people attending workshops, training, and/or tours. Number of people attending meetings on pesticide control and applicator training. Number of people being certified and re-certified for pesticide use.
 - Master Gardener/Horticulture: Number of people who become certified Master Gardeners. Amount of food donated and number of hours volunteered.
 - Junior Ag Loan Program: Number of youth completing quality assurance training and receiving loans.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Livestock: Increase number of producers using Extension information to successfully balance rations for the least-cost formulation. Increase number of people who successfully use knowledge gained through Extension interaction to improve profitability, meat quality and use of environmentally sustainable practices.
2	Crops: Increase in number of producers who improve their understanding of nutrient cycling, weed control, variety selection and alternative crop possibilities. Increase in number of farm operators who implement best practices to increase profitability and enhance long-term sustainability.
3	Range: Increase in number of producers and small acreage landowners who are aware of insect, weed and disease infestations as they begin so they can make timely management decisions. Increased number of producers/ranch managers who implement range monitoring activities which lead to improvement in resource management strategies.
4	Weed and Pest Control: Increase in number of applicators who are certified and employ safety precautions and risk management while using pesticides in the most environmentally and economically effective manner. Increased use of the Schutter Diagnostic Lab and specialists to identify pest, disease and plants in a timely manner, and provide appropriate recommendations.
5	Master Gardener/Horticulture: Increased number of certified Master Gardeners, increased amount of food donated to community partners and increased number of volunteer hours.
6	Junior Ag Loan Program: Youth who complete the finance and beef management training, successfully obtain a loan and use it for the purchase of livestock to begin or expand their herd.

Outcome # 1

1. Outcome Target

Livestock:

Increase number of producers using Extension information to successfully balance rations for the least-cost formulation.

Increase number of people who successfully use knowledge gained through Extension interaction to improve profitability, meat quality and use of environmentally sustainable practices.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 307 - Animal Management Systems
- 311 - Animal Diseases
- 601 - Economics of Agricultural Production and Farm Management
- 603 - Market Economics

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Crops:

Increase in number of producers who improve their understanding of nutrient cycling, weed control, variety selection and alternative crop possibilities. Increase in number of farm operators who implement best practices to increase profitability and enhance long-term sustainability.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

Range:

Increase in number of producers and small acreage landowners who are aware of insect, weed and disease infestations as they begin so they can make timely management decisions.

Increased number of producers/ranch managers who implement range monitoring activities which lead to improvement in resource management strategies.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 121 - Management of Range Resources
- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 4

1. Outcome Target

Weed and Pest Control:

Increase in number of applicators who are certified and employ safety precautions and risk management while using pesticides in the most environmentally and economically effective manner.

Increased use of the Schutter Diagnostic Lab and specialists to identify pest, disease and plants in a timely manner, and provide appropriate recommendations.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 5

1. Outcome Target

Master Gardener/Horticulture: Increased number of certified Master Gardeners, increased amount of food donated to community partners and increased number of volunteer hours.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 602 - Business Management, Finance, and Taxation

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 6

1. Outcome Target

Junior Ag Loan Program: Youth who complete the finance and beef management training, successfully obtain a loan and use it for the purchase of livestock to begin or expand their herd.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 307 - Animal Management Systems
- 311 - Animal Diseases
- 601 - Economics of Agricultural Production and Farm Management
- 602 - Business Management, Finance, and Taxation
- 603 - Market Economics

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

The weather will always be a factor over which producers have no control yet it effects their business greatly. In some parts of the state drought has caused ranchers to sell livestock and farmers to decide when, what and if to plant. Both are addressing weed and other pest issues brought on by stressed plants. Like other business entities, the economy has been difficult for agriculture producers to negotiate as well. The economy, along with health related issues, has also contributed to an increase in the number of people interested in growing their own food. Generally, the presence of Extension throughout the state will help to mitigate any external factors which arise for Montana agriculture.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

MSU Extension recently completed a new strategic plan which focuses on the integration of learning, discovery and engagement through all programming areas. Measurement of the impact of these efforts is a primary focus and work is currently under way to identify methods and means for accomplishing this. At this time, evaluations are frequently done before and after training in all these areas.

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Energy and Natural Resources

2. Brief summary about Planned Program

Since its beginning, Montana citizens have made use of abundant natural resources in order to make a living and survive on the land. Today, society has taken an increased interest in preserving and protecting these same resources that make Montana a unique and thriving state. Many Montanans own land but lack knowledge about how to best utilize the natural resources in a sustainable manner. For example, many industries, including livestock operations choose locations based on proximity to water sources; in spite of there being cases where these choices have had devastating consequences for the environment. MSU Extension programs work in collaboration with landowners, managers and industries to mitigate and avoid these issues.

Forests cover large areas of Montana and contribute to the economic base of the state while also serving as a critical natural resource for recreation, tourism and cultural purposes. Continual management and stewardship is required to maximize potential outputs, as well as for public safety, and to ensure a sustainable future. Water quality cuts across all entities and is an extremely important resource requiring intentional management, as well. Extension forestry and water quality programs touch the lives of Montanans all across the state.

According to the Montana Department of Commerce, Montana has more potential for energy development from existing and untapped diversified sources than any state in the nation. For example, it is #1 in US coal deposits, #1 in wind potential class 3 and above and has seen a 40% increase in oil production during the last decade. There are over 50 wind farms in various levels of production and more than 15 locations for potential geothermal energy. Biomass/biofuels have also seen an increase in interest and production. Education is needed for good decision making as it relates to energy and MSU Extension is in a position to help assist with that need. MSU Extension's Exploring Energy and Alternatives program (E3A) provides an extensive amount of information for consumers as well as many training opportunities for landowners, managers and individuals.

The eastern part of Montana has seen tremendous growth and expansion due to energy exploration in the Bakken Oil Foundation. Many landowners are being approached to sell their water and mineral rights but have little knowledge of the process to make good decisions. There are growing environmental, economic, social and community development challenges in the area. MSU Extension is exploring how to best collaborate with others around these issues to be able to make informed, science-based, sound decisions, follow best practices and establish priorities and strategies for minimizing damages and maximizing outcomes.

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
101	Appraisal of Soil Resources	5%			
102	Soil, Plant, Water, Nutrient Relationships	10%			
112	Watershed Protection and Management	5%			
121	Management of Range Resources	5%			
123	Management and Sustainability of Forest Resources	20%			
135	Aquatic and Terrestrial Wildlife	10%			
136	Conservation of Biological Diversity	10%			
605	Natural Resource and Environmental Economics	25%			
723	Hazards to Human Health and Safety	5%			
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	5%			
	Total	100%			

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

1. Situation and priorities

Natural resources in Montana are being impacted by the changing climate. Good management is necessary to keep pace with challenges brought on by evolving climatic conditions.

Forests and rivers are important in Montana because they provide timber products, clean water, recreation and wildlife habitat. Much of the state's forest acreage is privately owned. Extension offers private landowners and managers, as well as public land managers, extensive training opportunities and support in creating sound management strategies.

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. MSU Extension Water Quality programs help people feel comfortable that their drinking water is safe for their families by offering education and testing to consumers.

Many farm operators and landowners are interested in learning about energy alternatives and methods for reducing energy costs. MSU Extension's E3A program offers extensive resources and training in this area.

The eastern part of the state faces many unique challenges related to energy and natural resource development. MSU Extension is collaborating with others in the area to help find solutions to a wide range of concerns.

2. Scope of the Program

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

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

1. Assumptions made for the Program

Development in rural areas poses ongoing challenges.

Environmental restrictions related to water, air and pesticides will continue to increase.

Natural resources and environmental issues will continue to be a big influence on economic development and social and political decisions within Montana.

Extension natural resources and environmental programs are necessary to provide scientific information to help the general public and decision makers understand the complex interrelationships and consequences of natural resource and environmental management from a sound, science-based, neutral platform.

2. Ultimate goal(s) of this Program

Forestry - increase the knowledge of landowners and managers so they are able to create and follow stewardship plans to carefully manage their forested acreage.

Water Quality - increase the knowledge of landowners and managers so they utilize best practices to manage their water resources for livestock, crops and industry and increase the number of homeowners who test and manage their wells, assuring safe drinking water.

Energy Efficiency and Alternatives - increase access of consumers to resources and educational opportunities containing the latest science-based information on various energy alternatives and techniques for efficiency.

Natural Resource Development - MSU Extension is recognized as a strong team member, helping consumers, industry, landowners, and communities adapt to, and make research-based decisions, regarding rapid development issues related to the Bakken Oil Fields.

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
2014	3.4	0.0	0.0	0.0
2015	3.4	0.0	0.0	0.0
2016	3.0	0.0	0.0	0.0
2017	3.0	0.0	0.0	0.0
2018	3.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

MSU Extension agents and specialists will work one-on-one with producers, landowners and consumers to identify and address individual problems and solutions. They will continue to conduct workshops, trainings, group discussions, field tours and site visits that will address specific topics such as forest stewardship and water quality. MSU Extension will partner with local and state associations and organizations that are concerned about natural resource issues. In particular, MSU Extension specialists and agents will engage with leaders in eastern Montana to find ways in which Extension can provide meaningful resources and education/resarch while collaborating to solve problems and create strategies for future growth and development.

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 ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (Field Days) 	<ul style="list-style-type: none"> ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Newspaper articles, MontGuides) ● Other 2 (Websites)

3. Description of targeted audience

- Private forest land owners and public land managers
- Farmers/Ranchers/Ag Producers
- Small Acreage Land Owners
- Producers who operate Animal Feeding Operations
- Professional loggers/foresters
- Community leaders

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Forestry: Number of private forest owners and managers who participate in and successfully complete meetings/workshops/clinics aimed at forest stewardship. Number of landowners and managers who have forest stewardship plans and actively implement them.
 - Water Quality: Number of people attending Well Educated programs, who track water quality, regularly test their wells and receive information on how to help protect ground water resources. Number of people attending workshops and seminars to learn about watersheds and environmentally sustainable best practices.
 - Energy Efficiency and Alternatives: Number of consumers, landowners and industry professionals utilizing resources created and/or consolidated by MSU Extension's E3A program. Number of people successfully completing E3A trainings.
 - Natural Resource Development: Number of workshops and resources provided to assist landowners with leasing of mineral and water rights and other legal issues related to development. Number of collaborations with industry, agriculture and community leaders in eastern Montana.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Forestry: Increased number of private forest owners who have and implement forest stewardship plans that allow them to continue to provide economic, environmental and social benefits to Montanans. Increased number of people who gain knowledge about forestry management and sustainability issues and contribute to forest health through personal responsibility.
2	Water Quality: Increased number of homeowners regularly testing their wells and managing them for safe consumption and environmental soundness. Increased number of Montanans who utilize online Extension and other resources related to watershed protection, drinking water safety and other water quality topics.
3	Energy Efficiency and Alternatives: Increased number of consumers accessing and utilizing E3A resources and training to improve efficiency, reduce environmental impacts and lower costs.
4	Natural Resource Development: Increased number of collaborations with partners in eastern Montana as a result of the Bakken Oil Field and related issues. Increase in the number of landowners who are educated and able to make sound decisions about their water and mineral rights.

Outcome # 1

1. Outcome Target

Forestry: Increased number of private forest owners who have and implement forest stewardship plans that allow them to continue to provide economic, environmental and social benefits to Montanans. Increased number of people who gain knowledge about forestry management and sustainability issues and contribute to forest health through personal responsibility.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 123 - Management and Sustainability of Forest Resources
- 136 - Conservation of Biological Diversity
- 605 - Natural Resource and Environmental Economics

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Water Quality: Increased number of homeowners regularly testing their wells and managing them for safe consumption and environmental soundness. Increased number of Montanans who utilize online Extension and other resources related to watershed protection, drinking water safety and other water quality topics.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 112 - Watershed Protection and Management
- 605 - Natural Resource and Environmental Economics

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

Energy Efficiency and Alternatives: Increased number of consumers accessing and utilizing E3A resources and training to improve efficiency, reduce environmental impacts and lower costs.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 605 - Natural Resource and Environmental Economics
- 723 - Hazards to Human Health and Safety
- 803 - Sociological and Technological Change Affecting Individuals, Families, and Communities

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 4

1. Outcome Target

Natural Resource Development: Increased number of collaborations with partners in eastern Montana as a result of the Bakken Oil Field and related issues. Increase in the number of landowners who are educated and able to make sound decisions about their water and mineral rights.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 605 - Natural Resource and Environmental Economics
- 723 - Hazards to Human Health and Safety
- 803 - Sociological and Technological Change Affecting Individuals, Families, and Communities

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

The greatest of all the factors over which landowners have no control is the change in climate patterns. Some might reach the disaster level, but many are gradual. Natural resources are greatly impacted by the things over which we have little or no control leaving those who depend on these resources challenged to develop flexible management plans that ensure viability and profitability.

Growth in eastern Montana presents many challenges and opportunities which are and will continue to be affected by national and state policy changes, funding for energy development issues, taxation policies and more. The rapid changes result in a great need for Extension to provide sound science-based resources and facilitate community and leadership development to mitigate political and social factors.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

MSU Extension recently completed a new strategic plan which focuses on the integration of learning, discovery and engagement through all programming areas. Measurement of the impact of these efforts is a primary focus and work is currently underway to identify methods and means for accomplishing this.

Some programs in this area are connected to research projects that have specific targets established and strategies outlined for collecting data. Pre and post surveys are done in forestry and water quality classes, as well as with the E3A training programs.

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Youth and Adult Development

2. Brief summary about Planned Program

Young people will grow up with or without adult help. Positive 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. MSU Extension provides the support and framework for Montana's largest youth development organization, Montana 4-H.

Adults also need opportunities for development. MSU Extension recognizes that families do not come in one size or shape and provides resources to help them navigate diverse trials and tribulations. Regardless of the community, families are concerned about giving their youth skills to become competent, contributing and caring citizens. They are concerned about being good care givers whether as parents or grandparents. They are concerned about the elderly and planning for their own aging process to lessen worries for their children and having resources to take care of themselves. They often look to MSU Extension for solutions and resources.

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
307	Animal Management Systems	5%			
602	Business Management, Finance, and Taxation	5%			
801	Individual and Family Resource Management	15%			
802	Human Development and Family Well-Being	25%			
806	Youth Development	50%			
	Total	100%			

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

1. Situation and priorities

During the stakeholder input process, youth issues continue to surface as a priority of Montanans. The MSU Extension Montana 4-H program provides opportunities for life skill and competency development focused on helping youth to become strong, contributing members of their families, communities, and world. Stakeholders recognize the 4-H program is an effective, proven venue for youth to explore topics related to citizenship, healthy living and science, as well as to learn about leadership, volunteerism and community service. Youth involved in 4-H learn how to lead, follow and be contributing members of a team; and to apply their knowledge and skills in other environments.

The general population of Montana is aging. The fastest growing age group in the state is individuals over 85. Along with extended life expectancy comes a variety of chronic illnesses. Most elderly Montanans live on their own or with a spouse, yet they often require either direct or managed care. MSU Extension offers resources for caretakers to help address issues related to rural health.

Between 1990-2000, there was a 53% increase in the number of grandparents in Montana responsible for caring for their grandchildren (9th nationally). The US Census (2000) reported 6,053 grandparents hold the primary responsibility for the basic needs of their grandchildren, while 11,098 grandparents lived in households with one or more grandchildren 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. The two-parent nuclear family structure is no longer the majority of families. Parents and caregivers often need assistance. MSU Extension offers resources in this area, helping to reduce the risk of elderly or child abuse and neglect and strengthen the family unit.

Montanans are interested in the wise use and handling of their financial resources. Statistics reveal that 70% of Montanans 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 intergenerational transfers. Congress has made changes in the federal estate and gift tax laws. Education is needed to provide families, including those living on reservations, with information about the impact of state and federal laws.

2. Scope of the Program

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

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

1. Assumptions made for the Program

There is a continuing need for youth to learn skills they can use over time to become contributing adults.

The 4-H program has been providing positive youth development and teaching life skills to young people for nearly a century and will continue to do the same in the future.

Youth learn best by being involved in hands-on experiences.

Youth need safe places and positive relationships with caring adults.

The recent economic crisis and worldwide issues have affected all systems that impact youth.

Parents have less income and are forced to change their lifestyles, communities are challenged to provide for their citizens, future careers and employable skills have changed and new laws are enacted affecting communities, school and public policies.

The number of people caring for aging family members will likely increase over time.

Families will continue to have concerns about having enough money for the families to live comfortably through retirement years.

Estate planning is a difficult topic that many people avoid.

2. Ultimate goal(s) of this Program

Youth Competency Development: 4-H Youth programs will provide clubs, classes, training, camps and other activities which lead to the increased knowledge and aptitude of participants within specific competency areas.

Youth Life Skill Development: Opportunities provided through 4-H youth programs will lead to a demonstrated increase in specific life skills of participating youth.

Leadership/Volunteer Development: Youth and adults completing training will demonstrate improved leadership skills and adoption of positive youth development practices.

Military Partnerships: Partnerships with military and other organizations will be effective in providing resources for military families, as measured by increases in knowledge of how to access resources and increased ability to cope with deployments and other unique military related situations.

Parenting and Caregiving: Participants of parenting and caregiving classes will have increased knowledge and be actively using skills learned through Extension programming.

Personal Finances: Montanans will have access to classes, seminars, online training and printed resources to assist them in making personal finance decisions related to saving, estate planning and more.

Reservations: Support will increase for reservation goals to promote traditional culture and intergenerational pride through specifically targeted cultural programming that fosters healthy, meaningful relationships among youth, families and elders.

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
2014	12.0	0.0	0.0	0.0
2015	12.0	0.0	0.0	0.0
2016	12.0	0.0	0.0	0.0
2017	12.0	0.0	0.0	0.0
2018	12.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

- Conduct Workshops and 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
- Facilitate small support groups for caregivers
- Develop printed and online resources

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 ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (Field trips) ● Other 2 (Camps) 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Facebook)

3. Description of targeted audience

Youth aged 5-19
Parents of youth involved in 4-H
Adult and youth volunteer leaders
Professionals involved with youth development
School administrators and teachers
Military families
Rural Montana families, landowners and business owners
Caregivers
Healthcare providers and services

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
 - Number of patents submitted
 - Number of peer reviewed publications
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Youth competency development: 4-H programs and activities provide youth with training and support to foster the development of new skills and attributes.
- Youth life skill development: 4-H Youth programs provide activities and projects to help youth build specific life skills.
- Leadership/Volunteer Development: Classes, seminars and resources for youth and adults who volunteer in youth programs to help them become better, more effective leaders.
- Military Family Partnerships: Positive interactions with military families through partnerships with other organizations and schools to access resources and support opportunities.
- Parenting/Caregiving: Easily accessible classes and support groups for parents and caregivers.
- Personal Finances: Easily accessible classes, training and resources that provide critical information related to personal finances.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Youth competency development: Increased number of youth participating in 4-H projects and activities and demonstrating increased knowledge and ability in specific competency areas (including but not limited to science, healthy living and citizenship).
2	Youth life skill development: Increased number of youth participating in 4-H activities and demonstrating increased knowledge and ability in specific life skill areas (including but not limited to teamwork, communication skills, public speaking, etc.)
3	Leadership/Volunteer Development: Increased number of youth and adults who have received leadership training and demonstrate increased knowledge and ability as a result of the training.
4	Military Family Partnerships: Increased interaction with military families resulting in increased capacity of families to access resources and support.
5	Parenting/Caregiving: Increased number of opportunities for parents and caregivers to access support and resources and increased knowledge and ability of participants as a result of those efforts.
6	Personal Finances: Increased number of participants in classes and training and increased knowledge and aptitude of those participants based on pre and post survey results.

Outcome # 1

1. Outcome Target

Youth competency development: Increased number of youth participating in 4-H projects and activities and demonstrating increased knowledge and ability in specific competency areas (including but not limited to science, healthy living and citizenship.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 307 - Animal Management Systems
- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Youth life skill development: Increased number of youth participating in 4-H activities and demonstrating increased knowledge and ability in specific life skill areas (including but not limited to teamwork, communication skills, public speaking, etc.)

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

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

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

Leadership/Volunteer Development: Increased number of youth and adults who have received leadership training and demonstrate increased knowledge and ability as a result of the training.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 4

1. Outcome Target

Military Family Partnerships: Increased interaction with military families resulting in increased capacity of families to access resources and support.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 5

1. Outcome Target

Parenting/Caregiving: Increased number of opportunities for parents and caregivers to access support and resources and increased knowledge and ability of participants as a result of those efforts.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

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

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 6

1. Outcome Target

Personal Finances: Increased number of participants in classes and training and increased knowledge and aptitude of those participants based on pre and post survey results.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

Natural Disasters can affect family finances as well as the health of the family structure. The economy and changes to government benefits could also be a factor as healthcare revisions and other changes are implemented. Military deployments and benefits could be affected by budgeting and government decisions.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

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.

Pre and post surveys are utilized in most leadership, finance and other classes and opportunities including those for military families, parents and caregivers.

There is some "loss" of ability to measure impacts as Extension's direct involvement minimizes. For instance, as Grandparents who are parenting grandchildren learn about resources and form support groups, they often continue to meet, share and learn without direct Extension involvement; clearly a desired outcome yet one that makes quantifying difficult.

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Healthy Living, Nutrition and Food Safety

2. Brief summary about Planned Program

Statistics show the American population is becoming more sedentary and heavier in weight. These statistics include all ages; children to elderly. The number of people considered obese has increased dramatically in the past 10 years. Weight issues and lack of exercise are linked to a number of health problems including diabetes, high blood pressure and heart disease. Montana stakeholders acknowledge these trends and view health as being a major concern for both adults and children. This stakeholder 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 to achieve a healthy lifestyle.

Programs delivered under this planned program category also focus on safe food. It involves food handling practices and protocols by food service managers/employees and food preservation techniques generally used at home and on farms. Extension has long been recognized as one of the best sources of reliable information related to food safety, so it is appropriate to maintain a strong presence in this educational effort.

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
702	Requirements and Function of Nutrients and Other Food Components	5%			
703	Nutrition Education and Behavior	30%			
704	Nutrition and Hunger in the Population	10%			
724	Healthy Lifestyle	20%			
801	Individual and Family Resource Management	10%			
802	Human Development and Family Well-Being	20%			
805	Community Institutions, Health, and Social Services	5%			
	Total	100%			

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

1. Situation and priorities

The societal costs of poor health due to lack of good nutrition decisions and lack of physical activity are on the rise. When considering 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 provides educational programming that helps youth and adults make well informed decisions about their health as it relates to nutrition, physical activity and even basic health testing procedures. Through changes in health related attitudes and behaviors, the rising obesity rates can be reversed.

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 in 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 report eating fewer than the recommended daily intake of fruits and vegetables. Sixteen percent report having been told by a doctor that they had diabetes. While all youth and adults need to be concerned about nutrition, those who qualify as seniors are among those most in need.

One out of 65 Montanans experience an illness related to unsafe food handling practices. 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, as well as PowWow workers on reservations.

Montana has an abundance of nutritious seasonal, wild and homegrown foods appropriate for home preservation. It is critical that those who practice preserving and processing foods at home have access to the most reliable information available concerning food safety and food quality. A study done by CSREES-USDA in 2000, revealed a high percentage of home food processors are using practices that put them at risk for food borne illness and economic losses due to food spoilage. As a result of this study and more recent updates to the study, there is a renewed need to provide programming for home food preservers. The sustainable food trends and current economic downfall have also contributed to a renewed interest in home food preservation.

2. Scope of the Program

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

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

1. Assumptions made for the Program

By employing a health-centered (rather than a weight-centered) approach to well-being, people can improve their health by developing lifestyle habits rather than by trying to achieve a specific body size, shape or weight. Through 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 successfully addressing chronic disease issues as well as achieving a healthy lifestyle.

Funding for nutrition education for limited resource families is in jeopardy.

Food preservation will continue to be of interest while the economy is slow and as the culture changes to support more local grown food priorities.

Rural people are often isolated, have little access to healthcare and intervention or experience healthy food deserts.

2. Ultimate goal(s) of this Program

Healthy Lifestyles: Classes and programs directed toward healthy living reach adult and youth audiences in rural communities with participation in the Montana Department of Health and Human Services Cardiovascular Health program utilized to provide heartrate monitoring and education in rural

areas.

Nutrition: Classes, programs, publications and other resources are offered throughout Montana and online to specifically address the nutrition needs of youth, adults and the elderly.

EFNEP/SNAP-ED: The NEP curriculum is broadly utilized to educate youth and adults about food safety, food resource management, and nutrition.

Food Safety: Classes, seminars, formal trainings and additional resources are readily available and used by a an increased number of Montanans.

Food Preservation: County agents provide specialized training and up-to-date resources and knowledge to consumers through classes which are well known and respected and regularly follow-up with direct responses to questions from individual consumers.

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
2014	2.6	0.0	0.0	0.0
2015	2.6	0.0	0.0	0.0
2016	2.5	0.0	0.0	0.0
2017	2.5	0.0	0.0	0.0
2018	2.5	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

- Conduct train the trainer workshops
- Conduct workshops, seminars, meetings
- Facilitate meetings, discussion groups, focus groups
- Develop local and state partnerships
- Develop MontGuides (fact sheets), publications, website materials, video based materials
- Conduct web based, interactive training/education opportunities

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 ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations ● Other 1 (MontGuides (Fact Sheets)) 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● eXtension web sites ● Web sites other than eXtension

3. Description of targeted audience

- Low income adults
- Low income youth
- Adults that are FSP eligible
- Youth from FSP eligible households
- Teachers in the Montana School System
- Middle to older aged women, especially those living in rural areas
- Parents and youth living in rural areas
- Working people
- Elderly and shut-in people

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Healthy Lifestyles: Classes and resources, printed and online, are readily available to Montanans to gain knowledge related to physical activities, nutrition and the need for medical testing.
- Nutrition: Classes, publications and online resources are utilized to provide current information regarding nutrition, food resource management tools and other dietary needs directly to Montanans wherever they may be.
- EFNEP/SNAP-Ed: The NEP curriculum is utilized to teach adults and youth who qualify a series of lessons related to nutrition and food resource management.
- Food Safety: Provide a number of train the trainer sessions for County Agents so they can offer food safety education classes and ServSafe training to local sanitarians school food service personnel, volunteers and others.
- Food preservation: Provide training and updates to County Extension Agents so they can conduct trainings and answer questions for home preservers.

- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Healthy Lifestyles: Increased participation in healthy lifestyle programming and health monitoring that leads to increased knowledge and healthy lifestyle choices.
2	Nutrition: Increased participation in nutrition classes and training and use of online and printed resources leading to changes in nutrition habits.
3	EFNEP/SNAP-ed: Increased participation by eligible citizens, particularly the elderly, leading to increased knowledge and use of knowledge related to nutrition and food resource management.
4	Food Safety: Increased participation in food safety classes, trainings and increased knowledge and utilization of concepts learned by participants.
5	Food preservation: Increased participation in food preservation classes and increased knowledge and utilization of concepts learned by participants.

Outcome # 1

1. Outcome Target

Healthy Lifestyles: Increased participation in healthy lifestyle programming and health monitoring that leads to increased knowledge and healthy lifestyle choices.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Nutrition: Increased participation in nutrition classes and training and use of online and printed resources leading to changes in nutrition habits.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

EFNEP/SNAP-ed: Increased participation by eligible citizens, particularly the elderly, leading to increased knowledge and use of knowledge related to nutrition and food resource management.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 4

1. Outcome Target

Food Safety: Increased participation in food safety classes, trainings and increased knowledge and utilization of concepts learned by participants.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 5

1. Outcome Target

Food preservation: Increased participation in food preservation classes and increased knowledge and utilization of concepts learned by participants.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 724 - Healthy Lifestyle
- 801 - Individual and Family Resource Management
- 802 - Human Development and Family Well-Being
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

The national budget crisis and ongoing disagreement in the Congress could lead to funding and benefit changes that directly affect Montana's children, elderly, ill, veterans and rural people - many living at or near poverty. Changes in harvests or hunting opportunities as a result of weather or policy changes could affect food security.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

Most programs use pre- and post- surveys to evaluate effectiveness.

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Housing and Built Environments

2. Brief summary about Planned Program

As the economy has struggled, the cost of energy has increased (especially as a percentage of fixed costs). With higher utility bills, consumers are requesting assistance for energy conservation and weatherization, seeking information on energy-efficient construction and remodeling and purchasing EnergyStar appliances. The MSU Extension Housing and Environmental Health Program has become a national leader in providing the latest science-based resources and comprehensive training around weatherization and housing safety.

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

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

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

6. Expending other than formula funds or state-matching funds : 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
111	Conservation and Efficient Use of Water	10%			
133	Pollution Prevention and Mitigation	15%			
402	Engineering Systems and Equipment	10%			
403	Waste Disposal, Recycling, and Reuse	10%			
605	Natural Resource and Environmental Economics	10%			
608	Community Resource Planning and Development	10%			
723	Hazards to Human Health and Safety	15%			
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures	20%			
	Total	100%			

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

1. Situation and priorities

Energy is a significant expense for nearly all Montanans and a sizeable input cost for agricultural producers. Energy prices have been volatile in recent years. Environmental concerns are growing due to concern about greenhouse gas levels. Both of these factors have encouraged Montanans to utilize energy more effectively.

Additionally, the increasing energy costs and a national economic slow down are negatively impacting Montana businesses' ability to finance projects. Montana's small businesses can no longer pass on to consumers higher costs driven by escalating energy costs. A recent study by the Small Business Administration found that small businesses pay 30% more for electricity than large businesses. In order for Montana businesses to compete in the national market, flexible and innovative tools to reduce energy costs are necessary.

2. Scope of the Program

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

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

1. Assumptions made for the Program

Montanans will continue to seek ways to be more energy efficient.

Montanans will continue to want to use new forms of energy in homes and businesses that are economical, clean and renewable

Montanans will be willing to learn and use energy saving practices related to their home energy costs.

2. Ultimate goal(s) of this Program

Training Residential Consumers: Consumers will have easy access to the latest science-based knowledge related to reducing energy consumption and cost within their residences.

Training Professional Contractors: Training opportunities for construction professionals in the areas of weatherization and energy efficiency will be readily available in multiple mediums including one-on-one classes, online classes, professional certification programs, webinars and more.

Housing and Environmental Quality: Housing specialists will offer classes, site evaluations, and resources that assist consumers and contractors with issues related to mold, lead-based paint, water safety and more.

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
2014	2.3	0.0	0.0	0.0
2015	2.3	0.0	0.0	0.0
2016	2.3	0.0	0.0	0.0
2017	2.3	0.0	0.0	0.0
2018	2.3	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

- Produce guides on current energy topics.
- Conduct community meetings on energy topics
- Partner with agencies, local and tribal government, organizations and industry.
- Conduct meetings and seminars on methods for evaluating alternative energy opportunities for residential consumers and contractors.
- Conduct workshops on home energy for the building/remodeling industry.

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 ● Workshop ● Group Discussion ● Demonstrations 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Publications)

3. Description of targeted audience

- Home owners and renters - energy consumers
- People interested in becoming involved with creating alternative energy opportunities
- Small businesses by SBA definition
- Building Industry
- Montana Building Industry Association
- Montana Department of Environmental Quality
- Montana AARP
- Human Resource Development Councils

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Training residential consumers: Classes will be offered online and in person for consumers interested in reducing energy costs and consumption.
 - Training Professional Contractors: Training and professional certification will be offered for those in the construction and weatherization industries; giving professionals the latest science-based information and technologies available.
 - Housing and Environmental Quality: Training opportunities and up-to-date resources related to housing safety will be available for consumers and contractors.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Training Residential Consumers: Consumers will demonstrate and utilize increased knowledge related to weatherization and making homes more energy efficient.
2	Training Professional Contractors: Building and weatherization professionals will have the knowledge and use the tools or materials needed to remodel or construct safe, energy efficient housing.
3	Housing and Environmental Quality: Increased number of homes cleared of mold and lead-based paint issues and more residents living in safe conditions.

Outcome # 1

1. Outcome Target

Training Residential Consumers: Consumers will demonstrate and utilize increased knowledge related to weatherization and making homes more energy efficient.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 133 - Pollution Prevention and Mitigation
- 403 - Waste Disposal, Recycling, and Reuse
- 605 - Natural Resource and Environmental Economics
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Training Professional Contractors: Building and weatherization professionals will have the knowledge and use the tools or materials needed to remodel or construct safe, energy efficient housing.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 133 - Pollution Prevention and Mitigation
- 402 - Engineering Systems and Equipment
- 403 - Waste Disposal, Recycling, and Reuse
- 605 - Natural Resource and Environmental Economics
- 723 - Hazards to Human Health and Safety
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

Housing and Environmental Quality: Increased number of homes cleared of mold and lead-based paint issues and more residents living in safe conditions.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 133 - Pollution Prevention and Mitigation
- 402 - Engineering Systems and Equipment
- 403 - Waste Disposal, Recycling, and Reuse
- 605 - Natural Resource and Environmental Economics
- 608 - Community Resource Planning and Development
- 723 - Hazards to Human Health and Safety
- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

The need to determine alternative energy sources will continue to be a priority for the national government as well as local entities. Costs of energy will continue to fluctuate making it difficult for community and individual planning as many of the renewable energy sources are dependant on weather conditions. Housing issues in eastern part of Montana will continue to evolve as transient population settles or leaves. The response of the community will be based on resources made available for public housing etc.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

These programs can be evaluated based on participation in training and pre and post education surveys. Actual energy and cost savings are predicted by weatherization professionals based on services performed and reduced energy consumption.

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Community Development

2. Brief summary about Planned Program

Montana's large size and small population over a wide range of landscapes creates unique challenges and opportunities for communities. MSU Extension agents live and work in the communities they serve and provide a historical, trusted link connecting leaders and interest groups and focusing efforts toward community vitality. Over the next 10 years, the Montana Community Foundation estimates there will be a large transfer of wealth taking place which could greatly impact the survival and success of many small towns. MSU Extension supports community development by helping establish community foundations and other organizations that focus on long-term strategic planning, fundraising, grant making, endowment building and community collaboration. In addition, Extension provides leadership and government training, and often coordinates and/or participates in community partnerships and projects at the local, county and state level.

MSU Extension also plays a vital role in proactively planning for and managing disasters. Agents and specialists are able to quickly organize informational meetings, resources and follow-up. Several participate as statewide communications liaisons who are charged, in an emergency, with quickly identifying immediate needs, what those needs are and how to meet them. Extension agents often are integral members of preparation teams who plan extensively to respond to disasters/emergencies that could hit a community.

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

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

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

6. Expending other than formula funds or state-matching funds : 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	20%			
805	Community Institutions, Health, and Social Services	10%			
	Total	100%			

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

1. Situation and priorities

Communities face growing challenges related to the economy, changing climate, growth/declining growth, aging population, transfer of wealth and more. Because of their location, embedded within communities, local agents are often strong community leaders with historical and trusted links they can use to build collaborations and work toward common good. One major focus of MSU Extension Community Development is to help build community resources through the development of foundations and endowments as well as long-term strategic planning.

Montana has more than 11,000 public employees who are responsible for more than \$1 billion in county and city funds. The MSU Extension Local Government Center is the only entity offering training, technical assistance and research organization of its kind. The LGC and Community Development programming provide training for volunteers and elected officials who often have no technical background or directly-related education.

Citizens throughout the state need to be aware of local/community emergency plans and services available if a disaster should occur. MSU Extension frequently is very involved with communication before and during a disaster as well as contributing to extensive planning to make sure that individuals and communities are ready for disasterous situations.

2. Scope of the Program

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

- Integrated Research and Extension

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

1. Assumptions made for the Program

Evidence shows that communities who develop leadership skills and set specific goals and strategically plan to accomplish a united vision are more successful.

Training for people serving on boards, councils and committees can lead to better local governance.

Disasters including wildfire and drought will happen and being prepared limits negative impacts.

2. Ultimate goal(s) of this Program

Community Resource Development: Partnerships with community groups lead to the development and success of community foundations and endowments which maintain wealth within communities and support strong strategic planning.

Governance and Citizen Leadership: Training and support for local and county elected and public officials and volunteers significantly reduces liability and inefficiencies of local and county government.

Emergency/Disaster Planning and Management: An increased number of communities have clearly defined plans for managing disasters and citizens are aware of those plans and the resources available to them.

Community Development with Tribal Populations: Targeted efforts to collaborate with tribal communities result in achieving carefully developed strategic goals.

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
2014	5.2	0.0	0.0	0.0
2015	5.2	0.0	0.0	0.0
2016	5.0	0.0	0.0	0.0
2017	5.2	0.0	0.0	0.0
2018	5.2	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.

Work to plan for potential disasters that may occur in a community, e.g., EDEN.

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 ● Workshop ● Group Discussion ● Demonstrations ● Other 1 (MontGuides (Fact Sheets)) 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Publications)

3. Description of targeted audience

- Business and Community Leaders
- Local Development Entities
- Chamber of Commerce Members
- Tourism Leadership - local/state
- County and City Government
- County DES, Law Enforcement Emergency Response Coordinators
- Current community leadership/potential community leaders
- Landowners
- Adults/Youth serving on Boards
- Elected officials
- Tribal members

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Community Resource Development: Number of newly created Community Foundations or endowments or similar collaborations which keep wealth within the community to be used toward common strategic initiatives.
 - Governance and Citizen Leadership: Number of elected and public officials and volunteers who complete training offered through Extension Community Development and the MSU Extension Local Government Center.
 - Emergency/Disaster Planning and Management: Number of communities with current disaster response plans and the number of citizens and leaders who complete workshops/presentations and activities focused on disaster mitigation.
 - Community Development with Tribal Populations: Number of collaborations with tribes focused around community development issues.
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Community Resource Development: Increased number of Community Foundations and endowments and increased participation of community members toward established community priorities.
2	Citizen Leadership and Good Governance: Increased number of people serving on boards, councils and/or committees who are prepared for the responsibilities/authorities of the entity.
3	Emergency/Disaster Planning and Management: Increased number of opportunities for communities to learn how to create/update clear disaster mitigation plans and effective and efficient leadership by Extension personnel during emergencies.
4	Community Development with Tribal Populations: Increased number of collaborations with tribes to address specific community development priorities.

Outcome # 1

1. Outcome Target

Community Resource Development: Increased number of Community Foundations and endowments and increased participation of community members toward established community priorities.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families, and Communities
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Citizen Leadership and Good Governance: Increased number of people serving on boards, councils and/or committees who are prepared for the responsibilities/authorities of the entity.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families, and Communities
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

Emergency/Disaster Planning and Management: Increased number of opportunities for communities to learn how to create/update clear disaster mitigation plans and effective and efficient leadership by Extension personnel during emergencies.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 723 - Hazards to Human Health and Safety
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 4

1. Outcome Target

Community Development with Tribal Populations: Increased number of collaborations with tribes to address specific community development priorities.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 805 - Community Institutions, Health, and Social Services

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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

Description

Outcomes may be affected by significant natural or other emergency/disasters. Particular in areas around the Bakken Oil Fields, community development is facing challenges that will be affected by legislation (state and federal), market trends and more. As federal funding becomes less sure, local communities will be required to pick up pieces and Extension will have a clear role in pulling together resources (financial and human) to be most effective.

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

MSU Extension recently completed a new strategic plan which focuses on the integration of learning, discovery and engagement through all programming areas. Measurement of the impact of these efforts is a primary focus and work is currently under way to identify methods and means for accomplishing this. Currently pre- and post- surveys and are the most common evaluation tool. In some cases the evaluation will be based on the actual number of new community foundaitons and the dollars raised or specific impacts within individual communities.