

2007 University of Wyoming Combined Research and Extension Plan of Work

Brief Summary about Plan of Work

Agriculture is at a crossroads and faces many challenges and opportunities in the 21st century. Agriculture, as well as land-grant institutions, are challenged to compete in a global economy while still responding to the needs of a diverse U.S. population. Ensuring that agriculture remains profitable and sustainable, while addressing environmental concerns, places new demands on the industry. Issues involving production agriculture, natural resource management, and quality of life generate diverse research and education directives. Stakeholders have been vital in identification and prioritization of needs. Strategies emphasize the engagement of Wyoming's people to improve and develop relevant and applied research and extension programming. The College of Agriculture has a mission to serve the educational and information needs of students, Wyoming citizens and communities, and the global community by providing and distributing unbiased, scientifically sound information on production agriculture, natural resource management, and quality of life issues. The mission of the University of Wyoming Cooperative Extension Service is to provide lifelong learning opportunities for the people of Wyoming and empower them to make choices that enhance their quality of life. Livestock continues to be a major component of Wyoming's agriculture. Forage-based animal agriculture is the only basic industry found in all 23 Wyoming counties, and marketing of livestock and livestock products accounts for approximately 78 percent of statewide agricultural cash receipts. Grazing animals convert grass from rangeland and forage (including alfalfa and crop aftermath) from cultivated lands into marketable products, therefore filling a demand for human consumption. Technological changes in production and processing of agricultural commodities, along with changing consumer demands, are altering the markets for producers, processors, and consumers. In this new era of production, processing and environmental issues will be driven by consumer demands and concerns. It is important to remember that environmental problems, economic changes, diseases, and social trends are contained neither by state or international borders. Wyoming's geographic isolation provides no protection from broad global issues and influences. The people of Wyoming, particularly those in rural areas, have needs that demand knowledge and skills in the social and human sciences. Examples of these needs are divestiture of the federal governments responsibilities in human services, balances between environmental protection and economic development, child and youth development, workforce preparedness, maintaining and ensuring a quality food supply, adjustments to significant demographic changes such as aging populations and geographic population shifts, and an increased impact of global economics and issues on U.S. markets and communities. Planned programs for research and extension at the University of Wyoming reflect efforts in five initiative areas: Profitable and Sustainable Agriculture Systems (PSAS), Nutrition and Food Safety (NFS), Sustainable Management of Rangeland Resources (SMRR), 4-H and Youth Development (4-H), and Community Development Education (CDE).

Estimated number of professional FTEs/SYs total in the State.

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 103.0 | 0.0 | 49.6 | 0.0 |
| 2008 | 105.0 | 0.0 | 50.9 | 0.0 |
| 2009 | 105.0 | 0.0 | 50.9 | 0.0 |
| 2010 | 105.0 | 0.0 | 50.9 | 0.0 |
| 2011 | 105.0 | 0.0 | 50.9 | 0.0 |

Merit Review Process

The merit review process that will be employed during the 5-Year Plan of Work cycle

- Internal University Panel
- External University Panel
- External Non-University Panel
- Combined External and Internal University Panel
- Combined External and Internal University External Non-University Panel
- Expert Peer Review

Brief explanation

The merit review process for extension programs covers all programs conducted by UW CES. A team leadership model is utilized to review program plans and direction for CES programs as outlined in the 2003 UW CES Strategic Implementation Plan. Program initiative teams develop and review programs on an annual basis. Nine area external advisory teams comprised of stakeholders review CES programs annually. Teams make decisions to maintain, modify, or create new programs to meet the needs identified through external and internal stakeholder input. Projects supported with formula funds (Hatch, Multi-State, McIntire-Stennis, Animal Health) must be approved projects. The project proposal is transmitted to the department head and the head appoints a minimum of two scientific reviewers who are knowledgeable in the field to review the proposal. After a proposal is revised based on the above review, it is transmitted to the Experiment Station Director. The director's office assigns three scientific reviewers who are knowledgeable in the field to review the proposal. The Wyoming Agricultural Experiment Station administers an internal competitive grants program using a portion of its federal dollars. Proposals are reviewed by a ten member university-wide committee. Each proposal is also sent to a minimum of two external reviewers. The committee submits recommendations for project funding to the AES director.

Evaluation of Multis & Joint Activities

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

Faculty and CES specialists report multi-state and integrated activities through the UW College of Agriculture faculty update, cross-discipline activities, multi-state, and joint research have been common in the past, so these requirements are not new to Wyoming. Joint research can be audited through the projects that were at one time called regional projects. In UW's Plan of Work 2007-2011, Wyoming will commit 25 percent of its Hatch funds to the integrated activities; Extension has also committed 25 percent which are submitted annually. CES will annually conduct a survey of field educators to document multi-state activities. The strategic plan for the College of Agriculture calls for collaboration in all three functions, instruction, research, and outreach. To encourage multi-disciplinary and collaborative research efforts, the Wyoming Agricultural Experiment Station established a competitive grants program that emphasizes research across disciplines and colleges. Multi-disciplinary and integrated research efforts are quite common in the College of Agriculture. Over half of the research projects are integrated and the majority of those are multi-disciplinary. This is particularly true of the research efforts dealing with competitiveness and profitability of agriculture. Initiative teams formed as a result of the CES strategic plan have members representing CES educators, state specialists and faculty members, and UW College of Agriculture department heads. The intent of the initiative teams is to build communication and develop a more integrated program for research and extension. The CES strategic plan has identified five initiative areas which provide greater focus for extension personnel. Those initiatives redefined by stakeholders are Profitable and Sustainable Agriculture, 4-H/Youth Development, Nutrition and Food Safety, Rangeland Resources, and Community Development Education. The programs identified in the College of Agriculture's 5-Year Plan of Work address the critical issues of strategic importance for the state and region. These issues were identified through extensive input from research and teaching faculty, CES personnel, and college stakeholders during the college's strategic planning process. The five program initiatives listed in the 5-Year Plan of Work are consistent with those at the national level. Researchers at UW's College of Agriculture are involved in approximately 18 multi-state projects. The college's researchers have also been successful with research involving multi-institutions. There is also on-going multi-institution research programming through the R&E Centers. In addition, researchers have been successful in integrating research programs with various federal and state agencies and organizations.

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

All counties have targeted advisory meetings to gain stakeholder input on reaching limited resource audiences in the Cent\$ible Nutrition Program (EFNEP). County 4-H staff have established 4-H Expansion and Review committees to specifically address outreach efforts toward underserved youth audiences. In addition, the Research and Extension Centers located around the state have targeted under-represented populations to serve as members of advisory boards. Training has been provided for staff to encourage diversity in representation on advisory committees and in program planning. County personnel also utilize

collaborative partners to learn needs within communities of the state. CES has partnered with the Natural Resource Conservation Service (NRCS) with representatives meeting quarterly to assess joint needs and work cooperatively in development and delivery of programs. Each of the three Research & Extension Centers has an advisory committee that meets annually. These advisory committees provide information on existing research and outreach programs and input regarding priority needs for research and outreach. Planned programs will incorporate stakeholder input on reaching underserved audiences in all planning and delivery efforts.

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

The programs describe the expected outcomes and impacts. Each program utilized a logic model in planning which clearly outlines expected outcomes and plans for evaluation. Each of the research faculty, educators, and specialists will write impact statements, some of which are used for the impact reporting to CSREES and others for county commissioners, state and national legislators, university administration, and clientele. The College's 5-Year Plan of Work describes the expected outcomes and impact for each of the five initiatives. Information concerning the expected outcomes and impacts is presented in an evaluative manner so that expectations have been made clear. Within each initiative outcomes concerning work with external agencies including multi-state and multi-institutions are also addressed and encouraged. By focusing on specific outputs and outcomes as identified within the plan, there will be more consistency in reporting program effectiveness. Through the college's strategic planning efforts there appears to be a more concerted effort to streamline research programs to address identified goals of the initiative teams. Research and extension personnel are seeking ways through the Plan of Work to work more closely together in order to address the needs of the state and region. As these efforts continue, the college can anticipate an improved effectiveness in its research and extension programs.

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

The College of Agriculture's research and extension efforts are focused in five initiative areas. Initiative teams include area and county educators, state specialists, and department heads which enable improved communication. State teams meet multiple times during the year to plan and develop interdisciplinary programs which address clientele needs. These efforts also encourage more integration between research and extension. The new Sustainable Agricultural Research and Extension Center (SAREC) will allow for more efficiency of research efforts and dissemination of results to agriculture clientele.

Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation (Check all that apply)

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

Brief explanation.

Stakeholder input comes to the College of Agriculture Cooperative Extension Service and Agricultural Experiment Station through a variety of methods. A joint research and extension needs assessment process was completed in 2004. A stratified sample was used to determine program and research needs in the state. In addition to the mail survey, a phone survey was conducted with a random sample of Wyoming residents. Both surveys also addressed preferred delivery methods by Wyoming citizens. Stakeholder input gathered through all methods is shared with faculty and CES initiative teams comprised of field educators, extension specialists, UW department heads, and administrators. Information is used in development of CES programs and applied research. This needs assessment is guiding development of the 2007–2011 plan of work. Initiative teams conduct surveys or use other methods to identify needs such as a small acreage homeowner survey to determine needs specific to that audience. All counties have had targeted advisory meetings to gain stakeholder input on reaching limited resource audiences in the Cent\$ible Nutrition Program. County 4-H staff have established 4-H Expansion and Review committees to specifically address outreach efforts toward underserved youth audiences. Training has been provided for staff to

encourage diversity in representation on advisory committees. County personnel also utilize collaborative partners to learn needs within communities of the state. In the past year CES and the Ag College has partnered with the Natural Resource Conservation Service (NRCS) with representatives meeting quarterly to assess joint needs and work cooperatively in development and delivery of programs. Each of the three Research & Extension Centers has an advisory committee that meets annually. These advisory committees provide information on existing research and outreach programs and input regarding priority needs for research and outreach. The College of Agriculture maintains a separate statewide advisory committee. The committee meets annually to exchange information on the college's programs and to seek input of future concerns and issues. Three departments, Animal Science, Family and Consumer Sciences, and Veterinary Sciences, have separate advisory committees that provide input on programs in those departments.

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.

CES advisory committees have formed in the nine Extension areas. These area advisory committees meet at least once annually to provide input on issues and program direction for CES. Advisory committee members are nominated by extension staff by subject matter interest. Selection to serve on advisory committees is based on gender, geographic representation, race, national origin, and underserved audiences. In addition, the Director of CES has formed an advisory committee of county commissioners who will meet during quarterly meetings of the Wyoming County Commissioner Association. Research and Extension Center Advisory committees are represented by CES educators, industry leaders, and landowners (government and private) in all counties that they service. Advisory committee members are nominated by CES, AES, and administrative personnel and meet one to two times per year.

2(B). 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. 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
- Meeting with the general public (open meeting advertised to all)
- Survey of the general public
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Meeting specifically with non-traditional individuals
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Survey of selected individuals from the general public

Brief explanation

The College of Agriculture uses all reasonable efforts to gather input from stakeholders. Structured advisory meetings with both traditional and non-traditional stakeholder groups are held annually. Initiative teams, experiment stations and UW faculty will utilize a variety of methods to gather input which will be used to provide direction and evaluation of research and extension programs.

3. A statement of how the input will be considered

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

Brief explanation.

Stakeholder input is used by AES and CES initiative teams to identify emerging issues. Input gathered is used in program planning, evaluation of current programs, and redirection of programs when applicable. Stakeholder input from area advisory groups, county commissioners, and area teams assist in staffing priorities. Search committees comprised of local stakeholders provide input on screening, interviewing and hiring decisions for CES.

Planned Program Table of Content

| S. NO. | PROGRAM NAME |
|--------|--|
| 1 | (4-H) Non-Traditional 4-H |
| 2 | (4-H) Traditional 4-H |
| 3 | (4-H) Volunteer Management |
| 4 | (CDE) Entrepreneurship |
| 5 | (CDE) Family Resource Management |
| 6 | (CDE) Leadership Development |
| 7 | (NFS) Cent\$ible Nutrition Program (EFNEP) |
| 8 | (NFS) Food Safety |
| 9 | (NFS) Primary Prevention: Promote Healthier Food Choices and Lifestyles |
| 10 | (NFS) Type 2 Diabetes - Healthy Choices & Lifestyle Promotion |
| 11 | (PSAS)-Crop Systems - Profitable and Sustainable Agriculture Systems |
| 12 | (PSAS and SMRR) Wyoming Small Acreages |
| 13 | (PSAS) Forage Based Livestock Systems - Profitable and Sustainable Agriculture |
| 14 | (PSAS) Urban Horticulture and Master Gardeners |
| 15 | (SMRR) 4-H/Youth Natural Resource Education |
| 16 | (SMRR) Natural Resource Conservation and Management |
| 17 | (SMRR) Natural Resource Education for Agricultural Producer and Agency Personnel |

1. Name of the Planned Program

(4-H) Non-Traditional 4-H

2. Program knowledge areas

- 806 100% Youth Development

3. Program existence : New (One year or less)

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

Wyoming is not immune to high-risk behaviors among its youth. The current 4-H program will benefit by offering life skills education to non-traditional audiences. While 4-H projects and clubs remain the backbone of UW CES, youth development efforts, additional youth can be reached through collaboration with other community youth groups and nontraditional delivery methods.

6. Situation and priorities

In Wyoming there are an estimated 75,000 youth between the ages of 8-18 according to the U.S. Census Bureau. Of those 75,000 youth 6,942 are enrolled in the traditional program. This leaves 68,058 youth in the state of Wyoming who are not being served by the traditional club 4-H club program. 4-H focuses on the development of life skills and values. According to the Search Institute (1997) "Youth who have 10 or fewer of the 40 external and internal assets are at high risk of developing at-risk behaviors." All of the 40 external and internal assets are likely to be developed by youth involved in the 4-H Program.

7. Assumptions made for the Program

- Partnerships can be formed.
- Funds will be available.
- Schools will open their doors.
- Adults will volunteer.
- Governing bodies will cooperate.

8. Ultimate goal(s) of this Program

Through a variety of alternative teaching methods, this program is designed to motivate underserved and high risk youth to become involved, serve as leaders, and become responsible, productive adults.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

11. Expending other then formula funds or state-matching funds : No

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 5.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

- Cloverbuds (pre-4-H) • After School Programs • School Enrichment • Youth Leadership • Marketing • Camps

14. 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 ● Other 1 (Camps) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites |

15. Description of targeted audience

The University of Wyoming Cooperative Extension Service is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. The target audience will include: Underserved and high risk youth who do not participate in the traditional 4-H Youth program in Wyoming.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 500 | 1000 | 5000 | 10000 |
| 2008 | 500 | 1000 | 5000 | 10000 |
| 2009 | 500 | 1000 | 5000 | 10000 |
| 2010 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of non-traditional programs established. Target is number of programs.

2007: 10 2008: 12 2009: 15 2010: 0 2011: 0

Output Target

Number of youth enrolled in non-traditional youth development programs. Target is number of youth.

2007: 5000 2008: 5000 2009: 5000 2010: 0 2011: 0

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Increased: • Knowledge • Skills • Self-Esteem • Awareness • Motivation • Belonging • Diversity. Target is number of youth reporting positive changes.

Outcome Type: Short

2007: 1000 2008: 1000 2009: 1000 2010: 0 2011: 0

Outcome Target

• Youth Serving in Leadership Roles • Youth Serving on Governing Bodies • Youth Acting as Mentors • Youth Teaching. Target is number of youth.

Outcome Type: Medium

2007: 500 2008: 500 2009: 500 2010: 0 2011: 0

Outcome Target

• Decreased incidence of youth engaging in high risk behavior. • Youth become responsible productive adults. Target is number of youth.

Outcome Type: Long

2007: 0 2008: 0 2009: 1000 2010: 0 2011: 0

20. External factors which may affect outcomes

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

Description

Youth development educator positions have joint funding from county government and CES; change in appropriations could impact the program. Public policy and competing public priorities could impact youth development programs; specifically the ability to work with schools to implement school enrichment or after school programs. Population changes impacting the number of school age youth in communities could impact program direction.

21. Evaluation studies planned

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

Description

• Pre and Post test used to collect knowledge. • Charting of Trends • Structured and Unstructured Interviews • Teacher Reports

22. Data Collection Methods

- Whole population
- Structured
- Unstructured
- Observation
- Tests
- Other (Teacher Reports)

Description

• Pre and post tests used to collect knowledge. • Charting of Trends • Structured and Unstructured Interviews • Teacher Reports

1. Name of the Planned Program

(4-H) Traditional 4-H

2. Program knowledge areas

- 806 80% Youth Development
- 802 10% Human Development and Family Well-Being
- 801 10% Individual and Family Resource Management

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

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

5. Brief summary about Planned Program

Youth in the traditional 4-H program have the opportunity to expand their knowledge base, increase their life skills and develop leadership abilities in order to become responsible, contributing citizens. This type of impact will improve the overall quality of life in Wyoming.

6. Situation and priorities

In Wyoming there are an estimated 75,000 youth between the ages of 8 and 18 according to the U.S. Census Bureau. Of those youth, 6,942 are enrolled in the traditional club program. The main focus of 4-H is the development of life skills, knowledge and leadership. According to the Search Institute “youth who have ten or fewer of the 40 external and internal assets are at high risk of developing at-risk behaviors”. All of the 40 external and internal assets are likely to be developed by youth involved in the 4-H program.

7. Assumptions made for the Program

Assumptions made for this program include: • Partnerships will be formed. • Public entities will cooperate. • Colleagues will receive educational programming. • External funds will be sought.

8. Ultimate goal(s) of this Program

Wyoming youth will build assets and essential life skills to lead productive, responsible and healthy lifestyles.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 15.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

• Project or leadership activities • Present and/or facilitate educational programs • Recruitment • Training • Camps • Clinics • Contests • Media • Assessment.

14. 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 (Camps) ● Other 2 (Contests) | <ul style="list-style-type: none"> ● Newsletters ● Web sites |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. Traditional 4-H youth audiences will target: • Youth • Volunteers • Families • Community.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 3000 | 5000 | 7000 | 10000 |
| 2008 | 3000 | 5000 | 7000 | 10000 |
| 2009 | 3000 | 5000 | 7000 | 10000 |
| 2010 | 3000 | 5000 | 7000 | 10000 |
| 2011 | 3000 | 5000 | 7000 | 10000 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of youth enrolled in the traditional 4-H program. Target is number of youth.

2007 : 7000 2008 : 7000 2009 : 8000 2010 : 8000 2011 : 8000

Output Target

Number of educational events, camps, training workshops, clinics implemented. Target is number of educational activities

implemented.

2007: 100 2008: 100 2009: 100 2010: 200 2011: 200

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Build life skills, including critical thinking, public speaking, teamwork, self-discipline, responsibility, decision making, self-esteem, communication and leadership. Wyoming youth will acquire and utilize knowledge. Target is number of youth reporting positive changes as result of 4-H program.

Outcome Type: Short

2007: 1000 2008: 1000 2009: 1000 2010: 2500 2011: 2500

Outcome Target

Empower youth to make logical decisions, develop a positive behavior (according to traditional values), effectively communicate, and establish a working relationship with others. Target is number of youth.

Outcome Type: Medium

2007: 1000 2008: 1000 2009: 1000 2010: 2500 2011: 2500

Outcome Target

Wyoming youth build assets and essential life skills to lead productive, responsible and healthy lifestyles. Target is number of youth.

Outcome Type: Long

2007: 500 2008: 500 2009: 1000 2010: 1000 2011: 1000

20. External factors which may affect outcomes

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

Description

Factors that may affect programs and results include natural disasters, economy, demographic patterns, public policy changes, background and experiences of participants, government regulations and competing public priorities. Each of these affect communities and families.

21. Evaluation studies planned

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study

Description

Utilize pre-post test, end of session surveys, follow-up surveys by phone, e-mail, mail, on-site; observation, case study, sampling, and interviews that are either structured or unstructured.

22. Data Collection Methods

- Sampling
- Mail
- Telephone
- On-Site
- Structured
- Unstructured
- Case Study
- Observation
- Tests

Description

Utilize pre-post test, end of session surveys, follow-up surveys by phone, email, mail, on-site; observation, case study, sampling, interviews that are either structured or unstructured.

1. Name of the Planned Program

(4-H) Volunteer Management

2. Program knowledge areas

- 802 100% Human Development and Family Well-Being

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

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

5. Brief summary about Planned Program

4-H is the Cooperative Extension System's dynamic educational program for today's youth. Through a program delivery system which includes all 23 counties in Wyoming as well as the Wind River Indian Reservation, 4-H presents a strong, positive image challenging young people to prepare for their future roles as leaders. Adult volunteer leaders are a key to success in the 4-H program. Trained leaders provide support and training to members in local clubs. Recruitment, training, and management of volunteers is a major thrust of the 4-H youth development program.

6. Situation and priorities

In Wyoming there are an estimated 75,000 youth between the ages of 8 and 18 according to the U.S. Census Bureau. Of those youth, 6,942 are enrolled in the traditional club program. The main focus of 4-H is the development of life skills, knowledge and leadership. According to the Search Institute "youth who have ten or fewer of the 40 external and internal assets are at high risk of developing at-risk behaviors". All of the 40 external and internal assets are likely to be developed by youth involved in the 4-H program. Youth in the traditional 4-H program have the opportunity to expand their knowledge base, increase their life skills and develop leadership abilities in order to become responsible, contributing citizens. This type of impact will improve the overall quality of life in Wyoming. Adult volunteers are critical to implementing and expanding the youth development efforts of CES.

7. Assumptions made for the Program

1.) Volunteers care about kids 2.) Volunteers want to be involved with kids 3.) Volunteers are safe, responsible, and caring adults 4.) Resources are available to make the situations of the logic model happen 5.) Adults will engage with Extension Staff.

8. Ultimate goal(s) of this Program

Trained adult volunteers have skills and abilities in which they are able to foster youth to become responsible productive adults.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 15.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 15.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Activities include training on the following topics: Ages and stages of youth; Risk Management; Youth Development Concepts; Non-Profit Management/Coordination; Financial Management/IRS Issues; Project Training; Learning Styles; Club Maintenance; Recruitment and Retention.

14. 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 | <ul style="list-style-type: none"> ● Newsletters |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. 4-H Volunteers will be recruited from the following groups: Adults in the Community, Other Agencies, Civic Groups, Youth Groups, and the General Public.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 2500 | 5000 | 7000 | 15000 |
| 2008 | 2500 | 5000 | 7000 | 15000 |
| 2009 | 2500 | 5000 | 7000 | 15000 |
| 2010 | 2500 | 5000 | 7000 | 15000 |
| 2011 | 2500 | 5000 | 7000 | 15000 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of volunteers enrolled as leaders in the 4-H program. Target is the number of volunteers.

2007: 3000 2008: 3000 2009: 3000 2010: 3000 2011: 3000

Output Target

Number of volunteers participating in formal training programs. Target is number of volunteers participating.

2007: 600 2008: 800 2009: 800 2010: 1000 2011: 1000

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Increased knowledge in project areas. Target is number of volunteers.

Outcome Type: Short

2007: 200 2008: 200 2009: 200 2010: 500 2011: 500

Outcome Target

Volunteers become key players in 4-H and youth development programs. Target is number of volunteers.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 200 2011: 200

Outcome Target

Volunteers will demonstrate knowledge of youth development principals. Target is number of volunteers.

Outcome Type: Medium

2007: 50 2008: 100 2009: 100 2010: 500 2011: 500

Outcome Target

Volunteers will learn and apply the experiential learning model. Target is number of volunteers.

Outcome Type: Short

2007: 100 2008: 200 2009: 300 2010: 500 2011: 500

Outcome Target

Trained adult volunteers will demonstrate skills and abilities in which they are able to foster youth to become responsible adults. Target is number of volunteers.

Outcome Type: Long

2007: 100 2008: 100 2009: 200 2010: 500 2011: 500

20. External factors which may affect outcomes

- Appropriations changes
- Competing Programatic Challenges

Description

Funding for youth development is necessary for the program. Most youth educator positions in counties are jointly funded by county government. Youth and adults face time allocation challenges.

21. Evaluation studies planned

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

Description

Use and adopt the "Life Skills Evaluation Model" for evaluation of programs.

22. Data Collection Methods

- Whole population
- Mail
- Telephone
- On-Site
- Unstructured
- Observation
- Tests

Description

Evaluation of total participants at some educational activities. On-site, mail, or telephone surveys may be used to gather impact data. Unstructured interviews with volunteers will be used to determine impact. Pre and post tests, and observation will also be utilized in evaluation of volunteer management program.

1. Name of the Planned Program

(CDE) Entrepreneurship

2. Program knowledge areas

- 602 40% Business Management, Finance, and Taxation
- 604 30% Marketing and Distribution Practices
- 601 5% Economics of Agricultural Production and Farm Management
- 608 25% Community Resource Planning and Development

3. Program existence : New (One year or less)

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

A profitable, sustainable, and globally competitive rural sector is essential for the well-being of Wyoming communities, households, and social structure. Effective new venture development is a key component in attaining this. Through the implementation of this program, Wyoming's opportunity for businesses, particularly for new ventures, will be improved.

6. Situation and priorities

Wyoming is vulnerable because of its historical dependence on agriculture and extraction industries, coupled with its sparse population. Thus diversification is imperative for the survival of many communities. Although many rural people have skills and talents that could potentially generate income, they often do not have the information that can help them to develop economically viable alternative enterprises. In short, diversification efforts require knowledge and skills that many managers and entrepreneurs do not have. Extension provides educational offerings, resources and referrals designed to help existing and potential entrepreneurs enhance their prospects for success. Specific areas of emphasis are small businesses, especially in rural areas; new opportunities in entrepreneurial agriculture and natural resource enterprises (e.g., agritourism); and the strong and growing interest in entrepreneurship among youth and young adults, women, ethnic minorities, and immigrants. Management, financing and business diversification are areas essential for helping clients establish, maintain, and enhance their businesses. Communities need programs that will stimulate business development activity. Communities that are concerned about their economic future are moving away from the strategy of "recruiting" existing businesses to relocate from other communities to a strategy of supporting new businesses locally. The first critical issue is to create the capacity for entrepreneurs to explore and start a small or home-based business with emphasis on value-added agriculture, eco/agri-tourism, forestry, home trades, crafts, services, etc. Information collected from Cooperative Extension Service Area Advisory Committees in 2004-2005, constituency groups and the general public, identified diversification and small business development as important issues within the state. The second critical issue is the development of the ability of managers to identify and fill niche markets. Information collected from Area Advisory Committees in 2004-2005 identified niche marketing as an important issue within the state. The third critical issue is to create a supportive environment within the family for entrepreneurship. Information collected from Area Advisory Committees in 2004-2005 identified family business and entrepreneurship as an important issue within the state.

7. Assumptions made for the Program

The following assumptions are made about this planned program and the people involved. 1.) There are competing demands for time between the Extension initiative and other office obligations (i.e., county chair, 4-H/youth). 2.) The program effects can be best achieved with the partnership and collaboration of organizations, teachers and trainers who reach target audiences. 3.) The necessary resources will be available. 4.) The University of Wyoming Cooperative Extension is positioned to provide education to its clientele. 5.) Programming in entrepreneurship is one of three objectives of the Community Resource Education Initiative Team and the CRE Team is only one of five University of Wyoming Cooperative Extension teams. Consequently, University of Wyoming Cooperative Extension resources brought to bear on this objective will be limited.

8. Ultimate goal(s) of this Program

The vision for this program area is that decision-makers and enterprises will gain expertise to make better economic decisions, diversify economic activities, manage resources, and develop effective financial plans. This in turn will help vitalize rural communities and the well-being of individuals, issues of primary importance in Wyoming.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 1.5 | 0.0 | 0.0 | 0.0 |
| 2008 | 1.5 | 0.0 | 0.0 | 0.0 |
| 2009 | 1.5 | 0.0 | 0.0 | 0.0 |
| 2010 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 0.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Outputs for entrepreneurship programs include publications, meetings, classes, workshops, conferences, one-on-one consultations, and web sites.

14. 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 ● One-on-One Intervention ● Other 1 (Conferences) | <ul style="list-style-type: none"> ● Newsletters ● Web sites |

15. Description of targeted audience

The University of Wyoming Cooperative Extension Service is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. Targeted audiences will be individuals who manage or may develop ventures relating to food and agricultural systems, a non-farm extension of a farm business, forestry, home trades, crafts, services, etc. Other audiences through which Wyoming CES program may be delivered include: teachers, public and private agencies, business owners/managers/employers, trade/produce groups, educational entities, identified publics, youth groups/students, and small acreage owners.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 100 | 500 | 100 | 500 |
| 2008 | 100 | 500 | 100 | 500 |
| 2009 | 100 | 500 | 100 | 500 |
| 2010 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of individuals assisted. Target is the number of individuals.

2007: 25 2008: 50 2009: 50 2010: 0 2011: 0

Output Target

Participation in entrepreneurship programs designed for specific audiences including beginning farmers, multi-generation farm families, part-time farmers, and exiting farmers. Target is the number of participants in programs.

2007: 50 2008: 50 2009: 50 2010: 0 2011: 0

Output Target

Participation in program efforts to increase knowledge in the areas of transfer planning and estate planning. Target is the number of participants in programs on transfer and estate planning.

2007: 50 2008: 50 2009: 50 2010: 0 2011: 0

Output Target

Participation in educational programs and utilization of information provided in the area of employee management. Target is the number of participants.

2007: 50 2008: 50 2009: 50 2010: 0 2011: 0

Output Target

Applied research projects initiated. Target is the number of research projects.

2007: 0 2008: 1 2009: 1 2010: 0 2011: 0

Output Target

Participation in programs to evaluate new or specialty enterprises. Target is the number of participants.

2007: 10 2008: 10 2009: 10 2010: 0 2011: 0

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Increased rural economic diversification. Target is number of participants reporting change in practice.

Outcome Type: Long

2007: 0 2008: 0 2009: 5 2010: 0 2011: 0

Outcome Target

Enhanced incomes and jobs through business expansion or new businesses. Target is number of new businesses or expanded businesses reported.

Outcome Type: Long

2007: 0 2008: 0 2009: 5 2010: 0 2011: 0

Outcome Target

Long-term changes in practices (as determined by follow-up surveys with those attending meetings, events and workshops). Target is number of participants reporting changes.

Outcome Type: Long

2007: 0 2008: 0 2009: 20 2010: 0 2011: 0

Outcome Target

Improved business planning for realistic business success. Target is number of participants.

Outcome Type: Medium

2007: 5 2008: 10 2009: 10 2010: 0 2011: 0

Outcome Target

Improved management of risk, insurance, and labor. Target is number of agriculture producers reporting improved management practices.

Outcome Type: Medium

2007: 25 2008: 25 2009: 50 2010: 0 2011: 0

Outcome Target

Improved business/community collaborative work for long-range economic development. Target is number of collaboratives developed.

Outcome Type: Medium

2007: 2 2008: 5 2009: 5 2010: 0 2011: 0

Outcome Target

Improved ability to manage family quality-of-life concerns. Target is number of participants reporting change through evaluations.

Outcome Type: Medium

2007: 20 2008: 20 2009: 20 2010: 0 2011: 0

Outcome Target

Improved access to information on nontraditional, value-added enterprises and increased number of places these curricula are available. Target is number of individuals.

Outcome Type: Medium

2007: 25 2008: 25 2009: 25 2010: 0 2011: 0

Outcome Target

Knowledge and confidence gained (as measured by end-of-workshops forms). Target is number of participants.

Outcome Type: Short

2007: 25 2008: 25 2009: 50 2010: 0 2011: 0

Outcome Target

Development of a business plan and establishment of goals. Target is number of participants.

Outcome Type: Short

2007: 5 2008: 5 2009: 10 2010: 0 2011: 0

Outcome Target

Increased awareness and knowledge of available production and value-added alternatives. Target is number of agriculture producers.

Outcome Type: Short

2007: 25 2008: 25 2009: 50 2010: 0 2011: 0

Outcome Target

Improved ability to market, produce, finance, and promote products from new enterprises. Target is number of firms or individuals.

Outcome Type: Short

2007: 10 2008: 25 2009: 50 2010: 0 2011: 0

20. External factors which may affect outcomes

- Economy
- Public Policy changes
- Government Regulations
- Populations changes (immigration,new cultural groupings,etc.)
- Other (Changes in Technology)

Description

Factors external to University of Wyoming Cooperative Extension Service that will influence programs and results include: 1.) Formation of collaborations, 2.) A shift in demographics, 3.) A shift in state and regional economic situations, 4.) Shifts in local, state, university and national policy, and 5.) Changes in technology.

21. Evaluation studies planned

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

Description

For entrepreneurship educational programs and activities, the following methods will be used to determine effects achieved: 1.) Tracking of community interest and contact development, 2.) Program evaluation forms, 3.) Social capital surveys – pre and post where interventions are long-term, 4.) Interviews with key stakeholders.

22. Data Collection Methods

- Whole population
- Mail
- On-Site
- Unstructured

Description

For entrepreneurship educational programs and activities, the following methods will be used to determine effects achieved: 1.) Tracking of community interest and contact development, 2.) Program evaluation forms, 3.) Social capital surveys – pre and post where interventions are long-term, 4.) Interviews with key stakeholders.

1. Name of the Planned Program

(CDE) Family Resource Management

2. Program knowledge areas

- 801 70% Individual and Family Resource Management
- 802 20% Human Development and Family Well-Being
- 608 10% Community Resource Planning and Development

3. Program existence : Intermediate (One to five years)

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

5. Brief summary about Planned Program

The socioeconomic viability of families in Wyoming is central to the work of the Community Development Education (CDE) initiative team of the University of Wyoming Cooperative Extension Service. This plan reflects the relatively new arrangement of self-organized teams of educators, specialists, and faculty to address state issues. The CDE team delivers programming on the topics of community development, family resource management and entrepreneurship. The CDE initiative team is building on past work to offer more targeted programming given its resources.

6. Situation and priorities

In the last ten years Wyoming has experienced significant economic growth stemming from its natural resources of gas, oil, and coal. While jobs in the energy sector often pay well, most residents hold service sector positions that are typically low paying and are often seasonal. The preponderance of low-wage jobs forces many families to stretch family resources, even if they secure dual incomes to support their families. The situation is compounded because of a low level of skill in resource management, even among those holding high-paying jobs. Without programming that strongly advocates financial literacy and savings, residents will be uninformed as how to live a self-sustainable life. Households living on the edge of their ability to manage finances create the potential for tremendous emotional and economic strain. The majority of households are a paycheck away from financial crisis. Sound financial management will increase the stability and security of households as well as the happiness of household members. Educational programs that strengthen the capacity of youth and adults to manage resources are critically needed. The first critical need is the management of credit and debt. Seven out of 10 low and middle income households report using their credit cards as a safety net. \$8,650 is the average credit card debt of low and middle income indebted households in America. The stress of a poor financial situation for those who are bankrupt, or struggle for years to avoid bankruptcy, negatively effects individuals, and particularly children. In Wyoming about 2,500 people file for bankruptcy protection each year. Teaching the proper use of credit to those currently experiencing financial stress is critical. The second critical issue is the spending habits of adolescents. Many adolescents earn income, of which they spend 98 percent, and do not have to pay for many living expenses such as housing. Creating healthy spending habits and financial literacy will prevent financial stress for the time when they become independent. The third critical issue is improving the financial health of Wyoming households. Information collected from UW Cooperative Extension Service Area Advisory Committees in 2004-2005, identified retirement planning, consumer decision making skills, estate planning and family resource management as the top issues in the state. Wyoming is a state with a high proportion of elderly and people employed in the service sector industry. Consequently, many citizens are uninformed about financial management and estate planning issues, making targeted efforts to improve financial health necessary.

7. Assumptions made for the Program

The following assumptions are made about this planned program and the people involved. 1.) The program effects cannot be achieved without the partnership and collaboration of organizations, teachers and trainers who reach target audiences. 2.) Teachers will use video segments of financial resource management within their curriculums. 3.) The necessary resources will be made available. 4.) Leadership/gatekeepers will allow collaborations. 5.) Media outlets to be available for Extension programming throughout the state. 6.) Funding will be available to provide resource material at affordable prices and pay for use of technology time. 7.) Funding for research on household credit use is received.

8. Ultimate goal(s) of this Program

The performance goal is to increase the general financial literacy and fiscal responsibility of residents.

9. Scope of Program

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

Inputs for the Program

10. Expending formula funds or state-matching funds : Yes
11. Expending other than formula funds or state-matching funds : No
12. Estimated Number of professional FTE/SYs to be budgeted for this Program

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 3.5 | 0.0 | 0.3 | 0.0 |
| 2008 | 3.5 | 0.0 | 0.4 | 0.0 |
| 2009 | 3.5 | 0.0 | 0.4 | 0.0 |
| 2010 | 3.5 | 0.0 | 0.4 | 0.0 |
| 2011 | 3.5 | 0.0 | 0.4 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Family resource management programs will reach out to a broad spectrum of constituents throughout Wyoming using a variety of anticipated programs. Outputs include methods such as train-the-trainer workshops, home-study courses, and such approaches as the Internet (www.uwyo.edu/CES/FRM/), and satellite. Also included are publications, meetings, news releases, and feature articles.

14. 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 ● Other 1 (Home-study Courses) | <ul style="list-style-type: none"> ● Newsletters ● Web sites ● Other 1 (Satellite) ● Other 2 (News Releases/Feature Articles) |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in programs regardless of their race, national origin, gender, age, religion, or disability. The ultimate consumer of the educational product will be all individuals (including youth and senior citizens), families (including low-income families), and in general people at risk of experiencing financial stress. Other audiences through which the University of Wyoming Cooperative Extension Service programs may be delivered include 1.) Teachers of adolescents, 2.) Public and private agencies, and 3.) Private/public employers who are unlikely to have a human resources department. The group of educators, specialists and faculty responsible for leading and delivering the outputs in the program is the smallest of the University of Wyoming's Cooperative Extension Service groups. A priority for program development is to use methods of information and instruction that make it possible for the most constituents to be assisted while minimizing face-to-face work. Thus the team will emphasize train-the-trainer courses, newsletters and electronic delivery of information and programming.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 150 | 1000 | 150 | 1000 |
| 2008 | 150 | 1000 | 150 | 1000 |
| 2009 | 150 | 1000 | 150 | 1000 |
| 2010 | 150 | 1000 | 150 | 1000 |
| 2011 | 150 | 1000 | 150 | 1000 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Ultimately it will benefit all families in Wyoming. Short-term effects may be increased grant funding and increased involvement on regional and multi-state projects.

2007: 0 2008: 0 2009: 1 2010: 1 2011: 1

Output Target

Measures of the success of AES programs will be tied to grant dollars, involvement on multi-state projects and scientific publications. The ultimate goal is to provide information to improve socioeconomic viability of families in Wyoming. Targets include: Journal articles; abstracts and procedures published; other publications; presentations and grants.

2007: 5 2008: 5 2009: 6 2010: 9 2011: 9

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Permanent changes in practices as determined by follow-up surveys with those attending meetings, events and workshops. Target numbers reflect number of individuals reporting changes in practices as a result of educational activities.

Outcome Type: Long

2007: 50 2008: 50 2009: 50 2010: 100 2011: 100

Outcome Target

Financial stability and security in Wyoming households will improve. Targets reflect number of households reporting improvement as a result of educational efforts.

Outcome Type: Long

2007: 0 2008: 0 2009: 50 2010: 100 2011: 100

Outcome Target

Improved quality of life for participants in family resource management programs through adoption of management principles. Target measures are number of participants reporting positive change.

Outcome Type: Long

2007: 0 2008: 0 2009: 0 2010: 100 2011: 100

Outcome Target

One or more management principles from non-formal education programs on personal finance management are adopted by workshop participants. Targets are number of participants reporting adoption of management principles.

Outcome Type: Medium

2007: 25 2008: 25 2009: 50 2010: 50 2011: 50

Outcome Target

Wyoming Schools will increase awareness of University of Wyoming Cooperative Extension Service as a source of financial management curriculum. Target numbers are number of programs presented in Wyoming schools.

Outcome Type: Short

2007: 50 2008: 50 2009: 50 2010: 50 2011: 50

Outcome Target

Improved credit debt-management skills reported by participants in workshops. Target numbers include number of participants reporting improved skills.

Outcome Type: Medium

2007: 25 2008: 25 2009: 25 2010: 50 2011: 100

Outcome Target

Increased public interest in personal finance as determined by attendance at meetings, workshops, events, demonstrations. Target numbers are number of individuals participating.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Causal connections made between program events and participant behaviors as reflected by qualitative comments, stories and anecdotes about change in awareness or behaviors traceable to this Extension effort. Target numbers are participants reporting positive changes.

Outcome Type: Medium

2007: 20 2008: 30 2009: 50 2010: 50 2011: 50

Outcome Target

Knowledge and confidence gained as measured by end-of-workshop forms. Target numbers are participants reporting change through evaluations.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Increased number of people accessing electronic training and educational materials. Target numbers are participants utilizing on-line courses; or going to web site for information.

Outcome Type: Short

2007: 50 2008: 50 2009: 50 2010: 100 2011: 100

Outcome Target

Research efforts will result in Refereed Journal articles, abstracts and proceedings, and other publications. Target numbers are number of above published.

Outcome Type: Short

2007: 3 2008: 3 2009: 3 2010: 3 2011: 3

Outcome Target

Research efforts will be reported through presentations at professional meetings. Target number indicate number each year.

Outcome Type: Short

2007: 2 2008: 2 2009: 2 2010: 3 2011: 3

20. External factors which may affect outcomes

- Economy
- Public Policy changes
- Government Regulations
- Populations changes (immigration,new cultural groupings,etc.)
- Other (Changes in Technology)

Description

External factors that will influence programs and results include: 1.) Support for formation of collaborations, 2.) A shift in demographics, 3.) A shift in state and regional economic situations, 4.) Shifts in local, state, university and national policy, and 5.) Changes in technology.

21. Evaluation studies planned

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

Description

Efforts to evaluate programs will include: 1.) Pre and post-tests regarding knowledge and skills gained by participants, 2.) Post-meeting/workshops evaluations and tests of program participants, and 3.) Follow-up surveys of educators and community organizations. For family resource management educational programs and activities, the following skills will be measured to determine impacts achieved. These are the management principles by which immediate and intermediate outcomes will be evaluated. 1.) Communication—information is shared in a timely way, active listening, variety of communication methods used, expresses ideas clearly. 2.) Problem Solving—problem defined, criteria developed, alternative solution explored and evaluated, solution chosen and monitored. 3.) Decision Making—methods of decision-making are defined and understood by those involved. Examples include compromise, consensus, majority, one-man rule or spontaneous agreement. 4.) Goal Achievement—clearly defined goals, planning processes used to establish a course of action, progress made towards goal achievement, priority setting. 5.) Financial Skills—financial goals established, plans for managing debt and/or savings, record keeping utilized, fiscal control, financial security. In general, efforts will occur to assess the effectiveness of individual programs by the CRD Initiative team each year during the autumn.

22. Data Collection Methods

- Whole population
- Mail
- On-Site
- Unstructured
- Tests

Description

Efforts to evaluate programs will include: 1.) Pre and post-tests regarding knowledge and skills gained by participants, 2.) Post-meeting/workshops evaluations and tests of program participants, and 3.) Follow-up surveys of educators and community organizations.

1. Name of the Planned Program

(CDE) Leadership Development

2. Program knowledge areas

- 803 100% Sociological and Technological Change Affecting Individuals, Families and Communities

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

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

5. Brief summary about Planned Program

Wyoming residents face numerous challenges -- energy development impacting communities lacking adequate infrastructures, expanding growth in some areas and declines in others, aging population, declining youth population, workforce housing and development, land use, and more. Based on the research of Flora, Flora and Fey (2004) to uncover characteristics of successful communities, the community capitals framework was developed as an approach to analyze communities. They found that the most successful, healthy, and sustainable communities paid attention to seven types of capital: natural, cultural, human, social, political, financial and built capitals. This approach focuses on identifying community capitals and the interactions between these seven capitals. The following is a list of the seven community capitals and defining characteristics. •Natural Capital: air quality, land, water and water quality, natural resources, biodiversity and scenery. •Cultural Capital: religions, values, heritage recognition and celebration. •Human Capital: population, education, skills, health, creativity, youth, diverse groups. •Social Capital: trust, norms of reciprocity, network structure, group membership, cooperation, common vision and goals, leadership, depersonalization of politics, acceptance of alternative views, diverse representation. •Political Capital: level of community organization through the use of government; ability of government to garner resources for the community. •Financial Capital: tax burden/savings, state and federal tax monies, philanthropic donations, grants, contracts, regulatory exemption, investments, reallocation, loans, poverty rates. •Built Capital: housing, transportation, infrastructure, telecommunications infrastructure and hardware, utilities, buildings. Through relevant educational programming, UW Cooperative Extension can impact the three base blocks in Wyoming communities and can help grow several of the "capitals" identified in the Flora, Flora and Fey research to help sustain rural communities. The vision for this program area is to facilitate the creation of sustainable rural communities throughout Wyoming.

6. Situation and priorities

Leadership development was identified as a need by the Wyoming Rural Development Council's Community Assessments. This was later reaffirmed by Area Advisory Committees in 2004-2005 and the Extension Research Needs Assessment in 2004. The Wyoming Business Council has shared their vision of community economic development using a building block model. At the base are three blocks – leadership development, workforce development, and community capacity building. The second level has two blocks, existing business development and entrepreneur development, and one block on the top for recruiting.

7. Assumptions made for the Program

- Communities will continue to change and need to deal with change.
- Informed and trained community leaders and publics affect desired change.
- Many outside factors will continue to pressure and influence Wyoming communities.
- Wyoming Cooperative Extension is positioned to provide education to community leaders and publics.
- Wyoming Cooperative Extension has the expertise and resources to provide training and education to communities in necessary processes. However, those resources are limited and scarce and will need to be leveraged with other resource sources, partnerships and collaborations.
- Extension alone cannot address complex community issues. It takes multiple disciplines, expertise, available research, manpower and more. Extension can assist in addressing issues by sharing relevant research and expertise as well as providing educational programs that prepare people to participate and lead in addressing community issues.
- Wyoming communities will accept and use leadership and education from Wyoming Cooperative Extension to increase their ability to deal with community issues. It is also assumed that many communities will need to be educated or informed as to the resources and expertise that UW CES can bring to bear and the potential benefits of embracing such training, collaboration, and facilitation.
- Most people have the capacity to lead at some level in a community – home/family, business, organizations, spiritual, community.
- Leadership is a shared responsibility throughout communities.
- In-depth training will increase skills, knowledge and confidence of participants.
- Trained participants will tackle organizational, business and community issues to sustain rural communities.

8. Ultimate goal(s) of this Program

The vision for this program area is to facilitate the creation of sustainable rural communities throughout Wyoming. Ultimately, there will be stronger, more effective partnerships and collaboration within and between communities, as well as improved problem-solving, decision-making, group process skills, and leadership in community members, youth, workforce development,

and the volunteer base.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2008 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2009 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2010 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2011 | 3.5 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

• Community-based leadership training institutes – (EVOLVE) Extension Volunteer Organization for Leadership Vitality and Education. • Skill training workshops – i.e. board training. • General public information and educational efforts – i.e. public media materials; information/educational meetings and workshops; books, booklets, bulletins, training materials; providing data. • Facilitation of community processes. • Analyses of community data and economic impact. • Assessments to identify individual strengths and areas to be strengthened to guide personal development and grow talent. • Media resources to promote community capital development Extension education and increase awareness of Extension resources.

14. 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 | <ul style="list-style-type: none"> ● Newsletters ● Other 1 (Books & Booklets) ● Other 2 (Various Public Media Materials) |

15. Description of targeted audience

Targeted audiences include: • Elected officials. • Members and leaders of formal and informal community organizations. • Faith-based leaders and members. • Business owners/managers/employees. • Trade/produce groups. • Educational entities. • Federal/state/local agency leaders/members. • Identified publics. • The University of Wyoming is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in programs regardless of their race, national origin, gender, age, religion, or disability.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 300 | 500 | 150 | 500 |
| 2008 | 300 | 500 | 150 | 500 |
| 2009 | 300 | 500 | 150 | 500 |
| 2010 | 300 | 500 | 150 | 500 |
| 2011 | 300 | 500 | 150 | 500 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of individuals participating in programs. Target numbers are participants in leadership programs.

2007: 150 2008: 150 2009: 200 2010: 300 2011: 300

Output Target

Number of programs delivered. Target numbers reflect programs delivered each year in Wyoming.

2007: 25 2008: 25 2009: 30 2010: 30 2011: 50

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Participants will develop skills and confidence necessary for community participation, find resources to enhance community capital, recognize the needs for community vision, capacity building, and direction, and strengthen inner-community relationships. Target is the number of participants reporting positive change.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Participants will be able to utilize collaborative/coalition building practices to implement visionary community programs in order to provide the community with leaders, officials, and volunteers who are able to affect desired change or stability. Targets are number of participants reporting skills listed above.

Outcome Type: Medium

2007: 10 2008: 25 2009: 25 2010: 50 2011: 50

Outcome Target

Creation of economically strengthened and sustainable rural Wyoming communities that address the changes and impacts affecting them; Increased community capacity through an enhanced capitals framework. Targets include number of communities involved in leadership programs reporting positive changes.

Outcome Type: Long

2007: 5 2008: 15 2009: 15 2010: 25 2011: 25

20. External factors which may affect outcomes

- Competing Public priorities
- Competing Programmatic Challenges
- Other (Limited Resources)

Description

• Many Wyoming communities are under pressure to deal with multiple changes/issues. A significant portion of community members often resist such change or choose to ignore it. • Resources will continue to be scarce and may diminish. • This is only one of three objectives of the CDE Initiative Team and the CDE Team is only one of five UW CES SIT teams. Consequently, UW CES resources brought to bear on this objective will be limited. • Leadership training has become a popular subject of concern across the nation, which increases the opportunity and need for UW CES programming, but also increases the competition from other sources offering leadership training and community facilitation. • Most communities are eager to find someone that can help them learn how to deal with current issues. • There are competing demands for time between the Extension initiative and other office obligations (i.e., county chair, 4-H/youth). • Travel time and costs are associated with in-depth, multiple session programs.

21. Evaluation studies planned

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

Description

1.) End of session questionnaires with Likert scales and open-ended questions. 2.) A post-test online survey (or hard copy) developed by Dr. Kenneth Pigg, University of Missouri Extension Sociologist, administered six to twelve months after completion of intensive leadership training. 3.) Focus groups may be used to help determine impact.

22. Data Collection Methods

- Sampling
- Whole population
- Mail
- On-Site
- Unstructured
- Tests
- Other (Focus Groups)

Description

1.) End of session questionnaires with Likert scales and open-ended questions. 2.) A post-test online survey (or hard copy) developed by Dr. Kenneth Pigg, University of Missouri Extension Sociologist, administered six to twelve months after completion of intensive leadership training. 3.) Focus groups may be used to help determine impact.

1. Name of the Planned Program

(NFS) Cent\$ible Nutrition Program (EFNEP)

2. Program knowledge areas

- 704 50% Nutrition and Hunger in the Population
- 703 50% Nutrition Education and Behavior

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

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

5. Brief summary about Planned Program

In Wyoming the Extension Food Nutrition Education Program (EFNEP) is integrated with the Food Stamp Nutrition Education Program (FSNP) to form the Cent\$ible Nutrition Program. EFNEP is in two counties, Natrona and Laramie.

6. Situation and priorities

The United States Department of Agriculture recently released the Dietary Guidelines for Americans 2005. Tommy G. Thompson, Secretary of Health and Human Services, identified the number one message of the new guidelines as getting the most nutrition out of calories consumed. Number two was finding a balance between food and physical activity. (HHS-USDA press conference, January 12, 2005. Release # 0013.05). The key recommendations include an emphasis on increased consumption of fruits and vegetables, whole grains, and low-fat dairy and increased physical activity. Wyoming's large geographic size and low population makes food security a challenge for those with limited resources, and makes nutrition education, including food resource management, very important. In 2003, the percent of people below poverty in Wyoming was 10.9. Over the past several years, program educators have identified the following as the greatest needs for adult and youth low-income audiences in Wyoming: food resource management, food preparation skills, nutrition and lifestyle behaviors to improve health, feeding children, and food safety.

7. Assumptions made for the Program

1) In the 35 plus years EFNEP has been in existence, evaluation data shows the educational activities help limited resource families change behavior. 2) Hands on activities in small groups are effective methods with low income families.

8. Ultimate goal(s) of this Program

Diet Quality: Individuals, Families and Household level: 1)Increased adoption of healthy food practices 2)Participation in regular physical activity Food Safety: Individuals, Families and Household level will have: 1)Improved personal hygiene such as hand washing, 2)Avoidance of cross-contamination, 3)Keeping foods at safe temperatures. Food Resource Management: Individuals, Families and Household level will: 1) Use a variety of food resources to reduce food costs, 2)Provide culturally acceptable meals that are balanced for cost as well as for nutritional value Food Security: Individuals, Families and Household level will have: Increased availability of personal/family food resources.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

11. Expending other then formula funds or state-matching funds : No

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2008 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2009 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2010 | 3.5 | 0.0 | 0.0 | 0.0 |
| 2011 | 3.5 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Adult curriculum taught in a series of lessons; Adult one-time lessons; Youth curricula taught in a series of lessons and day camps; Displays and demonstrations; State and community partnerships with agencies serving the low-income; Training for educators ; Evaluation of program; Ongoing - Updating of curricula and materials.

14. 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 ● Demonstrations | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites |

15. Description of targeted audience

The University of Wyoming is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in all programs regardless of their race, national origin, gender, age, religion, or disability. Specific target audience groups: Low-income adults, Youth in Title I schools.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 100 | 500 | 500 | 500 |
| 2008 | 100 | 500 | 500 | 500 |
| 2009 | 100 | 500 | 500 | 500 |
| 2010 | 100 | 500 | 500 | 500 |
| 2011 | 100 | 500 | 500 | 500 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Increased adoption of healthy food practices and participation in regular physical activity; Increased adoption of healthy food practices; Participation in regular physical activity . Targets indicate number of participants reporting adoption of practices.

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Increased awareness and knowledge gained for EFNEP program participants.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Nutrition and food practices improved for EFNEP participants.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Food resource management improved for EFNEP participants.

Outcome Type: Long

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Improved personal hygiene such as hand washing; Avoidance of cross-contamination ; Keeping foods at safe temperatures for EFNEP participants.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Using a variety of food resources to reduce food costs; Providing culturally acceptable meals that are balanced for cost as well as for nutritional value. Targets indicate number of EFNEP participants.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Number of EFNEP participants reporting increased availability of personal/family food resources.

Outcome Type: Medium

2007: 50 2008: 50 2009: 50 2010: 50 2011: 50

20. External factors which may affect outcomes

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

Description

If EFNEP funding is decreased, appropriations will impact program delivery. Population changes impact limited resource audiences eligible for program.

21. Evaluation studies planned

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

Description

National EFNEP reporting program is used. Entry and exit data is collected on program participants. Case studies and success stories are gathered by nutrition educators.

22. Data Collection Methods

- Whole population
- On-Site
- Structured
- Observation

Description

Entry and exit interviews and surveys with participants. Observation of skills demonstrated regarding food buying, food safety and preparation.

1. Name of the Planned Program

(NFS) Food Safety

2. Program knowledge areas

- 712 100% Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxi

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

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

5. Brief summary about Planned Program

Microbial contamination of food is a serious public health problem: Each year in the U.S, food-borne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths. With approximately 60% of food-borne illness outbreaks nationwide attributable to food-service establishments, food-service personnel are key to reducing the risk of food-borne illness. Additionally, home food preparers and consumers are important groups to reach with food safety education because their behaviors greatly affect the safety of food that they serve to others and/or eat themselves. USDA grants helped establish the Wyoming Food Safety Coalition (WFSC). For over 10 years WFSC has involved a partnership between UW CES, Wyoming Department of Agriculture, Department of Health and local environmental health specialists to deliver food safety training to food service personnel; schools; and consumers. The college is currently developing new techniques for detection of E. coli contamination in food animal products.

6. Situation and priorities

Microbial contamination of food is a serious public health problem: Each year in the U.S, food-borne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths. With approximately 60% of food-borne illness outbreaks nationwide attributable to food-service establishments, food-service personnel are key to reducing the risk of food-borne illness. Additionally, home food preparers and consumers are important groups to reach with food safety education because their behaviors greatly affect the safety of food that they serve to others and/or eat themselves.

7. Assumptions made for the Program

1.) Educators and faculty in the College of Agriculture have the expertise to plan, implement, and evaluate community-based programs for audiences. 2.) Extension educators have established solid networks and support in many areas throughout Wyoming to assist community leaders in addressing nutrition issues concerning children, youth, and families. 3.) National support from the United States Department of Agriculture would provide sufficient financial resources to support planning and programming in communities. 4.) Funding will be secure throughout the course of the project. 5.) People will be motivated to gain awareness, knowledge and skills. Individuals will incorporate skills and change behaviors. 6.) Educators can serve as catalysts for change.

8. Ultimate goal(s) of this Program

Food service industry in Wyoming, individuals and families experience decreased incidence of food-borne illnesses.

9. Scope of Program

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

Inputs for the Program

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

11. Expending other then formula funds or state-matching funds : Yes

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 5.0 | 0.0 | 1.2 | 0.0 |
| 2008 | 5.0 | 0.0 | 1.3 | 0.0 |
| 2009 | 5.0 | 0.0 | 1.3 | 0.0 |
| 2010 | 5.0 | 0.0 | 1.3 | 0.0 |
| 2011 | 5.0 | 0.0 | 1.3 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

1.) Educational programs 2.) Media outreach 3.) Health Fairs 4.) Training 5.) Assessment/Data Collection; 6.) Research

14. 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 ● One-on-One Intervention ● Demonstrations ● Other 1 (Health Fair Displays) | <ul style="list-style-type: none"> ● Public Service Announcement |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. Targeted audiences include: • General Public (Youth and Adults) • Food Handlers: Commercial and Temporary Food Service • In-Home and Child Care Center Providers.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 500 | 2000 | 500 | 1000 |
| 2008 | 500 | 2000 | 500 | 1000 |
| 2009 | 500 | 2000 | 500 | 1000 |
| 2010 | 500 | 2000 | 500 | 1000 |
| 2011 | 500 | 2000 | 500 | 1000 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 1 2008 : 1 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of individuals participating in programs. Target numbers are participants in food safety programs.

2007: 500 2008: 500 2009: 500 2010: 500 2011: 500

Output Target

Number of educational programs or activities implemented. Targets are number of programs implemented.

2007: 15 2008: 15 2009: 20 2010: 25 2011: 25

Output Target

Measures of the success of AES programs will be tied to grant dollars, patented processes developed, and scientific presentations. The ultimate goal is to develop improved analytical techniques for detecting food-borne illnesses. Targets include: number of journal articles published, abstracts and proceedings, other publications; presentations at professional meetings and grants. In 2007 - we plan to have 1 journal article; 2 abstracts and proceedings; 2 other publications; 2 presentations at professional meetings; and 1 grant.

2007: 8 2008: 8 2009: 10 2010: 12 2011: 12

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Increased awareness and knowledge of food safety practices. Target: number of participants.

Outcome Type: Short

2007: 500 2008: 500 2009: 500 2010: 500 2011: 500

Outcome Target

Behavior or practice changes that improve food safety. Target is number of participants reporting behavior or practice changed.

Outcome Type: Medium

2007: 250 2008: 250 2009: 250 2010: 250 2011: 250

Outcome Target

Reduced health care cost and economic loss to restaurants as a result of food-borne outbreaks. Target is number of participants or restaurants reporting reduced economic loss.

Outcome Type: Long

2007: 10 2008: 10 2009: 10 2010: 10 2011: 10

Outcome Target

Decreased incidence of food-borne illness outbreaks in food service establishments. Target is the number of restaurants attributing decreased incidence of food-borne illness outbreaks to CES programs.

Outcome Type: Long

2007: 10 2008: 10 2009: 10 2010: 10 2011: 10

Outcome Target

Through research, develop improved detection methods for E.coli and Listeria in food. Target numbers are detection methods developed or improved.

Outcome Type: Medium

2007: 1 2008: 1 2009: 2 2010: 2 2011: 3

20. External factors which may affect outcomes

- Appropriations changes
- Government Regulations

Description

Many conditions and situations that exist in Wyoming are similar to those in other parts of the country, for example, the following: •Food choices made available and advertised to consumers by producers; •Access to timely and accurate information; •Coordination and cooperation of federal agencies and state partners; •Existence of local collaboration •Level of funding at federal, state and local level; and •Willingness of private sector funders, such as corporations, foundations, and community organizations, to collaborate with the College of Agriculture.

21. Evaluation studies planned

- Before-After (before and after program)

Description

1.Collection of pre- and post-program evaluation data.

22. Data Collection Methods

- Whole population
- Tests

Description

On-site survey evaluations. ServSafe certification training is evaluated through a test scored by the National Restaurant Association Foundation.

1. Name of the Planned Program

(NFS) Primary Prevention: Promote Healthier Food Choices and Lifestyles

2. Program knowledge areas

- 703 70% Nutrition Education and Behavior
- 724 30% Healthy Lifestyle

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

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

5. Brief summary about Planned Program

The health of our citizens is greatly influenced by their food choices and degree of physical activity. Rising rates of obesity and overweight among adults and children – resulting from poor nutrition and physical inactivity – increase their risk of chronic disease. Negative body image also contributes to poor nutrition and inactivity among many individuals. The UW Cooperative Extension Service faces challenges in addressing program priorities and actions that must address the changes occurring in the United States today. The orientation of food and nutrition research and nutrition education have the health priorities toward public health issues such as low birth weight, obesity, hypertension, osteoporosis, coronary heart disease, cancer, and nutritional inadequacies and abuses. High-quality educational programs have the potential to affect food behavior and to help promote health of Wyoming residents.

6. Situation and priorities

Wyoming residents are at risk as reflected by various health-related data: For example, over 20 percent of Wyoming adults report no leisure time physical activity, 47 percent of Wyoming high school students report not being enrolled in a physical education class, and 78 percent of both Wyoming adults and high school students do not eat recommended amounts of fruits and vegetables. Additionally, research in Wyoming, Montana, and Idaho documented body dissatisfaction as a significant predictor of self-consciousness keeping respondents from participating in physical activity.

7. Assumptions made for the Program

1.) Educators in Wyoming Cooperative Extension and the UW Department of Family and Consumer Sciences have the expertise to plan, implement, and evaluate community-based programs for audiences. 2.) Extension educators have established solid networks and support in many areas throughout Wyoming to assist community leaders in addressing nutrition issues concerning children, youth, and families. 3.) National support from the United States Department of Agriculture would provide sufficient financial resources to support planning and programming in communities. 4.) Funding will be secure throughout the course of the project. 5.) People will be motivated to gain awareness, knowledge and skills. Individuals will incorporate skills and change behaviors. 6.) Educators can serve as catalysts for change.

8. Ultimate goal(s) of this Program

The goal is to provide educational programs that increase the likelihood that people make healthy food choices consistent with the most recent Dietary Guidelines for Americans and MyPyramid.

9. Scope of Program

- In-State Extension
- Multistate Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 0.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

• Educational Programs • Educational Messages • Media Outreach • Health Fairs • Educator Training • Assessment/Data Collection

14. 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 ● One-on-One Intervention ● Demonstrations ● Other 1 (Health Fairs) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites |

15. Description of targeted audience

The University of Wyoming is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in programs regardless of their race, national origin, gender, age, religion, or disability. Targeted audience includes: general public, both adults and youth and policy makers.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 200 | 1000 | 200 | 1000 |
| 2008 | 200 | 1000 | 200 | 1000 |
| 2009 | 200 | 1000 | 200 | 1000 |
| 2010 | 200 | 1000 | 200 | 1000 |
| 2011 | 200 | 1000 | 200 | 1000 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of participants in educational programs or activities. Target is number of participants.

2007: 300 2008: 500 2009: 500 2010: 500 2011: 500

Output Target

Number of educational activities or programs implemented. Target is number of educational activities.

2007: 25 2008: 35 2009: 35 2010: 50 2011: 50

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Individuals gain awareness, knowledge & skills related to: -improved attitude about healthy eating -increased knowledge of healthy food choices -improved skill in selection of healthy foods -improved body image. Target is number of individuals.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Individuals incorporate skills and change behaviors related to: -increased participation in physical activity -improved eating behavior practices -improved food choices -adoption of recommended food-related practices for disease prevention. Target is number of individuals.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Individuals and families experience: -improved nutritional health -reduced medical costs -health improved through improved community opportunities -healthier weight -decreased risk factors for nutrition-health related problems. Target is number of individuals and/or families.

Outcome Type: Long

2007: 10 2008: 25 2009: 25 2010: 50 2011: 100

20. External factors which may affect outcomes

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

Description

Many conditions and situations that exist in Wyoming are similar to those in other parts of the country, for example, the following: •Food choices made available and advertised to consumers by producers; •Access to timely and accurate information; •Coordination and cooperation of federal agencies and state partners; •Existence of local collaboration; •Level of funding at federal, state and local level; and •Willingness of private sector-funders, such as corporations, foundations, and community organizations, to collaborate with Wyoming Cooperative Extension Service.

21. Evaluation studies planned

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

Description

1.) Collection of pre, post, and follow-up program data as part of the Steps to A New You applied research project. 2.) Collection of pre and post-program evaluation data as part of other programs.

22. Data Collection Methods

- Whole population
- Mail
- On-Site
- Unstructured
- Tests

Description

Pre and post and follow-up data will be collected using written surveys, pre and post -tests, and interview information to determine impact of programs.

1. Name of the Planned Program

(NFS) Type 2 Diabetes - Healthy Choices & Lifestyle Promotion

2. Program knowledge areas

- 703 85% Nutrition Education and Behavior
- 724 15% Healthy Lifestyle

3. Program existence : Intermediate (One to five years)

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

CES's Dining with Diabetes program addresses Type 2 diabetes, the most common metabolic disease in the world. In the US alone, the associated health care cost exceeds \$130 billion per year. Many studies have demonstrated that with proper nutrition and consistent physical activity habits, Type 2 diabetes can be delayed, controlled, or even prevented. The program modeled after the Dining with Diabetes program started in West Virginia, includes a series of classes which cover nutrition, physical activity, food demonstrations, and sampling of healthy, tasty food.

6. Situation and priorities

Rates of diabetes are reaching epidemic proportions. Over 18 million Americans have this disease, and another 41 million have prediabetes, a condition that may lead to diabetes. Wyoming statistics are also alarming: In 2003, an estimated 21,500 people in Wyoming (5.8% of adults) had been told that they have diabetes, and nearly 8,000 additional individuals have diabetes but are unaware of it.

7. Assumptions made for the Program

1) Educators in Wyoming Cooperative Extension and the UW Department of Family and Consumer Sciences have the expertise to plan, implement, and evaluate community-based programs for audiences. 2) Extension educators have established solid networks and support in many areas throughout Wyoming to assist community leaders in addressing nutrition issues concerning children, youth, and families. 3) National support from the United States Department of Agriculture would provide sufficient financial resources to support planning and programming in communities. 4) Funding will be secure throughout the course of the project. 5) People will be motivated to gain awareness, knowledge and skills. Individuals will incorporate skills and change behaviors. 6) Educators can serve as catalysts for change.

8. Ultimate goal(s) of this Program

The ultimate goal of this program is to provide educational programs that increase the likelihood that people make healthy food choices consistent with the most recent Dietary Guidelines for Americans and My Pyramid. Through food and nutrition education, seek to improve the health and lives of patients with diabetes and their families.

9. Scope of Program

- In-State Extension
- Multistate Extension

Inputs for the Program

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

11. Expending other then formula funds or state-matching funds : No

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 0.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

• Educational Programs • Educational Messages • Media Outreach • Health Fairs • Educator Training • Assessment/Data Collection

14. 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 (Health Fairs) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals, and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. This program targets the general public (youth and adults) with Type 2 Diabetes.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 500 | 1000 | 100 | 500 |
| 2008 | 500 | 1000 | 100 | 500 |
| 2009 | 500 | 1000 | 100 | 500 |
| 2010 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of Dining with Diabetes programs offered in Wyoming communities. Target is number of programs.

2007 : 5 2008 : 6 2009 : 6 2010 : 0 2011 : 0

Output Target

Number of partnerships with Diabetes coordinators, public health or other agencies formed. Target is number of partnerships.

2007 : 5 2008 : 5 2009 : 5 2010 : 0 2011 : 0

Output Target

Individuals completing the series of classes on Dining with Diabetes. Target is number of individuals.

2007 : 100 2008 : 150 2009 : 150 2010 : 0 2011 : 0

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Improved attitude related to diabetes self-care, food, and physical activity. Target is number of individuals reporting improved attitude.

Outcome Type: Short

2007: 100 2008: 150 2009: 150 2010: 0 2011: 0

Outcome Target

Increased knowledge of healthy food choices for optimal diabetes management. Target is number of participants reporting increased knowledge.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Improved skill in selection of healthy foods. Target is number of individuals reporting improved skills.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Improved attitudes about healthy eating being appealing. Target is number of participants.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Improved eating behavior practices, food choices, and lifestyle habits. Target is number of participants.

Outcome Type: Medium

2007: 75 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Increased participation in physical activity. Target is number of participants.

Outcome Type: Medium

2007: 50 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Improved blood glucose control. Target is number of participants reporting improvement.

Outcome Type: Long

2007: 50 2008: 50 2009: 50 2010: 0 2011: 0

Outcome Target

Improved health and diabetes management. Target is number of participants.

Outcome Type: Long

2007: 0 2008: 50 2009: 50 2010: 0 2011: 0

Outcome Target

Decreased chronic disease risk factors. Target is number of participants.

Outcome Type: Long

2007: 0 2008: 50 2009: 50 2010: 0 2011: 0

Outcome Target

Decreased medical costs. Target is number of participants reporting decreased medical costs.

Outcome Type: Long

2007: 0 2008: 0 2009: 100 2010: 0 2011: 0

20. External factors which may affect outcomes

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

Description

Many conditions and situations that exist in Wyoming are similar to those in other parts of the country, for example, the following: • Food choices made available and advertised to consumers by producers; • Access to timely and accurate information; • Coordination and cooperation of federal agencies and state partners; • Existence of local collaboration • Level of funding at federal, state and local level; and • Willingness of private sector funders, such as corporations, foundations, and community organizations, to collaborate with Wyoming Cooperative Extension Service.

21. Evaluation studies planned

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

Description

Collection of pre-, post-, and follow-up program data as part of the Dining with Diabetes in Wyoming project.

22. Data Collection Methods

- Whole population
- Mail
- On-Site
- Observation
- Tests

Description

Collection of pre-, post-, and follow-up program data as part of the Dining with Diabetes in Wyoming project. In addition, stakeholder input will be assessed through area advisory meetings, surveys, external focus groups, internal focus groups, needs assessments, etc. in order to identify emerging issues, redirect extension programs, and set priorities.

1. Name of the Planned Program

(PSAS)-Crop Systems - Profitable and Sustainable Agriculture Systems

2. Program knowledge areas

- 216 15% Integrated Pest Management Systems
- 204 10% Plant Product Quality and Utility (Preharvest)
- 601 10% Economics of Agricultural Production and Farm Management
- 202 5% Plant Genetic Resources
- 213 10% Weeds Affecting Plants
- 205 10% Plant Management Systems
- 215 10% Biological Control of Pests Affecting Plants
- 214 10% Vertebrates, Mollusks, and Other Pests Affecting Plants
- 212 10% Pathogens and Nematodes
- 203 10% Plant Biological Efficiency and Abiotic Stresses Affecting Plants

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

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

University of Wyoming Cooperative Extension educators and specialists will individually and cooperatively develop educational programs to address the needs of Wyoming crop producers. AES personnel will provide additional support to address other issues such as variety improvement, biological efficiency, biological pest control, and management of additional pest species such as diseases and nematodes. Time spent on research, program promotion, and client visits will be necessary to reach our goals. Money generated from grants, outside sponsors, and program registration fees, in addition to annual budget allocations, will be used for media, travel, accommodations, publications and postage to reach potential clientele. The use of volunteers will be employed to fortify our efforts at meetings and tours. Through the use of UW CES technology and equipment, such as remote sensing, guidance and leadership will be provided by educators and specialists to improve traditional management practices. Partnerships will be formed with ag businesses, financial organizations and investment companies, federal agencies and other universities to deliver timely information to producers and business owners.

6. Situation and priorities

Crop producers across Wyoming are challenged with increasing production costs, global market competition, environmental pressure, and decreased labor availability. Alternative markets, improved management practices, and cost efficiency is critical to ensure profitability and sustainability for Wyoming producers.

7. Assumptions made for the Program

1) Information exists that can improve the profitability and sustainability of Wyoming agriculture. 2) UW College of Agriculture personnel are dedicated to collection and distribution of non-biased, research-based information. 3) People will be interested in alternative crop production, and will be motivated to change. 4) Increased understanding of the biofuel industry will increase participation by Wyoming farmers. 5) Funding will be secure for speaker honorariums, facilitation, travel, accommodations, publications, and media.

8. Ultimate goal(s) of this Program

Short Term: Wyoming crop producers will be aware of the type of crops used by the biofuel industry, and will have a general understanding of the process of turning crops into fuel. Pasture land owners and/or managers will be able to recognize indicators of pasture condition and will possess decision-making skills necessary to make needed management decisions. Producers with the resources to irrigate their crops and/or pasture will know and understand costs and returns associated with their irrigation practices and systems. Crop producers in Wyoming will be aware of types of crops and cropping practices involved in producing crops for nutraceutical and/or pharmaceutical use. Medium Term: Wyoming producers will be able to substitute traditional or present crop production with alternative crops to market with the biofuel industry or pharmaceutical companies if increased profitability results from the substitution. The knowledge gained will be implemented, resulting in grazing strategies being reviewed and possibly modified, irrigation systems improved, and traditional practices evaluated for compliance with recent research-based information. Long Term: Wyoming producers will be dependable contributors to the biofuel industry, improving the economical stability of the region. Homeland security will be supported by the removal of the nation's dependence

on petroleum. Establishment of markets with pharmaceutical companies will result in an increase in supply of medicinal products, as well as contribute to regional economic growth. Water conservation and improved pasture conditions will improve the profitability and sustainability of Wyoming's agriculture industry, and further establish Ag producers as ultimate stewards.

9. Scope of Program

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

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 6.0 | 0.0 | 15.7 | 0.0 |
| 2008 | 6.0 | 0.0 | 16.2 | 0.0 |
| 2009 | 6.0 | 0.0 | 16.2 | 0.0 |
| 2010 | 0.0 | 0.0 | 16.2 | 0.0 |
| 2011 | 0.0 | 0.0 | 16.2 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Any or all channels of the media will be used to familiarize the public with UW College of Agriculture areas of programming and personnel. Media releases in local newspapers, radio spots and television advertisements will inform the public of upcoming Extension programs including contact persons. Newsletter articles distributed both electronically and through the mail by county offices, area teams, and the University of Wyoming will reach producers locally, regionally, and state-wide. Public educational programs with invited speakers and Extension specialists and educators presenting research-based information will continue to be held in response to local, state, and national crop production issues. Demonstrations of technology and skills training will be included in education curriculum to enhance educational effectiveness. Field tours will be organized to provide producers with the opportunity to observe industry procedure (i.e., tour of an ethanol plant).

14. 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 ● One-on-One Intervention ● Demonstrations | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites |

15. Description of targeted audience

The University of Wyoming is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in all programs regardless of their race, national origin, gender, age, religion, or disability. Participants will include policy makers for County, State, and Federal government agencies, crop producers, livestock producers, ag lenders, potential investors, and the scientific community. An existing secondary audience will be the media, general public, and interest groups not directly involved in production agriculture (i.e., environmental groups).

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 2000 | 50000 | 500 | 1000 |
| 2008 | 2000 | 50000 | 500 | 1000 |
| 2009 | 2000 | 50000 | 500 | 1000 |
| 2010 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 2 2008 : 3 2009 : 3 2010 : 3 2011 : 3

18. Output measures

Output Target

Measures of the success of AES programs will be tied to grant dollars (target 16 grants in 2007), patented and variety protected products developed and released, and scientific publications - (20 journal articles; 32 abstracts and proceedings; 24 other publications; 32 presentations; and 1 new crop variety developed) . The ultimate goal is to provide information to improve profitability and sustainability for Wyoming agriculture producers - our target is to reach 100 each year with CES educational activities.

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Awareness created for 500 agriculture producers of crops. Target is number of agriculture producers.

Outcome Type: Short

2007: 500 2008: 500 2009: 500 2010: 0 2011: 0

Outcome Target

Pasture land owners and/or managers will be able to recognize indicators of pasture condition and will possess decision-making skills necessary to make needed management decisions. Target is number of pasture land owners

reporting outcome.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Producers with the resources to irrigate their crops and/or pasture will know and understand costs and returns associated with their irrigation practices and systems. Target is the number of producers reporting outcome.

Outcome Type: Short

2007: 50 2008: 50 2009: 50 2010: 0 2011: 0

Outcome Target

Develop intergrated pest management systems in both irrigated and dryland cropping systems through research efforts. Target is number of systems developed.

Outcome Type: Medium

2007: 5 2008: 7 2009: 8 2010: 8 2011: 8

Outcome Target

Through research efforts develop new and improved crops and crop production systems for the High Plains of Wyoming and the West. Outcome indicator is the number of new crops or crop systems developed.

Outcome Type: Long

2007: 1 2008: 2 2009: 2 2010: 2 2011: 3

Outcome Target

Through research evaluate and determine economic feasibility of producing biofuel crops in Wyoming. Outcome indicators include number of crop producers implementing trial of biofuel crops.

Outcome Type: Medium

2007: 3 2008: 3 2009: 5 2010: 5 2011: 5

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Appropriations changes

Description

Financial support of programming is a necessity. Without financial support, program effectiveness will be severely encumbered. Wyoming has experienced six or more years of drought which impact cropping systems. Global market changes, the overall agriculture economy, and competing priorities are all external factors affecting this program area.

21. Evaluation studies planned

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

Description

Programs will be formally evaluated with written surveys to gain feed back by producers in attendance at "Insuring Success for Wyoming Agriculture" and other programs. Also, Extension professionals will seek feedback from the reading audience of "Barnyards and Backyards". In some cases, follow-up phone calls will be included in the evaluation process.

22. Data Collection Methods

- Sampling
- Mail
- Telephone
- On-Site
- Unstructured
- Observation
- Tests

Description

Multiple methods will be used. Sampling will be utilized to gather evaluative data from media education efforts. Surveys, by mail, telephone or on-site will be used with program participants. Observation and unstructured interviews will be used to determine medium to long term outcomes. Tests including pre and post will be used to measure knowledge gained.

1. Name of the Planned Program

(PSAS and SMRR) Wyoming Small Acreages

2. Program knowledge areas

- 602 14% Business Management, Finance, and Taxation
- 121 16% Management of Range Resources
- 112 14% Watershed Protection and Management
- 601 14% Economics of Agricultural Production and Farm Management
- 104 14% Protect Soil from Harmful Effects of Natural Elements
- 131 14% Alternative Uses of Land
- 102 14% Soil, Plant, Water, Nutrient Relationships

3. Program existence : New (One year or less)

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

5. Brief summary about Planned Program

The number of people moving into the West has steadily increased over recent years. While many new residents choose to live in urban areas, many others wish to live in rural and semi-rural settings on small tracts of what was once farmland, rangeland, or forested land. On these fragmented parcels they engage in activities that affect the natural resources of the state, such as agriculture. Many of this small acre audience do not have a previous relationship with Cooperative Extension or other traditional rural agencies. Reaching this new and emerging audience may require a new paradigm for educational methods used by Cooperative Extension Educators. This will require a greater reliance on research to better determine this audience's educational needs and preference for receiving education, and may require an entirely different approach to providing education to this clientele. In short, there are at least three dimensions to addressing this audience: 1) to better understand who the clientele are and their preferred mode for educational delivery, 2) to provide educational information on small properties resource management, and 3) to deliver educational information on rural enterprise management.

6. Situation and priorities

Statistics show that while in Wyoming the number of farms has remained relatively constant, farm size has declined—evidence of the increasing number of smaller-size operations. Since 1987 the total number of farms in Wyoming increased only two percent, while the number of farms under 50 acres increased 13 percent. More importantly, the number of farms between 10 and 49 acres increased fully 55 percent. In Wyoming managers of farms with less than 50 acres make decisions that affect 44,018 acres. (Statistics from USDA Agricultural Statistics Service, 2002.) This proliferation of new landowners has the potential to benefit the communities in which they reside in a variety of ways. For instance, the economic benefit to the state can be significant. In fact, since 1987, a 71 percent increase in the number of farms reporting sales of less than \$1,000 has been documented. However, many of these new landowners have little knowledge of resource management in Wyoming's ecosystems. Thus their expectations of the land and their land management techniques can be inappropriate for sustainable management. As these land managers begin to exert influence on the land through their entrepreneurial enterprises and land management decisions, their lack of experience can lead to a host of environmental and social problems. Recent assessments from Cooperative Extension Advisory Boards (2004) suggest that small acreage development is a major concern across the state. Agriculture and natural resource professionals are presently struggling to determine how to most effectively meet the educational needs of these new landowners and potential entrepreneurs.

7. Assumptions made for the Program

•Small acreage land ownership will continue to increase and these land managers will continue to need information to make sustainable land management decisions. •A majority of the small acreage landowners are seeking information and will use educational resources provided. •Adoption of recommended practices will lead to sustainability of ecosystems •Involved agency personnel will continue to be motivated and rewarded to pursue education of small acreage landowners in the manner outlined by this plan of work.

8. Ultimate goal(s) of this Program

Increase the percentage of small acreage land managers who are managing their land in a sustainable manner.

9. Scope of Program

- In-State Extension
- Integrated Research and Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 5.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 5.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Development of a statewide database of defining characteristics of small acre owners (who they are, what they want and need to know, and how they want that information). Educational programs targeted at small acreage landowners emphasizing sustainable land management practices. Individual interaction with small acreage landowners educating them on resources available to assist them with sustainable land management practices. Development and distribution of a targeted, user friendly publication providing education on sustainable land management practices. Coordination with other interested agencies to provide education to this clientele, and funding for this effort. Provide educational opportunities for professionals involved with small acreage landowners. Seek external funding to provide education to natural resource professionals, and small acreage landowners.

14. 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 ● One-on-One Intervention | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. The target audience for this program is individuals who reside on small acreages of 40 acres or less.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 500 | 2000 | 0 | 0 |
| 2008 | 500 | 2000 | 0 | 0 |
| 2009 | 500 | 2000 | 0 | 0 |
| 2010 | 500 | 2000 | 0 | 0 |
| 2011 | 500 | 2000 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of individuals participating in educational programs and activities. Target is number of individuals participating.

2007: 100 2008: 200 2009: 300 2010: 500 2011: 500

Output Target

Number of educational programs implemented. Target is number of programs implemented.

2007: 5 2008: 10 2009: 10 2010: 25 2011: 25

Output Target

Number of subscriptions to Barnyards and Backyards publication. Target is paid subscription numbers for magazine.

2007: 1500 2008: 2000 2009: 2000 2010: 2000 2011: 2000

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Increase awareness, knowledge, skills and aspirations of small acreage landowners for managing their resources. Target is number of participants reporting outcome.

Outcome Type: Short

2007: 100 2008: 200 2009: 500 2010: 500 2011: 500

Outcome Target

Improve resource management practices of small acre landowners. Target is number of participants reporting outcome.

Outcome Type: Medium

2007: 25 2008: 50 2009: 100 2010: 100 2011: 100

Outcome Target

Tools and techniques will be provided for small farm landowners who want to develop businesses. Target is number of participants reporting outcome.

Outcome Type: Medium

2007: 10 2008: 25 2009: 25 2010: 25 2011: 25

Outcome Target

Create a "culture of stewardship" among small acreage landowners. Target is number of participants reporting outcome.

Outcome Type: Long

2007: 0 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Small farm businesses will be developed. Target is number of businesses developed.

Outcome Type: Long

2007: 1 2008: 5 2009: 10 2010: 10 2011: 10

Outcome Target

Improved small acreage landowner understanding of Wyoming's laws and regulations of land management issues (ex. trespass, fence laws, neighborliness). Target is number of participants reporting outcome.

Outcome Type: Long

2007: 25 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Increase the proportion of small acreage land managers who are managing their land in a sustainable manner. Target is number of participants reporting outcome.

Outcome Type: Short

2007: 0 2008: 50 2009: 100 2010: 100 2011: 100

20. External factors which may affect outcomes

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

Description

Weather extremes and drought may affect small acreage owners in agriculture or horticulture issues. The economy forces many landowners to sell parcels of their property to small acreage owners. Many new to the land owners are also new to the west. Funding is vital to this program, changes in appropriations would impact the program. Government regulations such as zoning can affect the program.

21. Evaluation studies planned

- Retrospective (post program)
- During (during program)

Description

•Focus group evaluation of targeted publication for small acreage land owners •Evaluation of interest in publication determined by number of subscriptions •Post workshop evaluation of knowledge, awareness and skills •Phone, and/or mail surveys a period

of time following workshops or individual interaction to determine change in knowledge, awareness, skills and practices. •Implement quantifiable land health assessments during initial contact with a sample of landowners and conduct follow-up assessments after a determined period to determine impact on health of ecosystem. •Assess community economic impact resulting from new enterprise development using the following indicators: Enterprises developed. Jobs created. New markets developed. New markets captured. Personal income increased or decreased. Support/service enterprises developed.

22. Data Collection Methods

- Sampling
- Mail
- Telephone
- On-Site
- Unstructured
- Observation

Description

A variety of data collection methods are planned to evaluate media and direct contact educational activities.

1. Name of the Planned Program

(PSAS) Forage Based Livestock Systems - Profitable and Sustainable Agriculture

2. Program knowledge areas

- 301 20% Reproductive Performance of Animals
- 601 10% Economics of Agricultural Production and Farm Management
- 314 5% Toxic Chemicals, Poisonous Plants, Naturally Occuring Toxins, and Other Hazards Affecting Animals
- 302 15% Nutrient Utilization in Animals
- 307 20% Animal Management Systems
- 602 10% Business Management, Finance, and Taxation
- 311 15% Animal Diseases
- 305 5% Animal Physiological Processes

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

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

Livestock producers throughout Wyoming face an ever changing industry with issues such as; increasing cost of production, increasing pressure for individual animal identification, changing requirements for marketing knowledge. All of the issues are coupled with the need for producers to raise livestock in a sustainable operation with limited resources. AES faculty will provide additional research support in several areas such as pest management, poisonous plants, and wildlife/livestock diseases interfaces. University of Wyoming Cooperative Extension Educators and Specialist's will individually and cooperatively develop educational programs to address the needs of Wyoming livestock producers. Time spent on research, program promotion, and client visits will be necessary to reach our goals. Money generated from grants, outside sponsors, and program admissions, in addition to annual budget allowances, will be used for media, travel, accommodations, publications and postage to reach potential clientele. The use of volunteers will be employed to fortify our efforts at meetings and tours. Through the use of UWCES technology and equipment, i.e. ultrasound data collection, guidance and leadership will be provided by educators and specialists to improve traditional management practices. Partnerships will be formed with ag businesses, financial organizations and investment companies, federal agencies and other universities to deliver information to producers and business owners.

6. Situation and priorities

The value of agriculture to Wyoming's economy approaches \$1 billion each year, and agriculture's contribution to open spaces, wildlife, and recreation is even greater. The largest component of Wyoming agriculture is the beef cattle industry, accounting for approximately 70 percent of all cash receipts and 86.5 percent of all livestock production. Sheep, lamb, and wool receipts in 1998 were \$29 million. Forage sustains the Wyoming livestock industry. Hay is the leading crop in Wyoming with production valued at \$185 million annually, mostly marketed through livestock.

7. Assumptions made for the Program

1) Information exists that can improve the profitability and sustainability of Wyoming agriculture. 2) UW College of Agriculture personnel are dedicated to collection and distribution of non-biased, research-based information. 3) People will be interested in improved livestock production techniques, and will be motivated to change. 4) Increased understanding of the National Animal Identification Plan will increase participation by Wyoming ranchers. 5) Funding will be secured for speaker honorariums, facilitation, travel, accommodations, publications, and media.

8. Ultimate goal(s) of this Program

Short Term: Wyoming livestock producers will gain an understanding and compliance with the National Animal Identification Program. Producers will also gain an understanding of heifer development as well as opportunities for matching genetic improvement with successful marketing strategies. Livestock producers will have an increased awareness of sources of risk as well as risk-management alternatives. Medium Term: Wyoming producers will be able to implement electronic animal identification in their operations to gain advantages in herd management. Producers will have a greater awareness of food security and animal management practices. Producers will be able to utilize technology and information to make better heifer selection decisions. Long Term: Wyoming producers will benefit through an increased value of livestock and crops related to improved cropping practices, herd selection and management.

9. Scope of Program

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

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 12.0 | 0.0 | 22.9 | 0.0 |
| 2008 | 12.0 | 0.0 | 23.1 | 0.0 |
| 2009 | 12.0 | 0.0 | 23.1 | 0.0 |
| 2010 | 0.0 | 0.0 | 23.1 | 0.0 |
| 2011 | 0.0 | 0.0 | 23.1 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Any or all channels of the media will be used to familiarize the public with UW CES and the AES programming areas and personnel. Media releases in local newspapers, radio spots and television advertisements will inform the public of upcoming Extension programs including contact persons. Newsletter articles distributed both electronically and through the mail by county offices, area teams, and the University of Wyoming will reach producers locally, regionally, and state-wide. Public educational programs with invited speakers and Extension specialists and educators presenting research-based information, will continue to be held in response to local, state, and national livestock production issues. Demonstrations of technology and skills training will be included in education curriculum to enhance educational effectiveness. Field tours will be organized to provide producers with the opportunity to observe industry procedure. Specific Areas of Focus. Emphasis will be placed on the four main areas which follow; Herd management and traceability, herd development, cropping systems and livestock development, risk and operation management techniques and alternatives to enhance the stability of Wyoming livestock producers. The new Sustainable Agriculture Research and Extension Center (SAREC) located at Lingle, Wyoming will provide a resource base for integrating livestock/forage based programs.

14. 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 | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites |

15. Description of targeted audience

Participants will include policy makers for county, state, and federal government agencies, livestock producers, crop producers, ag lenders, and potential investors. An existing secondary audience will be the media, general public, and interest groups not directly involved in the production of agriculture (i.e., environmental groups).

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 2000 | 50000 | 1000 | 1000 |
| 2008 | 2000 | 50000 | 1000 | 1000 |
| 2009 | 2000 | 50000 | 1000 | 1000 |
| 2010 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 1 2008 : 1 2009 : 1 2010 : 1 2011 : 1

18. Output measures

Output Target

Effectiveness of research programs will be based on publications, external grant support, and integration into existing extension programs. Ultimately, this program will improve livestock value through cropping practices, herd selection, and management for Wyoming livestock producers. Targets include number of programs conducted, livestock producers reporting change in practices as a result of educational efforts.

2007 : 30 2008 : 30 2009 : 30 2010 : 0 2011 : 0

Output Target

Research efforts will develop new and improved forages for high elevation livestock systems. Target measures are new or improved forages.

2007 : 1 2008 : 2 2009 : 2 2010 : 2 2011 : 3

Output Target

Develop improved methods of estimating forage base under varying environmental conditions. Targets included new methods developed.

2007 : 1 2008 : 2 2009 : 2 2010 : 3 2011 : 3

Output Target

Develop profitable and sustainable forage based livestock systems for the High Plains. Targets are defined as new systems developed.

2007 : 1 2008 : 2 2009 : 3 2010 : 3 2011 : 3

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Awareness Created for Wyoming Livestock producers through educational activities. Target numbers indicate number of producers reached.

Outcome Type: Short

2007: 500 2008: 500 2009: 500 2010: 0 2011: 0

Outcome Target

Wyoming producers will implement electronic animal identification to gain advantages in herd management. Target shows that by 2009, 10 percent of producers in Wyoming will have voluntarily implemented electronic animal identification.

Outcome Type: Medium

2007: 0 2008: 0 2009: 10 2010: 0 2011: 0

Outcome Target

Producers will also gain an understanding of heifer development as well as opportunities for matching genetic improvement with successful marketing strategies. Targets reflect number of livestock producers making changes in heifer development.

Outcome Type: Short

2007: 10 2008: 10 2009: 20 2010: 0 2011: 0

Outcome Target

Wyoming producers will benefit through an increased value of livestock and crops related to improved cropping practices, herd selection and management. Outcomes indicate by 2009, 25 Wyoming producers will report increased sustainability and profitability due to educational efforts.

Outcome Type: Long

2007: 0 2008: 0 2009: 25 2010: 0 2011: 0

Outcome Target

Through research efforts UW will minimize disease transfer between livestock and wildlife. Outcomes reflect number of methods identified to diagnose and prevent disease transfer.

Outcome Type: Long

2007: 2 2008: 2 2009: 2 2010: 2 2011: 3

20. External factors which may affect outcomes

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

Description

Financial support of programming is a necessity. Severe weather including winter blizzards and drought impact feed cost for livestock operations. Increased production costs may result in reduced herd size for operators. Government regulations (state and federal), competing priorities and global market changes for livestock producers may affect outcomes.

21. Evaluation studies planned

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

Description

Programs will be formally evaluated with written survey to gain feed back by producers in attendance at “Insuring Success for Wyoming Agriculture” and other programs. Also, Extension professionals will seek feedback from the reading audience of “Barnyards and Backyards”. In some cases, follow-up phone calls will be included in the evaluation process.

22. Data Collection Methods

- Sampling
- Mail
- Telephone
- On-Site
- Unstructured
- Observation

Description

A variety of data collection methods will be utilized. Methods will be determined by duration of educational activity, audience, and objective to be measured.

1. Name of the Planned Program

(PSAS) Urban Horticulture and Master Gardeners

2. Program knowledge areas

- 124 10% Urban Forestry
- 806 5% Youth Development
- 216 15% Integrated Pest Management Systems
- 206 20% Basic Plant Biology
- 211 10% Insects, Mites, and Other Arthropods Affecting Plants
- 102 15% Soil, Plant, Water, Nutrient Relationships
- 111 10% Conservation and Efficient Use of Water
- 212 5% Pathogens and Nematodes Affecting Plants
- 213 10% Weeds Affecting Plants

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

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

University of Wyoming Cooperative Extension Service educators, specialists, and College of Agriculture faculty and academic professionals will individually and cooperatively develop educational programs to address the needs of Wyoming horticultural consumers and producers; providing education in sustainable and environmentally sound horticultural practices as well as fresh produce selection and maintenance of healthy urban and production forests. AES will provide additional support to strengthen knowledge areas related to pests, pest management, and nutrient relationships. Research development should include an increase in horticultural research at the University of Wyoming Research & Extension Centers. The use of UW CES and county based technology and equipment, teaching and presentation; guidance and leadership will be provided by educators and specialists to improve traditional management practices. Partnerships will be formed with local, state, and federal agencies, green industry businesses and organizations, financial organizations and other universities to deliver information to producers and consumers. These partners include but are not limited to local and state Weed & Pest, and local and federal Conservation Services, the Wyoming State Forestry and local Wildfire Mitigation committees, the Wyoming Groundskeepers & Growers Association, and the Wyoming Grape & Wine Association. Volunteers include but are not limited to Wyoming State Master Gardeners, county based Master Gardeners, and 4-H leaders.

6. Situation and priorities

In Wyoming, horticulture involves commercial production of vegetables, fruits, herbaceous and woody ornamentals, turf grass sod and seed. Wyoming horticulture also involves all of these products in the consumer's homes, landscapes or businesses. Demand for consumer-based horticulture is a large local, area, and state-wide need. The commercial green industry in Wyoming is young, diverse, and widely dispersed. It is comprised of greenhouses, florists, garden centers, landscape care companies, nurseries, tree care companies, interior plantscapers, etc. Wyoming's environment includes less than optimal soil conditions, a very harsh climate for many horticultural crops and growing practices; the variation in elevation across the state as well as short to very short growing seasons all contribute to difficult growing conditions. However, Wyoming consumers spend \$100,000,000 on goods and services from the green industry annually contributing a high level to Wyoming's economy. There is a tremendous level of potential for green industry growth within the next few years. Nationally, the green industries are the fastest growing segment of agricultural production today.

7. Assumptions made for the Program

1) Information exists that can improve the profitability and sustainability of Wyoming agriculture and green industry. 2) UW College of Agriculture personnel are dedicated to collection and distribution of non-biased, research-based information. 3) Producers will be interested in alternative crop production, and will be motivated to change. 4) Consumers will be interested in alternative crop availability, and will be motivated to change. 5) Citizens will continue to participate in Master Gardener trainings and continue to volunteer in their communities. 6) Increased understanding of green industry production will increase participation by Wyoming's traditional crop producer and small acreage producers. 7) Funding will be secure for speaker honorariums, facilitation, travel, accommodations, publications, and media.

8. Ultimate goal(s) of this Program

Wyoming producers will be dependable contributors to the economic stability of the counties, areas, and state. Plant waste recycling facilities will increase production of reusable products and landfills will decrease the space needed to meet the needs of their communities. Water conservation will improve the profitability and sustainability of Wyoming's green industry and municipal water supplies. Community property values will increase due to sustained landscapes designed with sustainable plant choices. Wyoming families will increase their use of fresh produce, making healthier choices in food selection. Youth and their families will choose gardening as a healthy choice for active living.

9. Scope of Program

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

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 8.0 | 0.0 | 0.8 | 0.0 |
| 2008 | 8.0 | 0.0 | 1.0 | 0.0 |
| 2009 | 8.0 | 0.0 | 1.0 | 0.0 |
| 2010 | 0.0 | 0.0 | 1.0 | 0.0 |
| 2011 | 0.0 | 0.0 | 1.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

A variety of channels of the media will be used to familiarize the public with UW CES and AES areas of programming and personnel. Media releases in the local newspapers, radio spots and television advertisements will inform the public of upcoming Extension programs including contact persons. From the Ground Up television news segments will continue to be developed by UW CES field staff and aired on local and statewide television stations. Newsletter articles distributed both electronically and through the mail by county offices, Master Gardener organizations, area teams, and UW will reach producers, consumers and volunteers locally, area-wide, and state-wide. UW CES specialists will continue to develop Horticultural Train the Trainer events for the benefit of training UW CES field staff and long term Master Gardener volunteers. Public educational programs and conferences with invited speakers and Extension specialists and educators presenting research-based information will continue to be held in response to local, area, state, and national horticultural issues. Demonstrations of technology and skills training will be included in education curriculum to enhance educational effectiveness. Field tours will be organized to provide producers, consumers and volunteers with the opportunity to observe industry procedures. Recruitment of Master Gardener, 4-H leaders, and youths as well as other volunteers will occur on an ongoing basis. Over the course of the five years, Wyoming will see an overall increase in the number of Master Gardeners. 4-H Vegetable and Forestry judging programs will provide youth with opportunities to evaluate the value of fresh produce and forest products. 4-H gardening project leaders and youth will receive training in proper gardening practices.

14. 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 (Judging Contest) | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites |

15. Description of targeted audience

The University of Wyoming is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in programs regardless of their race, national origin, gender, age, religion, or disability. Participants will include policy makers for County, State, and Federal government agencies, horticultural crop producers and consumers, Master Gardener and 4-H volunteers, youths, lenders, and potential investors. An existing secondary audience will be the media, general public, and interested groups not directly involved in the production of horticultural crops or products.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 20000 | 50000 | 500 | 1000 |
| 2008 | 20000 | 50000 | 500 | 1000 |
| 2009 | 20000 | 50000 | 500 | 1000 |
| 2010 | 0 | 0 | 0 | 0 |
| 2011 | 0 | 0 | 0 | 0 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of horticulture contacts reached. Target is the number of contacts.

2007: 5000 2008: 5000 2009: 5000 2010: 0 2011: 0

Output Target

Number of individuals participating in educational programs. Target is number of individuals.

2007: 1000 2008: 1000 2009: 1000 2010: 0 2011: 0

Output Target

Volunteers completing Master Gardener training. Target is number of new volunteers each year.

2007: 100 2008: 100 2009: 100 2010: 0 2011: 0

Output Target

Measures of AES success will be tied to grant dollars, publication and adoption of improved species and techniques. The ultimate goal is to provide increased sustainability. Target numbers include:

2007: Journal Articles-1; Abstracts and Proceedings-2; Other publications-3; Presentations-4; Grants-1

2008: Journal Articles - 1; Abstracts and Proceedings -2; Other publications - 3; Presentations - 4; Grants- 1

2009: Journal Articles - 2; Abstracts and Proceedings -2; Other publications - 3; Presentations - 4; Grants- 1

2010: Journal Articles - 2; Abstracts and Proceedings -3; Other publications - 3; Presentations - 4; Grants- 2

2011: Journal Articles - 2; Abstracts and Proceedings -3; Other publications - 3; Presentations - 4; Grants- 2

2007: 11 2008: 11 2009: 12 2010: 14 2011: 14

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Awareness created and knowledge increased. Target is number of participants in horticulture programs.

Outcome Type: Short

2007: 1000 2008: 1000 2009: 1000 2010: 0 2011: 0

Outcome Target

Wyoming crop producers will be able to substitute traditional or current crop production with alternative horticultural crops to market if increased profitability may result. Target is number of crop producers.

Outcome Type: Medium

2007: 25 2008: 25 2009: 25 2010: 0 2011: 0

Outcome Target

Water conservation will improve the profitability and sustainability of Wyoming's green industry and municipal water supplies. Target is number of individuals reporting water conservation practices adopted.

Outcome Type: Long

2007: 100 2008: 100 2009: 100 2010: 0 2011: 0

Outcome Target

Youth and their families will choose gardening as a healthy choice for active living. Target is number of youth and families reporting gardening practices increased.

Outcome Type: Long

2007: 500 2008: 500 2009: 500 2010: 0 2011: 0

Outcome Target

Research efforts will develop integrated pest management systems for turf. Target is number of systems developed.

Outcome Type: Long

2007: 2 2008: 2 2009: 3 2010: 3 2011: 3

Outcome Target

Research efforts will develop improved water and nutrient management systems in turf. Target is the number of systems developed.

Outcome Type: Medium

2007: 2 2008: 2 2009: 3 2010: 3 2011: 3

Outcome Target

Research will evaluate and develop suitable grape varieties for Wyoming's varied climates. Targets are number of grape varieties.

Outcome Type: Long

2007: 3 2008: 3 2009: 4 2010: 4 2011: 4

Outcome Target

Improve profitability and sustainability of the horticulture industry in the High Plains. Targets are number of horticulture industry operations reporting improved profitability.

Outcome Type: Long

2007: 3 2008: 3 2009: 3 2010: 4 2011: 4

20. External factors which may affect outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes

Description

Financial support of programming is a necessity. Without financial support, program effectiveness will be severely encumbered. Weather impacts horticulture production.

21. Evaluation studies planned

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

Description

Programs will be formally evaluated with written questionnaire feed back by producers and consumers in attendance of Horticultural and 4-H youth programming as well as Master Gardener trainings. In some cases, follow-up phone calls will be included in the evaluation process.

22. Data Collection Methods

- Whole population
- Telephone
- Unstructured

Description

Participants in educational programs will be surveyed to determine impact. Follow-up phone surveys will be done with some activities to determine medium to long term impact. Unstructured interviews will be conducted with clientele to document value of the program.

1. Name of the Planned Program

(SMRR) 4-H/Youth Natural Resource Education

2. Program knowledge areas

- 132 5% Weather and Climate
- 131 5% Alternative Uses of Land
- 112 15% Watershed Protection and Management
- 104 10% Protect Soil from Harmful Effects of Natural Elements
- 102 10% Soil, Plant, Water, Nutrient Relationships
- 121 20% Management of Range Resources
- 306 20% Environmental Stress in Animals
- 206 5% Basic Plant Biology
- 213 5% Weeds Affecting Plants
- 211 5% Insects, Mites, and Other Arthropods Affecting Plants

3. Program existence : Intermediate (One to five years)

4. Program duration : Medium Term (One to five years)

5. Brief summary about Planned Program

Extension is uniquely positioned in that we have existing volunteer youth development programming infrastructure already built in the 4-H program featuring offices in all of Wyoming's 23 counties, several thousand volunteer staff and thousands of youth already acquainted with the 4-H program. These youth present an immediate natural resource education audience and an opportunity to reach the broader youth audience with the educational resources we have. In addition to education, we can utilize various delivery methods and hands-on techniques to build upon the remaining elements of youth development such as inclusive environments, positive relationships with a caring adult, opportunities for mastery, opportunity for self-determination, and so on. Building stronger natural resource programs, enhancing natural resource teaching opportunities within existing high-interest projects (like market livestock and shooting sports projects) and increasing youth development opportunities are key. This will continue to foster interest in natural resource careers, knowledge about the land, how to be good stewards of the land, and how to be prepared to make informed decisions about the use and management of Wyoming's natural resources as adults.

6. Situation and priorities

Given the importance of natural resources to the State of Wyoming, it is imperative for Wyoming residents, including youth, to be knowledgeable about the use and management of natural resources. The desire to be engaged and learning about natural resources is already at the top of the list for many residents of Wyoming. Since natural resources are such an important part of Wyoming's way of life, there are wide-spread avenues to utilize their importance and attractiveness to reach youth by employing the eight essential elements of youth development. For many topics, including natural resource appreciation, the childhood years are often "the teachable moment."

7. Assumptions made for the Program

• Youth are interested in natural resources. • Youth understand that knowledge of natural resources is an important enhancement to their quality of life. • The childhood years are "the teachable moment".

8. Ultimate goal(s) of this Program

To educate the youth about the use and management of natural resources, increasing their interest in natural resources and related careers.

9. Scope of Program

- In-State Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 1.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 1.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 1.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 1.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 1.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

• Produce informative single topic media using television, radio and other venues where appropriate • Develop and/or present programs on natural resources at youth activities • Produce, or update currently produced educational materials targeted to youth on natural resource education • Produce information/education modules emphasizing natural resource topics for 4 H leader use in 4-H project with large enrollment

14. 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 | <ul style="list-style-type: none"> ● Public Service Announcement ● TV Media Programs ● Web sites |

15. Description of targeted audience

The University of Wyoming Cooperative Extension Service is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. The target audience for this program is: general youth and traditional 4-H members.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 50 | 100 | 100 | 500 |
| 2008 | 50 | 100 | 100 | 500 |
| 2009 | 50 | 100 | 100 | 500 |
| 2010 | 50 | 100 | 100 | 500 |
| 2011 | 50 | 100 | 100 | 500 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of youth participating in natural resource educational programs or activities. Target is the number of youth participants.

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Output Target

Number of youth related natural resource programs implemented. Target is number of programs implemented.

2007: 5 2008: 5 2009: 10 2010: 10 2011: 10

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Citizens will make more informed public policy decisions on natural resources. Target is number of citizens.

Outcome Type: Long

2007: 0 2008: 0 2009: 0 2010: 0 2011: 100

Outcome Target

Increased interest in potential careers in natural resources. Target is number of youth reporting career choices in natural resources.

Outcome Type: Long

2007: 0 2008: 5 2009: 10 2010: 10 2011: 25

Outcome Target

Increased enrollment in 4-H natural resource programs (projects, camps, activities). Target is number enrolled in 4-H natural resource programs.

Outcome Type: Medium

2007: 50 2008: 100 2009: 100 2010: 150 2011: 150

Outcome Target

Increase appreciation of natural resources within 4-H project groups who may not be formally enrolled in natural resource project areas. Target is number of youth reporting increased appreciation.

Outcome Type: Medium

2007: 25 2008: 25 2009: 25 2010: 50 2011: 50

Outcome Target

Increase knowledge, awareness and skills among youth on natural resources, their management and associated issues. Target is number of youth.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Enrich non-natural resource 4-H project curricula by inserting appropriate natural resource education topics into them. Target is changes in 4-H project curricula.

Outcome Type: Short

2007: 1 2008: 1 2009: 1 2010: 1 2011: 1

20. External factors which may affect outcomes

- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges

Description

The following external factors can potentially have a large impact on this program and/or its results: • The general level of interest in current Wyoming natural resource issues (may affect the involvement of the potential youth audience) • The level of conflict within natural resource policy-making debates • Traditional 4-H leaders and parents commitment to animal and FCS projects

21. Evaluation studies planned

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

Description

• Gathering testimonials. • Gather feedback from media partners who are transmitting the product. • Conduct spot surveys of audience. • Gather input from program volunteers who employed these materials. • Monitor natural resource 4-H program area project enrollment.

22. Data Collection Methods

- Sampling
- On-Site
- Structured
- Unstructured
- Observation
- Tests

Description

A variety of data collection methods will be used including sampling of participants in programs, surveys, informal and formal interviews with program participants.

1. Name of the Planned Program

(SMRR) Natural Resource Conservation and Management

2. Program knowledge areas

- 135 15% Aquatic and Terrestrial Wildlife
- 132 5% Weather and Climate
- 103 5% Management of Saline and Sodic Soils and Salinity
- 111 10% Conservation and Efficient Use of Water
- 101 10% Appraisal of Soil Resources
- 314 10% Toxic Chemicals, Poisonous Plants, Naturally Occuring Toxins, and Other Hazards Affecting Animals
- 123 10% Management and Sustainability of Forest Resources
- 121 20% Management of Range Resources
- 605 5% Natural Resource and Environmental Economics
- 102 10% Soil, Plant, Water, Nutrient Relationships

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

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

5. Brief summary about Planned Program

One of the greatest benefits of living in Wyoming is the opportunity to experience and to appreciate natural resources. Wyoming's tremendous natural resources support an abundance of recreational opportunities but they also provide the basis for a number of industries that are very important to the state's economy. Therefore, the way in which natural resources are managed, governed and used is of great importance to Wyoming residents. Forty-eight percent of the land area in Wyoming is publicly-owned and is managed by government agencies. Natural resource management policies administered by agencies have significant impacts on Wyoming's economy and quality of life. These agencies are influenced by public input. Private lands are also extremely important as watersheds, wildlife habitats and other values significant to all citizens. Given the importance of natural resources to the State of Wyoming, it is imperative for Wyoming residents to be knowledgeable about the use and management of natural resources. Despite the many natural resource-related opportunities, many Wyomingites are not directly tied to natural resources and agriculture. This results in lack of knowledge and experience regarding natural resource systems, their management and the industries they support. Unfortunately, a segment of the general public appears to believe that any use of even renewable resources is damaging. There is often conflict and occasional litigation among interest groups that differ on how resources should be used and managed. While some differences of opinion and perspective are healthy and needed, other conflicts result in unnecessary rancor or legal battles that are very costly in terms of time, energy and money. Natural resources are important to all segments of the Wyoming population. The natural resource focus of the college will provide research and educational programs designed to foster an understanding of Wyoming's ecosystems as related to the concerns and needs of the state.

6. Situation and priorities

Wyoming has abundant natural resources. A variety of ecosystems and agroecosystems from near pristine wilderness to well managed forests, rangelands, and urban landscapes make Wyoming a unique and inviting place. Wyoming's economy is based on use of its natural resources (minerals, energy, and agricultural products) by U.S. and global economies. The state is characterized by rural areas and wildlife resources and serves as a national and international travel destination. Management of natural resources and associated environmental issues permeate nearly every aspect of life in the state. A compilation of advisory board input from several areas of the state recommended a focused effort to educate the general public on natural resource topics and issues. To raise awareness and knowledge regarding natural resources, educational programs are needed that target the general public and non-traditional audiences for Cooperative Extension. This knowledge and awareness is expected to increase the ability of Wyoming citizens to make informed decisions that will improve public policy, reduce conflict and contribute to the economic and ecological sustainability of Wyoming communities.

7. Assumptions made for the Program

1. The program effects cannot be achieved without the partnership and collaboration of Federal agencies, industry, and state agencies. 2. The necessary resource will be available. 3. The college is capable of providing the leadership along with the scientific information. 4. Public is interested and open to information on natural resources. 5. Informed citizens need knowledge of natural resources and their management to participate in public policy formation.

8. Ultimate goal(s) of this Program

The vision is that decision makers will gain scientific information to make sound environmental decisions on ecosystem management. Knowledge and awareness is expected to increase the ability of Wyoming citizens to make informed decisions that will improve public policy, reduce conflict and contribute to the economic and ecological sustainability of Wyoming communities.

9. Scope of Program

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

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 6.0 | 0.0 | 8.7 | 0.0 |
| 2008 | 6.0 | 0.0 | 8.9 | 0.0 |
| 2009 | 6.0 | 0.0 | 8.9 | 0.0 |
| 2010 | 6.0 | 0.0 | 8.9 | 0.0 |
| 2011 | 6.0 | 0.0 | 8.9 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Natural resource programs will reach out to a broad spectrum of constituents throughout Wyoming using a variety of sources. Outputs include methods such as workshops, short courses, publications, meetings, media releases, and feature articles.

14. 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 ● One-on-One Intervention ● Other 1 (Short courses) ● Other 2 (Field days, plot tours) | <ul style="list-style-type: none"> ● Newsletters ● TV Media Programs ● Web sites ● Other 1 (Publications) |

15. Description of targeted audience

The University of Wyoming is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in programs regardless of their race, national origin, gender, age, religion, or disability. The College of Agriculture is committed to transmitting unbiased scientific-based information to solve local and regional natural resource conflicts involving state, Federal,

and private resources. All efforts will be made to provide information through direct contact and through publications, newsletters, Web sites and other methods. The general public and exurban landowners are among the target audiences.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 100 | 1000 | 20 | 200 |
| 2008 | 100 | 1000 | 20 | 200 |
| 2009 | 100 | 1000 | 20 | 200 |
| 2010 | 100 | 1000 | 20 | 200 |
| 2011 | 100 | 1000 | 20 | 200 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 1 2008 : 1 2009 : 1 2010 : 1 2011 : 1

18. Output measures

Output Target

Number of programs implemented. Target is number of programs.

2007: 5 2008: 5 2009: 5 2010: 10 2011: 10

Output Target

Documented media efforts implemented. Target is number of media efforts.

2007: 5 2008: 5 2009: 10 2010: 10 2011: 10

Output Target

Number of individuals participating in educational programs or activities. Target is number of individuals participating.

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Output Target

Measures of the success of AES programs will be tied to grant dollars, patents, and a variety of protected products developed and released, and scientific publications. The ultimate goal is to provide unbiased information for making informed decisions. Target numbers =

2007: Journal Articles 9; Abstracts or Proceedings 15; Other Publications 18; Presentations 18; Grants 9
 2008: Journal Articles 9; Abstracts or Proceedings 15; Other Publications 18; Presentations 18; Grants 9
 2009: Journal Articles 9; Abstracts or Proceedings 15; Other Publications 18; Presentations 18; Grants 9
 2010: Journal Articles 15; Abstracts or Proceedings 22; Other Publications 18; Presentations 24; Grants 12
 2011: Journal Articles 15; Abstracts or Proceedings 22; Other Publications 24; Presentations 24; Grants 12

2007: 69 2008: 69 2009: 69 2010: 91 2011: 91

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

Program success will be based on information provided in the form of publications, competitive grant dollars received, and contacts made.

Outcome Type: Short

2007: 0 2008: 0 2009: 0 2010: 0 2011: 0

Outcome Target

Increase public knowledge and appreciation of natural resources and public awareness of sustainable natural resource utilization is raised. Target is number of participants reporting outcome.

Outcome Type: Short

2007: 500 2008: 500 2009: 500 2010: 500 2011: 500

Outcome Target

General public understands the impact of resource use and management on the quality and quantity of the resources (i.e. water, rangeland, wildlife, viewsheds). Target is number of participants reporting outcome.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Raise the understanding of the interaction of natural resource use of Wyoming's economy. Target is number of participants reporting outcome.

Outcome Type: Medium

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Citizens will make better-informed decisions on natural resource issues and topics. Target is the number of participants reporting outcome.

Outcome Type: Long

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

Greater public consensus of management of private and public lands resulting in less litigation and burden on the system. Target is number producers reporting outcome.

Outcome Type: Long

2007: 0 2008: 0 2009: 0 2010: 0 2011: 10

Outcome Target

To provide unbiased information that will reduce conflict and contribute to the economic and ecological sustainability of Wyoming communities. Target is number of TV spots developed.

Outcome Type: Long

2007: 10 2008: 15 2009: 15 2010: 15 2011: 15

Outcome Target

Through research develop improved management systems for rangeland and forest resources. Target numbers are management systems developed.

Outcome Type: Medium

2007: 3 2008: 3 2009: 4 2010: 4 2011: 4

Outcome Target

Through research develop improved management techniques for poisonous and invasive plants on extensively managed ecosystems. Target is number of management techniques developed.

Outcome Type: Medium

2007: 4 2008: 4 2009: 4 2010: 5 2011: 5

Outcome Target

Through research develop improved soil, water, and nutrient management on extensively managed agroecosystems. Target numbers are new management techniques developed.

Outcome Type: Long

2007: 2 2008: 2 2009: 3 2010: 3 2011: 3

Outcome Target

Through research develop improved reclamation techniques on drastically disturbed sites. Target numbers are reclamation techniques developed or improved.

Outcome Type: Long

2007: 2 2008: 2 2009: 3 2010: 3 2011: 3

20. External factors which may affect outcomes

- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Other (Technology changes)

Description

Factors external to the University of Wyoming College of Agriculture that could influence results include 1) any changes in state and regional economics, 2) any changes in public policy or regulations, 3) change in technology, and 4) information from special interest groups.

21. Evaluation studies planned

- After Only (post program)
- Retrospective (post program)
- Comparison between locales where the program operates and sites without program intervention

Description

Efforts will be made to assess the success of individual programs through educational efforts, publications, and peer review of the projects. Unstructured surveys will be conducted between program locales and those without program intervention. Feedback from media partners who broadcast radio and TV education materials will be gathered in addition to informal polls to determine public perception of natural resources conducted on-line or with media partners.

22. Data Collection Methods

- Sampling
- On-Site
- Unstructured
- Observation
- Journals

Description

A sample population will be surveyed to determine the benefits of the program and to make adjustments. The goal is to provide the best science possible.

1. Name of the Planned Program

(SMRR) Natural Resource Education for Agricultural Producer and Agency Personnel

2. Program knowledge areas

- 135 5% Aquatic and Terrestrial Wildlife
- 136 5% Conservation of Biological Diversity
- 121 65% Management of Range Resources
- 132 5% Weather and Climate
- 112 20% Watershed Protection and Management

3. Program existence : Intermediate (One to five years)

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

5. Brief summary about Planned Program

About 73 percent of Wyoming agriculture is based on livestock production. At least 95 percent of Wyoming's livestock operations utilize rangeland, and many of these operations use public land leases as a portion of their forage base. Livestock on public rangelands is managed by producers in cooperation with government agencies. Continuing educational opportunities are essential for both agricultural producers and agency personnel to maintain or improve their management skills, to minimize producer-agency conflict and, ultimately, to keep the land healthy and productive, and to maintain or increase the profitability of range livestock production operations.

6. Situation and priorities

Rangelands comprise over 80 percent of Wyoming's land base. Range livestock production, recreation, and wildlife habitat are some of the dominant uses of rangelands. Rangelands also provide water for homes and municipalities, irrigation, industries, fisheries, wildlife and livestock. In semi-arid Wyoming, rangeland uses need to be compatible with maintaining the quality and quantity of water resources. Livestock grazing and wildlife habitat management must also be compatible as both are important for the sustainability of the State's rangeland resources and its economy.

7. Assumptions made for the Program

•Rangeland management practices have ecological consequences. •Improved knowledge and skills will result in improved practices. •Proven rangeland management practices will result in sustainability of the rangeland resources, agricultural operations and help rural communities.

8. Ultimate goal(s) of this Program

Expected long-term outcomes from this program include: •Improved rangeland health, productivity, and profitability. •More profit for range-based agricultural enterprises. •Improve values of rangelands for multiple uses. •Sustain economic base of communities relying on rangeland industries. •Promote rural social and cultural stability.

9. Scope of Program

- In-State Extension
- Integrated Research and Extension

Inputs for the Program

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

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

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

| Year | Extension | | Research | |
|------|-----------|------|----------|------|
| | 1862 | 1890 | 1862 | 1890 |
| 2007 | 6.0 | 0.0 | 0.0 | 0.0 |
| 2008 | 6.0 | 0.0 | 0.0 | 0.0 |
| 2009 | 6.0 | 0.0 | 0.0 | 0.0 |
| 2010 | 6.0 | 0.0 | 0.0 | 0.0 |
| 2011 | 6.0 | 0.0 | 0.0 | 0.0 |

Outputs for the Program

13. Activity (What will be done?)

Workshops on sustainable rangeland and animal management principles will be offered within each extension area within the state. Provide professional development opportunities for rangeland professionals. Develop written educational materials on rangeland and animal management practices and principles (fact sheets, bulletins, media, presentations, Web). Conduct technical consultation on rangeland and animal management, and monitoring of rangelands. Develop media on rangeland management principles (radio, TV, press). Conduct research and demonstrations on sustainable natural resource management principles. Work with individual rangeland managers on developing, implementing, and evaluating sustainable management practices.

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

| Extension | |
|---|--|
| Direct Methods | Indirect Methods |
| <ul style="list-style-type: none"> ● Workshop ● One-on-One Intervention ● Demonstrations | <ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites |

15. Description of targeted audience

The University of Wyoming College of Agriculture is committed to reaching underrepresented groups and individuals and to implementing the objectives of equal opportunity regulations relative to the consideration and treatment of clientele for participation in Extension programs regardless of their race, national origin, gender, age, religion, or disability. The target audience for this program is: The general public, agricultural producers and federal and state land management agency personnel.

16. Standard output measures

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

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|------|------------------------|--------------------------|-----------------------|-------------------------|
| Year | Target | Target | Target | Target |
| 2007 | 100 | 1000 | 100 | 500 |
| 2008 | 100 | 1000 | 100 | 500 |
| 2009 | 100 | 1000 | 100 | 500 |
| 2010 | 100 | 1000 | 100 | 500 |
| 2011 | 100 | 1000 | 100 | 500 |

17. (Standard Research Target) Number of Patents

Expected Patents

2007 : 0 2008 : 0 2009 : 0 2010 : 0 2011 : 0

18. Output measures

Output Target

Number of educational programs or activities implemented. Target is the number of educational programs or activities.

2007: 5 2008: 10 2009: 20 2010: 20 2011: 25

Output Target

Number of Agency personnel, range professionals, and general public participating in training. Target is the number of participants in training.

2007: 100 2008: 100 2009: 250 2010: 250 2011: 250

Outcomes for the Program

19. Outcome measures

Outcome Text: Awareness created

Outcome Target

•Raise awareness, knowledge, and skills for development, implementation and evaluation of land management plans that include management of grazing and browsing animals, and adjusting management as necessary to meet objectives. Target is the number of participants reporting outcome.

Outcome Type: Short

2007: 20 2008: 20 2009: 50 2010: 50 2011: 50

Outcome Target

•Raise awareness of tools to affect management of rangeland resources and herbivores. Target is number of participants reporting outcome.

Outcome Type: Short

2007: 25 2008: 25 2009: 50 2010: 50 2011: 100

Outcome Target

•Raise knowledge on specific range management practices including economic analysis. Target is the number of participants reporting outcome.

Outcome Type: Short

2007: 100 2008: 100 2009: 100 2010: 100 2011: 100

Outcome Target

• Assist land managers, public and private, in the development, implementation and evaluation of plans for improved management of rangeland resources and associated herbivores. Target is number of range management plans developed.

Outcome Type: Medium

2007: 10 2008: 25 2009: 25 2010: 50 2011: 50

Outcome Target

•More profit for range-based agricultural enterprises. Target is number of agriculture enterprises reporting increased profit.

Outcome Type: Long

2007: 2 2008: 5 2009: 10 2010: 25 2011: 25

Outcome Target

•Improve values of rangelands for multiple uses. Target is number of producers reporting improved values.

Outcome Type: Long

2007: 5 2008: 5 2009: 10 2010: 10 2011: 10

Outcome Target

•Improved rangeland health, productivity, and profitability. Target is number of agriculture operations reporting outcome.

Outcome Type: Long

2007: 10 2008: 20 2009: 20 2010: 25 2011: 25

20. External factors which may affect outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Public Policy changes

Description

•Weather conditions – i.e. drought; •Market conditions; •Political/public policy considerations;

21. Evaluation studies planned

- Retrospective (post program)
- Before-After (before and after program)
- Case Study

Description

•Testimonials from clientele. •Monitor level of inquiries for assistance. •Tracking permitted number of animal unit months in active management programs which are a result of extension activities and programs. •Document the number of land managers that adopt rangeland management plans and monitoring practices. • Evaluate success of clients in achieving land and animal management objectives and level of conflict pertaining to resource use

22. Data Collection Methods

- Sampling
- Whole population
- Structured
- Unstructured
- Observation

Description

Both informal and formal methods of data collection will be used including documenting testimonials, tracking impact of monitoring practices and other program components.