

V(A). Planned Program (Summary)

Program # 8

1. Name of the Planned Program

Food Safety

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
308	Improved Animal Products (Before Harvest)			10%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins			30%	
723	Hazards to Human Health and Safety			30%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities			30%	
	Total			100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Actual	0.0	0.0	0.3	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	30697	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	17381	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Current work by NAES involves developing an online food safety education program for child and elderly care givers reaching participants through their worksites. Participants access this fully narrated and animated curriculum whenever they choose, rather than at a specific time and location. In addition, onsite food safety workshops are being conducted for those caregiver facilities who desire such and for those caregivers who do not have easy access to the internet.

2. Brief description of the target audience

Child and elderly care givers, State of Nevada Division of Health, Washoe District Health Department, the Nevada Food Safety Task Force, Nevada cattle producers

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	{NO DATA}	{NO DATA}	{NO DATA}	{NO DATA}
Actual	60	200	90	0

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

Patent Applications Submitted

Year: 2010
 Plan:
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	2	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Peer reviewed scientific journal articles, presentations at scientific meetings, presentations to stakeholder, health care organizations, agency and local government meetings.

Year	Target	Actual
2010	{No Data Entered}	6

Output #2

Output Measure

- Leveraged Research Projects

Year	Target	Actual
2010	{No Data Entered}	6

Output #3

Output Measure

- Web Sites Created or Updated

Year	Target	Actual
2010	{No Data Entered}	2

Output #4

Output Measure

- Digital Media Created or Updated

Year	Target	Actual
2010	{No Data Entered}	1

Output #5

Output Measure

- Number of Graduate Students or Post-Doctorates Trained

Year	Target	Actual
2010	{No Data Entered}	4

Output #6

Output Measure

- Number of Undergraduate Students Involved in Research

Year	Target	Actual
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2010

{No Data Entered}

1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Improving Quality Assurance in Nevada's Dairy and Beef Industry

Outcome #1

1. Outcome Measures

Improving Quality Assurance in Nevada's Dairy and Beef Industry

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Cattle can be many things to a producer at any given time but the fact is they're all the same in the end - steaks, hamburgers burgers, roasts and ribs. They end up on someone's plate thousands of miles away. Delivering a safe and quality product is the beef industry's best way to increase beef demand and meet consumer's satisfaction for quality and safety. Producers have to assure that the beef product meets the quality standards established.

The purpose of the Nevada Youth Livestock Quality Assurance Training Program is to increase food safety awareness by educating youth producers of their role in this process and the importance of raising their livestock in an appropriate manner. By following a quality assurance program, youth can improve their animal care and management practices in order for their animal to achieve its highest level of performance while providing a safe, wholesome product for consumers.

What has been done

BQA is an ongoing program that teaches cattle ranchers in all 50 states about animal genetics, cattle-handling, feed-purchasing, record-keeping, testing and other procedures to produce beef without residue of animal health products or pesticides. Participants work with veterinarians and scientists to learn how to keep their cattle healthy, increase product quality and enhance consumer confidence in their meat.

Over the past two years University of Nevada, Reno veterinarians have begun the "Youth Livestock Quality Assurance Training Program". This project developed instructive materials (both print and web based) that enhance the educational aspects of 4-H, FFA, and Nevada Junior Livestock Show participant.

Results

Often in our youth livestock programs, youth get so involved in competitive aspects of the project that they lose sight of the fact that the livestock they produce is eventually destined to the consumer. 4-H and FFA beef project leaders and parents can use these materials to teach their youth about Beef Quality Assurance and how they can produce a better beef product for the consumer. By the end of 2010 season, more than 400 youth have passed the QA program.

This program has produced more than 350 adults and 60 beef operations certified in BQA. Additionally, the Nevada BQA program is part of national effort, which has resulted in a 25 percent reduction in the amount of injection site lesions due to improper vaccination protocol on beef cattle.

4. Associated Knowledge Areas

KA Code	Knowledge Area
308	Improved Animal Products (Before Harvest)

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Programmatic Challenges

Brief Explanation

Current State budget shortfalls have narrowed the breadth of research programs in NAES. The two programs conducting the majority of research directly related to food safety have either been closed (Animal Biotechnology & Veterinary Science) or face the possibility of closure in 2013 (Nutrition). These losses prevent NAES from moving forward and determining the areas of research most important to the state and nation. Current cutbacks and the looming layoff to our nutrition faculty will only further hurt research efforts by reducing graduate student and post-doctoral recruitment.

Additionally, if \$17,000,000 is not secured by State Legislators this 2010 session, the College of Agriculture, Biotechnology and Natural Resources is proposed for closure and remaining departments will be moved to new homes. This action could significantly alter the NAES's organizational structure and cohesiveness.

All of these issues will determine the future of our research.

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

1. Evaluation Studies Planned

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

Evaluation Results

Faculty programs are evaluated annually and annual reviews of performance are prepared for each calendar year. We held a web based mini-symposium to learn of the research advances from each NAES research projects where each principle investigator or graduate student makes a power point presentation in a forum open to all faculty, staff, students and stakeholders as well as College and NAES leadership. Faculty are questioned and future goals are discussed for each research project t in the NAES research portfolio. The web cast has been saved and will be open for review for one year. Faculty have been productive and continued to carry out cutting edge research and in addressing food safety issues in Nevada. Where appropriate future funding will continue where the results justify continued funding.

Key Items of Evaluation

Publications in refereed journals, invited review articles, extension publications, invitations to talk at national and international meetings.