# FY05 & FY06 Plan of Work Update University of Nevada Cooperative Extension &

### Nevada Agriculture Experiment Station 31 March 2004

#### **Introduction:**

This is an "update" to the current POW, not a complete revision or totally new plan. While we are continuing the efforts in the original FY00-FY05 Plan of Work (POW), we are amending the plan by highlighting new, expanded or revised efforts.

## Goal 1: An Agricultural System That Is Highly Competitive In The Global Economy

**Overview:** Our Plan of Work (POW) goals are to increase the overall quality and health of Nevada livestock through research and outreach, to understand the quality of plants through basic research, potential alternative crops, and to evaluate and promote improved marketing of Nevada products.

University of Nevada Cooperative Extension (UNCE) education programs are continuing a focus on diversified/alternative crops, risk management and animal production efficiency. UNCE campus and field faculty are also part of many NAES research projects in these subjects, and have made extensive use of research findings.

NAES research programs are continuing to focus on developing alternative crops that require less water including evaluating the potential to establish wine grape and native seed industries in Nevada. In addition, research continues on abiotic stress in plants and the genetic basis for resistance. NAES scientist are using genomic analysis to select for production traits in livestock that will be optimized for the Nevada Arid Rangelands and improving the health of livestock in increased production.

· ·	Goal	Federal \$	State \$	County	Total \$	FTE
FY05 Nevada Agricultural Experiment Station	I	395,348	2,159,138	-	2,554,486	33
FY06 Nevada Agricultural Experiment Station	I	395,348	2,159,138	-	2,554,486	33
FY05University of Nevada Cooperative Extension	I	208,941	928,445	1,010,355	2,147,741	25
FY06University of Nevada Cooperative Extension	I	208,941	928,445	1,010,355	2,147,741	25

#### Goal 2: Safe And Secure Food And Fiber System

**Overview:** Our POW goal is to conduct research and outreach programming to prevent food borne illness in Nevada.

Data from Nevada research has been incorporated into the Nevada Beef Quality Assurance Program as well as the Hazard Analysis and Critical Point (HACCP) management program to improve consumer confidence in Nevada's beef industry. Food safety is also a part of all nutrition and food preparation training conducted by UNCE under Goal 3. Biosecurity is also of increasing importance especially in the livestock industry.

UNCE faculty were instrumental working with the Nevada Cattleman's Association to introduce and teach education programs related to the Beef Quality Assurance Program to help improved food safety. This is going to be a continuing effort to expand the number of participants, and to move more to the next level of certification. With biosecurity concerns nationally, this effort is of increasing interest and importance.

NAES research is focused on improving livestock health, protecting the quality of Nevada's water supplies and preventing food borne illness at the farm gate.

	Goal	Federal \$	State \$	County	Total \$_	FTE
FY05 Nevada Agricultural Experiment Station	II	7,881	507,349	-	515,230	12
FY06 Nevada Agricultural Experiment Station	II	7,881	507,349	-	515,230	12
FY05 University of Nevada Cooperative Extension	II	-	17,943	-	17,943	0.15
FY06 University of Nevada Cooperative Extension	II	-	17,943	-	17,943	0.15

### **Goal 3: Healthy, Well Nourished Population**

**Overview:** Our POW goal is to conduct research to better understand healthy life style habits, and educational programs that focuses on healthy life style habits.

Many studies have documented the impact of nutrition on learning and health problems such as obesity among youth, diabetes, heart disease, hypertension and stroke among minorities as well as other adults. Therefore, major UNCE programs are being directed at improving the nutritional knowledge and eating behaviors of youth, especially those from minorities or limited resource families. Special efforts have also been made to reach minority audiences with programs specifically targeting African-Americans, Native Americans and Hispanics.

NAES research is focusing on stem cell transplantation to treat human disease, environmental toxicology of Nevada pollutants, nutritional intervention in the treatment of cancer, nutritional protection from side stream cigarette smoke and evaluating the beneficial effect of functional foods.

	Goal	Federal \$	State \$	County	Total \$	<u>FTE</u>
FY05 Nevada Agricultural Experiment Station	III	145,358	1,311,757	=	1,457,115	33
FY06 Nevada Agricultural Experiment Station	III	145,358	1,311,757	-	1,457,115	33
FY05 University of Nevada Cooperative Extension	III	27,961	126,652	135,211	289,824	2.5
FY06 University of Nevada Cooperative Extension	III	27,961	126,652	135,211	289,824	2.5

### **Goal 4: Greater Harmony Between Agriculture And The Environment**

**Overview:** Through the deliberate incorporation of diverse and often conflicting interests, the POW goals of the community-based decision-making for natural resources include:

- To catalyze decision-making processes that build communities and produce sustainable agreements
- To facilitate the development of innovative collaborations for the conservation and enhancement of natural resources
- To analyze and strategically confront barriers to implementation of community-based decision-making and collaborative utilization models for public lands

Given the nature of Nevada, water and wildfire related educational programs have been a primary focus of the University of Nevada Cooperative Extension Service (UNCE). In both of these areas, UNCE faculty have made a significant impact and received local and national recognition for their efforts.

In the "living with fire" educational program, UNCE faculty have had a significant impact on people's awareness and preparedness for wildfires. The program has grown and expanded each year, and many request are received for materials and assistance from other states as well as from the Federal level. This is an integrated research-Extension effort, and has led to statewide cooperation and involvement of Federal, state and local organizations concerned with wildfire prevention and preparedness. Programming related to this topic will continue to expand and grow in FY05 and FY06.

Water quality is a concern for both urban and rural communities in Nevada. Major UNCE efforts have been devoted to working with local groups and organizations to reduce non-point source pollution, and to clean up various waterways. Because of the Fallon cancer cluster, significant water research and education efforts have been undertaken in the Fallon area. Additionally, having education programs for rural public community water supply operators has been important. Educational programs related to water quality will continue and expand in FY05 and FY06. Efforts to maintain and address well being of riparian areas is also an area of focus as well as educational programs for those living around the Lake Tahoe area.

Weeds and integrated pest management are a significant problem in Nevada. Educational programs related to weed identification, eradication/management and efforts to prevent spreading are major educational outreach efforts. Cooperative Extension is also involved in a variety of efforts with local communities, the Nevada Weed Management Association and others to partner in this effort. These efforts will continue through FY05 and FY06.

NAES research is focused on pheromone protection of forests, evaluating livestock grazing for noxious weed management, compatibility of wildlife and livestock on irrigated pastures, evaluating post wildland fire restoration and grazing systems, using NAES field labs to conserve water and improve water quality and evaluating sage grouse habitat and developing a conservation plan compatible with Nevada agriculture.

	Goal	Federal \$	State \$	County	Total \$	_FTE
FY05 Nevada Agricultural Experiment Station	IV	464,792	2,530,391	-	2,995,183	52
FY06 Nevada Agricultural Experiment Station	IV	464,792	2,530,391	-	2,995,183	52
FY05 University of Nevada Cooperative Extension	IV	483,919	2,191,898	2,340,033	5,015,850	76
FY06 University of Nevada Cooperative Extension	IV	483,919	2,191,898	2,340,033	5,015,850	76

### Goal 5: Economic Development and Quality of Life for People and Communities

**Overview:** Our POW goals in rural economic development include conducting research and subsequent education for decision-makers on changing economic dynamics for their communities, developing leadership opportunities for community decision-makers, establishing and evaluating innovative decision-making models and extending research results in educational programs to stakeholders. In the area of youth and family development our POW goals include educating parents regarding quality childcare, conducting research and outreach on youth at risk, and conducting research and outreach learning on literacy.

UNCE's Project MAGIC (Making a Group and Individual Commitment) educational program was designed to teach at risk teens the skills necessary to become productive members of society. A decline in per capita incarceration was observed in those counties where MAGIC was implemented, and among youth participating. Project MAGIC has been expanded to new areas and from rural to urban counties, and to Reservations. Results of this program have shown a dramatic reduction in the % of youth returning to the juvenile justice system. Because of its success, the program has expanded into additional communities in Nevada. This award winning and nationally recognized program will be continuing and expanding in FY05 and FY06. Other youth/4-H programs such as after school programs, 4-H programs, 4-H Military programs will all continue during FY05 and FY06. The 4-H military program is new and expansion is anticipated.

Literacy programs have been increasingly important for the development of good parenting skills, as well as for helping youth. This has been especially important for families where English is a second language. After school and other programs where students can receive help with studies have also been important. Literacy programs and materials in both Spanish and English will continue to focus on both youth and adults in their families.

Other programs to be continued and expanded in FY05 and FY06 include parenting programs in both English and Spanish, programs to help senior citizens maintain their independence, and programs to educate child care providers.

Efforts to provide some limited economic and community development assistance to rural communities will continue in FY05 and FY06.

Nevada scientists will continue to conduct economic analysis of various rural labor and public policy issues, research improving childcare and diverse needs of custodial grandparents in Nevada. Research will continue in economic development through the economic development center and analysis and development of rural healthcare.

	Goal	Federal \$	State \$	County	Total \$	_FTE
FY05 Nevada Agricultural Experiment Station	V	253,395	356,816	-	610,211	7
FY06 Nevada Agricultural Experiment Station	V	253,395	356,816	-	610,211	7
FY05 University of Nevada Cooperative Extension	V	616,958	2,794,495	2,983,355	6,394,808	82
FY06 University of Nevada Cooperative Extension	V	616,958	2,794,495	2,983,355	6,394,808	82

## STAKEHOLDER INPUT PROCESS

In 2000, UNCE established a statewide Advisory Committee that represents a diverse cross section of stakeholders from both rural and urban communities, including minorities. This Advisory Committee has met at least twice a year since 2001 and continues to review UNCE programs and provide suggestions on additional program opportunities. It provides broad guidance on UNCE programming and policies, serves as a sounding board for setting program priorities, and has helped obtain support for UNCE from key state and county elected officials.

In 2000, UNCE administration initiated a series of statewide "community stakeholder meetings." These have continued on an annual basis and will be continued again in FY06. In addition to the general public, "key community stakeholders" from each individual community/county are invited to participate in an open meeting with all of UNCE administration (Dean/Director, Assistant Director, Area Directors, Fiscal Officer, Communications Specialist, AA/EEOC Officer). At this meeting, comments, suggestions and issues/concerns are solicited from participants. The focus is on issues/concerns as they relate to UNCE programs and the University of Nevada overall. This information is being used for developing both local and statewide programming, and is posted on the web at:

http://www.unce.unr.edu/what's%20new/Community%20Tour%20Survey.pdf. Information is used in strategic planning and in program planning. It has also been shared with colleges and departments at the University.

Within their first year of being hired, UNCE funded campus based faculty are expected to conduct a formal needs assessment in order to identify critical issues in their subject matter area. For Extension Educators, a very broad, community-based assessment is expected. For Area Specialists, a broad, issue-based assessment is expected. State Extension Specialists are charged with compiling local needs assessments and adding statewide data and impacts. Indeed, one of the criteria for annual performance evaluation is effective assessment of need. Following the initial needs assessment, faculty are required to continually assess need and periodically conduct a needs assessment in a similar manner as expected of newly hired faculty.

As a result of the above formal processes for stakeholder input, all of UNCE's major educational programs are based on one or more needs assessments. UNCE has also used this information in strategic planning for the future. The data collected by UNCE is also used as the basis for broad Nevada Agricultural Experiment Station research priorities. In addition, NAES has conducted "rural tours" into the state and met with county and municipal decision makers, agriculture producers, state and Federal agency personnel and local high schools to obtain input into our research program. A newly formed citizens advisory committee meets quarterly and provides insight into NAES and College of Agriculture, Biotechnology and Natural Resource programming. Finally, the NAES has created a web page at <a href="http://www.ag.unr.edu/naes/index3.htm">http://www.ag.unr.edu/naes/index3.htm</a> to connect stakeholders with campus faculty and Nevada Dividends, an impact database that is useful for establishing accountability.

# PEER AND PROGRAM REVIEW PROCESS

There have been no significant changes in the peer and program review processes used by UNCE or NAES since the last 5-Year Plan of Work. These same procedures will continue to be used in FY05 & FY06.

### INTEGRATED RESEARCH AND EXTENSION ACTIVITIES

For almost a decade, Nevada Agricultural Experiment Station (NAES) and University of Cooperative Extension (UNCE) have complied with the intent of Congress to *integrate agricultural research*, *extension and education functions to better link research to technology transfer and information dissemination activities*. Initial efforts have been made by both. NAES has used the program priorities established by and needs assessments conducted by UNCE faculty as an initial guide in allocating their research funds. Collaboration with community-based faculty and developing research components to Extension programs has been openly endorsed.

UNCE likewise has made specific efforts. Scholarship has long been recognized as an expectation of community-based faculty. All major programs are grounded in research theory and deliberate attempts are made to include campus-based faculty who hold joint Extension and Experiment Station appointments in their overall design. Programs are rigorously evaluated so as to contribute to the knowledge base of theory in practice. Not only are campus-based faculty expected to be involved in the evaluation design, increasingly Extension his hiring faculty trained at the doctoral level to ensure a scholarly approach to its work.

These efforts will continue from the previous 5 Year POW.

## **EVALUATION OF THE SUCCESS OF MULTI AND JOINT ACTIVITIES**

As outlined in the previous POW, and will continue for FY05 and FY06, University of Nevada Cooperative Extension (UNCE) and the Nevada Agricultural Experiment Station (NAES) work together to build multistate, multi-institutional and multidisciplinary activities, and joint research and extension activities which address critical issues of strategic importance as well as those identified by stakeholders. All activities/programs of UNCE and NAES match needs/issues identified in the stakeholder input processes. Additionally, these activities/programs also address needs common to under-served/under-represented populations of the state, as well as activities/programs specific to the needs of these audiences.

Integrated and multistate programs have generally realized the outcomes/impacts expected. The multistate research program and Western Coordinating Committee projects are reviewed by RCIC (which is represented by both Extension and Research) for progress during the course of the project/program and at project termination. The reviews are documented and housed at the executive director's office in the western region. This process will continue to be used. Additionally, UNCE faculty and campus faculty on UNCE appointments are expected to demonstrate program results/impacts as part of their annual evaluations. Therefore, peers and administration both have an opportunity to review impacts/results of all UNCE programs.

Both UNCE and NAES have a long history of integrated and multistate programs/activities. In fact, many of the State Specialists with UNCE appointments also have NAES appointments so that their research is closely related to their educational programming. Integrated and multistate programming is increasingly the result of more proactive processes, and has helped to identify ways for cooperation even outside of specific programs. For example, UNCE has continued an arrangement with Utah State University Extension for their Dairy Specialists to provide dairy programming in Nevada.