The University of Nevada Cooperative Extension was established in Nevada in 1914 as an educational partnership between the federal government, county governments and the land-grant university. Cooperative Extension conducts “educational, research, outreach and service programs pertaining to agriculture, community development, health and nutrition, horticulture, personal and family development and natural resources in both rural and urban communities of Nevada.”
**Mission**

The University of Nevada Cooperative Extension's (UNCE) mission is, "To discover, develop, disseminate and use knowledge to strengthen the social, economic and environmental well-being of people". UNCE's values include:

- Responsive to the needs of a diverse society.
- Quality community education.
- Honest and open communication.
- Innovative thinking, flexibility, integrity and dedication.
- Teamwork and collaboration.
- Accountability and ethics.

My role as Extension Educator, based in Eureka County, is to provide non-formal education in Eureka County and throughout the Central Northeast region of Nevada, utilizing research supported knowledge to address issues that result in measurable impacts. My role as Extension Educator in Eureka County also requires me to defend and manage the University of Nevada Cooperative Extension Eureka County office budget and to supervise the office's staff including one part-time employee.
**Summary for Calendar Year 2016**

I started work with UNCE on July 7, 2016 more than half way through the calendar year. This start date created somewhat of a crisis situation providing a very short time frame to complete the necessary preparations for the Eureka County Fair and 4H show. I was able to obtain sponsorship’s and complete the logistical arrangements necessary to a successful completion of the Fair, 4H show and Diamond Valley Hay Contest.

In 2016, the University of Nevada Cooperative Extension office in Eureka County focused on three major program areas: (1) Agricultural and Livestock Production, (2) Natural Resource Conservation, and (3) Youth Development and 4H.

**Agricultural and Livestock Production:**
I have renewed participation in the Range Management School and Nevada Riparian cadre for development and deliverance of workshops to educate and initiate better grazing management on uplands and riparian areas. I assisted in one Riparian workshop in Ely reaching approximately 50 producers and agency personnel. I have also initiated development of the Rangeland Quality Assurance program through the NV Cattlemen’s Association to provide an incentive based producer education program that offers science based rangeland management principals and strategies in a concise format primarily through a web based delivery system enabling producers to implement, demonstrate, and document sound range management practices on private and public rangelands. Delivery to Cattlemen is anticipated to be fall 2017.

A team review and update of the NV Monitoring Handbook and Rancher’s Guide is ongoing. This effort should be completed and published in 2017. The update will include information and guidance on monitoring and management of rangelands for Sage Grouse. We have a commitment from the NV State Director of BLM to finalize and include a template agreement to implement cooperative permittee monitoring (CPM) that will be used state wide and is hoped to finally enable CPM in Nevada.

Dr. Sherman Swanson and I have submitted a grant application to Western Sustainable Agricultural Research and Education Program titled “Grazing Strategies for Range Quality Assurance” ($70,104). This proposal will build upon Range Management School principals of plant growth and grazing strategies that promote plant growth. We will involve and conduct workshops on “stewardship ranches” helping them learn how to better meet rangeland management objectives and in turn seek to learn each ranch managers’ strategies for rangeland stewardship and livestock production. Products include revised curriculum for schools, extension fact sheets about using GRI or other indices to improve rangeland conditions. The product will be written up for Western SARE and the rangeland management community with an article for Rangelands.

**Natural Resource Conservation:**
I renewed contact with Dr. Howard Neibling, Extension Water Management Engineer, University of Idaho. As a result, Dr. Neibling and I have collected 2016 water use and production data from ongoing LESA pivot research sites in Diamond Valley and have outlined a series of publications to be developed early 2017, and are organizing a 1-2 day workshop in March 2017 to assist DV irrigators in re-designing and re-tooling irrigation infrastructure; implementing irrigation scheduling; and utilizing advanced irrigation technologies to conserve water and retain production capability. We are going to continue collecting data on existing pivots and are exploring additional research opportunities with participating producers to expand our understanding of LESA pivot irrigation and ability to fine tune this method as needed on specific sites and conditions.
I have been asked to work with CABNR to complete the research project funded by the FY2013 Conservation Innovation Grant, Nevada Biochar Field demonstration Trials: Treatment within Agricultural Pivots and Rehabilitation of Pivot Corners. This research is intended to determine the efficacy of locally produced biochar as a soil amendment to increase water holding capacity under irrigation and dryland conditions in DV. Dean Payne has committed to assist in attaining the necessary disciplinary and technical assistance in CABNR to complete this research in 2017.

Additionally, in regards to Sage Grouse, the Governor’s office in conjunction with NV executive leadership at BLM, USFS, NRCS, USFWS and state agencies, initiated the Collaborative Network and convened a two and one half day Collaborative Training workshop which I attended. This Network and the training is intended to provide basic tools for engaging in consensus building and facilitating consensus-based processes related to implementation of the sage grouse records of decision. I am working with a representative from the Governor’s office and the NV Association of Conservation Districts to develop the infrastructure and operational model for the Collaborative Network in Nevada and increasing the involvement of Conservation Districts throughout Nevada. I have also committed to getting further facilitation training to serve as a local facilitator developing conservation plans and working through implementation of the Sage Grouse LUPA’s and Sage Grouse Habitat guidelines amenable to industry producers and local communities.

**Youth Development and 4H:**
I was successful in securing over $5,000.00 to fund contest and 4H events. 4H show participation was less than desired but understandable; the market animals secured very high prices. Barrick Gold was convinced to purchase a market animal and contribute to the overall 4H program for the first time that I am aware.
I supervise one temporary 4H coordinator position and assisted in transitioning this employee from a temporary to permanent position. The primary changes I have instituted with this employee is to focus on Eureka County and enhancement of the 4H program in Eureka County while maintaining support to areas of Lander and Nye county 4H participants not currently served by their county. The 4H coordinator has been working to update and design the 4H program and online presence. We have also been successful in working with the Eureka Elementary school administration to participate in the after school program to deliver STEM programming and stimulate interest in 4H activities and participation. Numerous parents have expressed their interest having their children participate in a livestock breeding program focused on local range land production.

**UNCE Program Support from Outside Eureka County**
As the Extension Educator in Eureka County, I also coordinated with state UNCE faculty and staff to deliver the following programs to the citizens of Eureka County throughout 2013:

- American Indian Farmer & Rancher Outreach and Assistance Improvement Project
- An Apple a Day
- Beef Quality Assurance
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- Cattleman's Update
- University of Center for Economic Development
- Collaborative Resource Stewardship
- Cooperative Weed Management Areas
- Discover Your Future
- Extension
- Fire Adapted Communities Project
- Great Basin Science Delivery Project
- Grow Your Own Nevada
- Healthy Eating on a Budget
- Herds & Harvest
- Integrated Pest Management (1PM) and IR-4 Program
- Intermountain Regional Evaluation and Introduction of Native Plants
- Justin Time Parenting
- Living with Fire
- Local Leaders Institute
- Nevada Wildfire Awareness Week
- Nevada Wildland Urban Interface Fire Summit
- Nevada Youth Range Camp
- Pesticide Safety Education Program
- Radon Education Program
- Range Management School
- Riparian Grazing Management and Riparian Proper Functioning Condition Programs
- Riparian Proper Functioning Condition Assessment
- Stronger Economies Together (SET)
- Vegetation Management (formerly Great Basin Native Plant Selection and Increase Project)
- Youth Worker Training

**Fiscal Summary**

I have administered the Extension office in Eureka assisting facilitation of the transition from the historical shared County/UNCE operational paradigm to the current status whereby, UNCE operates independently from the County renting office space and operating financially separate from the County.

The UNCE Eureka County operating budget for 2016 was **$88,326**. Total gifts supporting program development, included in excess of $5,000 from the Barrick Gold, Kinross, Elko Mining Group, Mount Wheeler Power, and NV Ag. Credit in 2016.
Cooperative Extension Accomplishment Report 2016

Signature:

[Signature]

Extension Educator
University of Nevada, Reno
University of Nevada Cooperative Extension, Eureka County