

MEMORANDUM

DATE:

April 3, 2017

TO:

Al Rogers, Director, Management Services

FROM:

Frank Flavin, Washoe County Extension Educator, Northern Area Director

RE:

Annual Submission of Cooperative Extension Budget Pursuant to NRS

549.020 (1)

The undersigned, having been delegated fiscal authority from the Director of Cooperative Extension, hereby makes the following budget submission pursuant to NRS 549.020:

A. Revenue-County, State and Federal

1. FY 2018 Projected Revenue

Washoe County Special Revenue Account:	\$1,401,383
University (State and non-Sponsored Projects Federal):	\$663,468
Total FY 2018:	\$2,064,851

2. FY 2017 Projected Revenue

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	Washoe County Special Revenue Account:	\$1,333,455
	University (State and non-Sponsored Projects Federal):	\$595,721
	Sponsored Projects Received July 1-March 31:	\$704,000
	Total FY 2017:	\$2,633,176

3. FY 2016 Actual Revenue

Washoe County Special Revenue Account:	\$1,315,598
University (State and non-Sponsored Projects Federal):	\$530,644
Sponsored Projects Received FY 2016:	\$917,187
Total FY 2016:	\$2,763,429

B. Projected Washoe County Funds Budget FY2018

Personnel Costs	\$1,372,263
Travel	\$21,869
Operating Expenses	\$213,518
Overhead Expenses	\$59,408
Equipment	\$0
Capital Improvements	\$40,000
Contingency Fund	\$384,111
Total	\$2,091,169

A-4-11-2017 -# 6

C. <u>Budget Narrative for Washoe County Funds Budget FY2018</u>

1. Personnel Costs

Covers all or a portion of salaries and fringe benefits for employees with a University of Nevada, Reno (UNR) home department of Cooperative Extension Northern Area-Washoe County. These positions include faculty, staff, and temporary employees that are providing direct programming or administrative support in the Washoe County office.

2. Travel

Covers mileage reimbursement, in-state, and out of state travel expenses related to Washoe County programs.

3. Operating Expenses

Covers all operating expenses that are not included in the Overhead Expenses category. This would include office supplies, postage, copy/binding, fingerprinting, and other miscellaneous expenses. Also, we are planning to update furniture, computers, and printers in several offices.

4. Overhead Expenses

Covers leases for building and equipment, utilities, and phone costs.

5. Equipment

We don't anticipate any equipment purchases in FY 2018

6. Capital Improvements

In FY 2018, UNR will be redoing the parking lot of the Washoe County office. We are taking this opportunity to install a shade structure along a portion of the rear of the building. This will allow the rear entrance to be covered from the elements and afford exhibit space for volunteers and the public as well as provide the Washoe County Extension office employees a place for breaks and lunches.

7. Contingency Fund

This provides a reserve for unexpected conditions such as a sudden drop in revenues. Grant revenues are extensive and the grant funding for key programs, such as Radon Education and Literacy, may unexpectedly disappear or be greatly reduced. In addition, this fund is used to back-up memo accounts for pending Sponsored Project awards for Washoe County programs where funding is awarded but delayed. UNR allows memo accounts to be created to enable the charging of allowable project costs during grant award processing. UNR requires that the requesting department have discretionary funds to guarantee the requested memo account budget.

Respectfully submitted,

Frank Flavin

Northern Area Cooperative Extension/Washoe County Office

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Washoe County Cooperative Extension 2016 Accomplishment Report

Mission

Cooperative Extension's mission is to discover, develop, disseminate, preserve, and use knowledge to strengthen the social, economic, and environmental well-being of Washoe County residents.

Summary Description

The Cooperative Extension Fund was established to allocate a 1 cent ad valorem tax apportioned to, and specifically appropriated for, statutorily established educational programs focusing on agriculture; community development; health and nutrition; horticulture; personal and family development, and natural resources. Cooperative Extension identifies critical needs, and designs educational programs and activities to address those needs. Extension provides ongoing program evaluation to ensure educational offerings impact and improve lives of Washoe County residents through a planned educational process. As an outreach partnership of the University of Nevada, Washoe County and USDA, Cooperative Extension provides research-based information to local residents.

Background

University of Nevada Cooperative Extension (Extension) is the University – Washoe County partnership that puts university research to work in our Washoe County urban settings; on public rangelands; in schools; on family farms and ranches; and in our homes, workplaces and communities. Cooperative Extension is in every corner of Washoe County, assisting the County and its citizens in community engagement, providing a broad spectrum of youth development

activities, assisting agriculture producers in farm and range management, providing educational programming for improved health and nutrition, providing best management practices to protect our precious natural resources, and improving childhood literacy through innovative educational programming.

Since 1916 Cooperative Extension has played a major role in the outreach teaching, research and service of the University for the benefit of Washoe County. It is the college that connects citizens with the University, provides a NSHE presence in all of Washoe County and fulfills the statewide land-grant mission of the University of Nevada. Extension was founded in 1914 as a partnership between the federal government, land-grant universities, and county governments throughout the United States. Cooperative Extension exists through land-grant universities in all 50 states. Extension's purpose, as stated in the Nevada Revised Statutes (NRS 549.010), is to "conduct educational, research, outreach and service programs pertaining to agriculture, community development, health and nutrition, horticulture, personal and family development, and natural resources in the rural and urban communities of Nevada." The Statute states that State "funds to carry out the provisions of this chapter shall be provided by direct legislative appropriation from the General Fund."

Federal enabling legislation for Extension is found in the Smith-Lever Act. This law requires a State match in order to receive federal funds. These funds are appropriated through the USDA/NIFA budget. Counties, such as Washoe County, contribute through a tax levy pursuant to NRS 549 of not less than 1 cent and no more than 5 cents on each \$100 of taxable property in the county.

Program Development and Evaluation

The Logic Model – The Logic Model is a framework for planning and evaluation generally used by Cooperative Extension in program development and outcome (impact) assessment. The Logic Model is...

- A depiction of a program showing what the program will do and what it is to accomplish.
- A series of "if-then" relationships that, if implemented as intended, lead to the desired outcomes.
- The core of program planning and evaluation.
- A road map to desired outcomes.

Program Action - Logic Model Outputs Outcomes - Impact Inputs Medium Term Long Term Activities Participation What the What the What the What we do Who we reach What we **Priorities** medium term short term ultimate invest Consider: Conduct **Participants** impact(s) is Situation results are results are workshops, meetings Staff Mission Clients Needs and Learning Action Conditions Vision Volunteers Deliver Agencies Awareness Behavior Values Social services Decision-Symptoms Develop Mandales Knowledge Practice makers Economic versus problems products, Money Decision-Attitudes curriculum, Civio Customers Local dynamic Research base making resources Skills Stakeholder Environmental Collaborators Train Materials **Policies** engagement Competitors Provide **Opinions** Satisfaction Social Action Equipment counseling Intended outcomes Aspirations Assess Technology Facilitate Motivations Partner **Partners** Work with media **External Factors** Assumptions

Evaluation
Focus - Collect Data - Analyze and Interpret - Report

The Logic Fosters Accountability...

- What gets measured gets done.
- If you don't measure results, you can't tell success from failure.
- If you can't see success, you can't reward it.
- If you can't reward success, you're probably rewarding failure.
- If you can't see success, you can't learn from it.
- If you can't recognize failure, you can't correct it.

Key Factors Influencing Situation and Priorities

- NRS Statutory Program Authorization
 - o Agriculture
 - o Community Development
 - Health and Nutrition
 - o Horticulture
 - Personal and Family Development
 - Natural Resources

 County Strategic Objectives – County Strategic Objectives are key elements of the Situation and Priority components of the Logic Model program development framework.



- Needs Assessments Needs assessment is the process of obtaining and analyzing information to determine the current status and needs of a defined population and/or geographic area. Needs assessments are useful for...
 - Obtaining information about current conditions in a defined population, including issues and needs and the resources and approaches being used to address them.
 - Determining met and unmet needs among specific target populations and for the overall community.

Cooperative Extension has conducted needs assessments on a wide variety of subjects impacting Washoe County, such as: Aging, Natural Resources and Environmental Conservation including Wildland Fire, Land Use, Water Quality, Invasive Weeds, Horticulture, Children, Youth and Families, Nutrition, Civic Engagement and Civic Infrastructure.

Performance Indicators

Performance Indicators (All Programs Excluding 4-H)

Potential Clientele vs. Actual Contact Comparison Census Data vs. UNCE Collected Data

University of Nevada Cooperative Extension

			Ger	nder						Ra	ce					Ethn	icity
	County							Black, A	frican								
Census Data	Population		nale		ale	W	nite	Amer	ican	America	n Indian	Asia	an	Othe	r*	Hisp	anic
Census 2010	421,407	49.5%		50.5%		76.9%		0.3%		1.7%		5.2%		4.4%		22.2%	
	Total												- 1				
County Summary	Contacts												- 1				
2016	36,337	58.1%	21,096	41.9%	15,241	56.8%	20,636	2.5%	902	4.4%	1,604	1.9%	699	0.2%	64	34.2%	12,432
2015	34,581	58.2%	20,126	41.8%	14,455	57.0%	19,720	2.7%	937	7.5%	2.581	2.7%	938	0.2%	70	29.9%	10,335
2014	34,003	58.0%	19,724	42.0%	14,279	58.5%	19,905	2.0%	682	4.8%	1,623	2.3%	771	0.3%	113	32.1%	10,909
Program Areas	Contacts																
Agriculture																	
2016	985	53.4%	526	46.6%	459	59.0%	581	1.3%	13	34.7%	342	1.0%	10	0.0%	-	4.0%	3
2015	1,441	57.7%	831	42.3%	610	65.2%	939	5.6%	80	18.9%	273	1.5%	21	0.1%	2	8.7%	120
2014	737	55.0%	405	45.0%	332	59.3%	437	1.5%	11	30.9%	228	2.6%	19	0.0%	-	5.7%	4:
Children, Youth and Families (non-4H)																	
2016	8,745	69.0%	6.030	31.0%	2.715	25.2%	2,206	2.1%	183	0.5%	43	2.3%	204	0.0%	-	69.9%	6,109
2015	7,307	66.3%	4.843	33.7%	2,464	21.7%	1,587	1.9%	140	1.0%	72	2.4%	173	0.0%	-	73.0%	5,335
2014	8,306	66.5%	5,524	33.5%	2,782	25.6%	2,125	2.3%	191	1.4%	119	2.7%	225	1.0%	86	66.9%	5,560
Community Development																	
2016	912	59.1%	539	40.9%	373	62.6%	571	9.9%	90	4.5%	41	2.4%	22	0.0%	-	20.6%	188
2015	1,066	53.6%	571	46.4%	495	62.8%	669	4.5%	48	16.8%	179	4.4%	47	0.0%	-	11.5%	123
2014	863	52.7%	455	47.3%	408	59.1%	510	6.0%	52	5.7%	49	12.1%	104	0.0%	-	17.1%	148
Health and Nutrition																	
2016	9,903	55.7%	5,520	44.3%	4,383	33.7%	3,341	4.8%	473	10.0%	990	1.0%	100	0.3%	30	50.2%	4,969
2015	10,920	56.5%	6,173	43.5%	4,747	40.8%	4,459	4.4%	479	16.0%	1,747	2.4%	262	0.5%	54	35.9%	3,919
2014	8,797	57.1%	5,022	42.9%	3,775	34.5%	3,034	2.4%	209	10.9%	958	0.9%	82	0.3%	27	51.0%	4,487
Horticulture																	
2016	10,812	57.6%	6,227	42.4%	4,585	88.7%	9,594	0.7%	79		50	2.9%	315	0.3%	34	6.8%	740
2015	9,714	60.4%	5,868	39.6%	3,846	89.6%	8,700	0.7%	65	1.4%	135	3.9%	374	0.1%	9	4.4%	431
2014	11,291	56.5%	6,381	43.5%	4,910	92.9%	10,492	1.1%	122	1.6%	184	2.1%	233	0.0%	-	2.3%	260
Natural Resources		10.00															
2016	4,980	45.3%	2,254	54.7%	2,726	87.2%	4,343	1.3%	64	2.8%	138	1.0%	48	0.0%	-	7.8%	387
2015	4,133	44.5%	1,840	55.5%	2,293	81.4%	3,366	3.0%	125	4.2%	175	1.5%	61	0.1%	5	9.7%	401
2014	4,009	48.3%	1,937	51.7%	2,072	82.5%	3,307	2.4%	97	2.1%	85	2.7%	108	0.0%	-	10.3%	412

^{*}Census data from the categories "Native Hawaiian and Other Pacific Islander alone" and "Two or More Races" were combined in the "Other" column.

4-H Performance Indicators

Youth Members of Organized 4-H Community Clubs

FY 13/14	285
FY 14/15	331
FY 15/16	318

Total 4-H Club Membership

FY 13/14	305
FY 14/15	345
FY 15/16	324

Youth Participating in 4-H Special Interest Programs

FY 13/14	2,463
FY 14/15	4,296
FY 15/16	2,196

Youth Participating in 4-H Camping Programs

FY 13/14	331
FY 14/15	315
FY 15/16	456

Youth Participating in School Enrichment Programs

FY 13/14	6,795
FY 14/15	5,890
FY 15/16	3,051

Youth Participating in 4-H After-School Programs

FY 13/14	6,890
FY 14/15	8,269
FY 15/16	7,425

Total Direct Contacts

FY 13/14	16,784
FY 14/15	19,115
FY 15/16	13,452

Major Accomplishments

4-H Youth Development - NRS: Personal and Family Development
- Washoe County: Safe, Secure and Healthy Communities;
Regional and Community Leadership; Stewardship of our Community



Summary of 4-H Accomplishments in Washoe County in 2016

Eight UNCE staff provided 4-H YD programs for 13,452 (12,901 non-duplicated – per the ES237 report) youth in Washoe County in 2016.

Program Detail

Eight UNCE staff provided 4-H YD programs for 13,452 (12,901 non-duplicated – per the ES237 report) youth in Washoe County in 2016. Clerical support was provided for the entire 4-H Youth Development Program. Staff attended training on a monthly basis and appropriate staff attended supervisor training. Twelve monthly issues of 4-H Clover Clips, an educational newsletter for 4-H volunteers and youth were written, produced and disseminated to all participants and collaborators during the year. There were a total of 8,727 pieces mailed, emailed or hand distributed in 2016 which includes Clover Clips and other educational materials

such as educational clinics, or educational materials created and presented for specific targeted audiences. A total of sixty-eight trained adult volunteer leaders provided direct program delivery for 4-H Clubs. It is estimated that direct program volunteers provide an average of ten hours per month of volunteer service with a value of \$23.56 per hour (based on national averages as reported by independent sector.org). Using this formula, it can be projected that adult volunteers have saved the UNCE Washoe County operating budget \$192,250 for 2016. Additionally, 4-H Youth Development Programs provided training to a total of 497 adults in positive youth development practices. Using the same formula of the value of volunteer time, these adults who receive training through UNCE Programs had the potential of saving Washoe County over 1.58 million dollars. 4-H Camp had one hired camp director, two hired part-time lifeguards, a volunteer Health Professional, twenty-four adult chaperones and twenty-four teen counselors which provided a week-long residential camping experience for 135 youth between the ages of 9 and 12. Also offered in 2016, 4-H Youth Development staff presented STEM based day-camps during scheduled school breaks and summer sessions to youth in section 8 housing and public housing through Reno Housing Authority as well as military partners. 4-H Youth Development Staff also provided an intensive STEM-based academic enrichment series June 15-30 for specific Title I schools in the Washoe County School District. A total of 800 youth participated in day-camps.

For the total 4-H Youth Development Program (all delivery methods and programs) direct face to face contacts for youth for 2016 were 12,915. Direct face to face contacts for adults was 5,043 = total direct face to face contacts for 2016 were 17,958.



Goal

The Washoe County 4-H Youth Development Program will continue to provide transferable life skills education for youth and adult volunteers in a variety of venues and utilizing a variety of research-based delivery methods to include but not limited to 4-H Clubs, 4-H AfterSchool, 4-H Military Programs, Youth Mentoring Programs, residential camps, day camps, project specific/episodic STEM Learning camp and direct teaching. The entire 4-H Youth Development team will continue to increase objective and subjective evaluation data collection of youth educational programming content and training provided to volunteers and staff. Evaluation data collection will be driven by the specific measurable outcomes as directed in each of the program delivery methods. This includes pre/post testing that is measured through SPSS as well as qualitative and quantitative data collected after each program offered and measured through National 4-H Common Measures. Washoe County 4-H Youth Development will continue to increase professional youth development training opportunities for staff and volunteers throughout Washoe County as well as Northern Nevada.



Living With Fire Living with Fire – NRS: Natural Resources – Washoe County: Safe, Secure and Healthy Communities; Regional and Community Leadership; Stewardship of our Community

The purpose of LWF is to teach Nevadans how to live more safely in wildfire prone areas.

Summary of Living With Fire Program Accomplishments in Washoe County in 2016:

- 16 Number of Washoe County communities reached directly with our:
 - o 3,024 publications distributed
 - o 2,807 direct contacts
 - o 24 Nevada Wildfire Awareness Month Events or Activities
 - o 11 community events
 - 6 communities we assisted directly
 - o 11 presentations
 - 2 community workshops conducted
- **11** Number of media coverage activity
- 4 Number of fire departments we partnered with in these efforts, including the City of Reno Fire Department, North Lake Tahoe Fire Protection District, Sparks Fire Department, Truckee Meadows Fire Protection District
- 2 Number of conferences held in Washoe County that we participated in

Program Detail

2016 Faculty Activities: 1) Help generate interagency and community support and activities, 2) Distribute educational materials, 3) Coordinate and conduct planning meetings, 4) Conduct media interviews, 5) Participate at booths and interact with the public at NWAM events, 6) Give presentations, 7) Organize events, 8) Acquire and manage grant funds, track activities and participation and 9) Summarize and report results.

Results and Outcomes: Overall, LWF interacted with 16 Washoe County communities (ArrowCreek, East Washoe Valley, Estates at Mt. Rose, Hidden Valley, Incline Village, Lakeridge Springs, Palomino Valley, Reno, River Mount, Silver Lake, Somersett, South Valley, Sparks, West Washoe Valley, Wildcreek, and Montreux), had more than 2800 direct contacts, and distributed over 3000 publications. Specific program examples are presented below.



Nevada Wildfire Awareness Month (NWAM) - The purpose of NWAW is to recruit and coordinate a variety of resources to promote awareness and action concerning Nevada wildfire issues during the month of May.

2016 Faculty Activities: 1) Help generate interagency and community support and activities, 2) Coordinate and conduct planning meetings, 3) Conduct media interviews, 4) Participate at booths and interact with the public at NWAM events, 5) Give presentations, 6) Organize events, 7) Acquire and manage grant funds, track activities and participation and 8) Summarize and report results.

Results and Outcomes: Twenty-four NWAM activities were held in Washoe County. Examples include:

Cooperative Extension assisted the **West Washoe Wildfire Preparedness Group** (WWWPG) in organizing their second annual community meeting in cooperation with the Nevada Division of Forestry (NDF) and Truckee Meadows Fire Protection District (TMFPD). Held on May 11, there were 64 people in attendance which included residents, members of the WWWPG and presenters, more than tripling the attendance from the year prior. Presentations included an update on the WWWPG's efforts, information on choosing the right plants for high-fire-hazard communities, defensible space recommendations, NDF's fuel reduction efforts, all-hazard emergency preparation and fire adapted communities.

Cooperative Extension and NDF, with additional support from Moana Nursery, coordinated a Junk the Junipers event on May 21. The event was held at the NDF Eastlake/Washoe Valley location. A total of 72 households participated by bringing ornamental junipers and other hazardous wildfire fuels they had removed from their property to the location for free disposal. Participants received a coupon from Moana Nursery, valid for 30 percent off of a good plant choice replacement shrub. NDF crews collected the fuels to be chipped or burned at a later date. A Cooperative Extension representative and community volunteers from the Washoe Valley Alliance directed traffic and distributed LWF Program publications as participants exited the area. This event has grown significantly since last year with an increase in participation of almost 31 percent, junking an estimated 36 tons of sagebrush and junipers.

Cooperative Extension in partnership with the BLM-Nevada State Office, Desert Sky Adventures and Washoe County Regional Parks coordinated the 2nd Annual Wildfire Awareness Half Marathon and 5K Trail Run held on May 31 at Rancho San Rafael Regional Park. Additional support during the event was provided by the City of Reno Fire Department, NDF, TMFPD, and USFS. The collaborators brought apparatus, equipment and information to educate the public on the wildfire threat and how to prepare homes to survive, which were displayed near to the race start/finish line. Washoe County Sheriff's Office CERT volunteers assisted with parking and traffic control. A total of 171 people registered for the run, and 154 completed the run with an additional 46 others in attendance during and after the races.

Washoe County Community Workshops: Working with local fire services and community representatives, Cooperative Extension organized and held two LWF wildfire threat reduction workshops in Washoe County.

2016 Faculty Activities: 1) Arrange and chair the planning meetings, 2) Develop the workshop agendas, 3) Arrange for local agency presenters at the workshops, 4) Serve as Master of Ceremonies for workshops, 5) Prepare and deliver presentations and 6) Develop the post-conference evaluation survey.

Results and Outcomes: River Mount Park - This workshop was held July 28 and had 25 participants. Cooperative Extension, as well as City of Reno Fire Marshal Trey Palmer and Battalion Chief Mark Bohach, presented during this event. Riverbend - This workshop was held September 28 and had 20 participants. Cooperative Extension's Ed Smith, Elwood Miller and Jamie Roice-Gomes presented.

Program Evaluation: River Mount - A post-event survey was conducted and resulted in 16 responses. A summary of the key results included: 1) 100% felt they definitely have a better

understanding of the wildfire threat to their home as a result of attending the meeting, 2) 100% of the participants anticipate using the information learned from the meeting during the next 12 months. The majority of activities listed were related to removal or changing landscape features. The most useful part of the meeting was listed as "All generally useful information", 3) When asked on a scale of 1 to 5, with 1 being a definite "No" and 5 being an absolute "Yes", was the meeting worth attending, the participants responded with a weighted average score of 4.8. Riverbend – A post-event survey was conducted and resulted in 11 responses. A summary of the key results included: 1) 100% felt they definitely have a better understanding of the wildfire threat to their home as a result of attending the meeting, 2) 100% of the participants anticipate using the information learned from the meeting during the next 12 months. The majority of activities listed were related to removing, reducing or changing landscape features.

3) The most useful part of the meeting was the "The Ember Threat" presentation. 4) When asked if the meeting worth attending, the participants unanimously responded "Yes".

Washoe County Wildland Urban Interface Communities Project: This project brings together representatives of Washoe County's high fire hazard communities with representatives of the local, state and federal agencies responsible for fire protection for those communities to discuss wildfire threat reduction opportunities. It promotes networking, idea sharing, communication and improved working relationships.

2016 Faculty Activities: 1) Conceived the project, 2) Recruited community and agency representatives, 3) Hosted the meeting and 4) Facilitated group discussions.

Results and Outcomes: Twelve people representing 6 communities and the US Forest Service, Nevada Division of Forestry and Bureau of Land Management attended the May 12 meeting. Each community representative was given 7 minutes to describe their community, their actions to reduce the wildfire threat and obstacles that prevent them from taking action. The agency representatives described their plans for wildfire threat reduction projects for these communities and the various forms of assistance they could provide the communities. The meeting culminated in an extensive and productive question and answer session. During the meeting debriefing, the participants unanimously agreed that the meeting was worthwhile and that it should occur on a regular basis. A second meeting was held on November 9. Thirty-one people representing 8 communities and the US Forest Service, Bureau of Land Management, City of Reno Fire Department, TMFPD and Washoe County Emergency Management attended. A similar format to the May 12 meeting was used for this meeting. Again, meeting participants overwhelmingly felt the meetings were valuable and that they should be continued.

Washoe County Presentations: Wildfire threat reduction presentations were developed and delivered to Washoe County residents. Results and Outcomes: Eleven presentations were delivered to Washoe County residents regarding wildfire threat reduction were delivered including Sommerset, Northern Nevada Homeowners Association Council, Truckee Meadows Fire Protection District Board and Lakeridge Springs.

Regional Recognition: The LWF Program received the Great Basin Fire Mitigation, Education and Prevention Award from the Great Basin Fire Mitigation, Education and Prevention Committee. (2016). This award is the highest Great Basin honor one can receive for outstanding work and significant program impact in the area of fire mitigation, fire education and fire prevention.

Extension Nutrition Education Programs – NRS: Health and Nutrition: Personal and Family Development – Washoe County: Safe, Secure and Healthy Communities; Stewardship of our Community

Summary of Nutrition Education Accomplishments in Washoe County in 2016

Grow Yourself Healthy (GYH): During the 2016 program year, a total of 4,960 direct contacts (duplication included) and 23,053 indirect contacts were made at two sites. Small Steps 4 Big Changes (SS4BC): A total of 847 direct contacts were made. Direct contacts were made during 52 total nutrition lessons. An additional 1048 indirect contacts were made via a Small Steps newsletter, which provided nutrition education, healthy and affordable recipes, and SS4BC, as well as SNAP, program information for RHA residents. Smart Choices (SC): teacher in-services were provided at the five participating schools reaching 146 teachers and school staff. Resulting classroom nutrition lessons totaled 133, reaching 254 teachers and 1,374 students (unduplicated), and 2,129 (duplicated) student contacts.

Program Detail

Grow Yourself Healthy (GYH): During the 2016 program year, a total of 4,960 direct contacts (duplication included) and 23,053 indirect contacts were made at the two sites. Direct contacts were made during 90 in-class nutrition lessons taught to students in grades 4 and 5 (218 direct student contacts) and 45 additional lessons taught to lower grades at the Mariposa site (189 direct contacts) along with seventeen additional lessons taught to two first grade classes, four second grade classes and one CLS class at the Libby Booth site (139 direct contacts). One teacher in-service and one parent presentation provided for 47 direct contacts at Mariposa.

Three teacher in-services at Libby Booth resulted in 21 direct contacts. An additional 176 direct contacts were made during 19 family nutrition education opportunities during the summer and fall. Nine additional nutrition events were offered at Mariposa and Libby Booth to increase parent participation and nutrition knowledge. These events included two plant sales, farmer's market, salsa contest and parent work days resulting in 555 direct contacts. Indirect contacts were made via homework assignments, parent newsletters, FFVP program fliers and informational materials, totaling 23,053.

Small Steps 4 Big Changes (SS4BC): During the 2016 program year, 52 total SS4BC lessons were delivered at various Reno Housing Authority (RHA) sites. Five RHA sites were eligible to receive lessons – Mineral Manor (MM), Myra Birch (MB), Stead Manor (SM), Essex Manor (EM) and Hawkview (HV). Four sites received at least 1 cycle of SS4BC classes in FY15. In the first quarter, HV received 10 lessons, MM received 8 lessons, SM received 4 lessons, and MB received 10 lessons. Parent involvement was highly encouraged for each class. In the third quarter, MB and MM received 10 lessons. Successful recruitment was achieved via attending RHA Resident Council meetings, delivering program invitations directly to potential program participants, and offering invitations via the phone. To encourage and positively influence continued participation, reminder phone calls were made each week.

A total of 847 direct contacts were made. Direct contacts were made during 52 total nutrition lessons. An additional 1048 indirect contacts were made via a Small Steps newsletter, which provided nutrition education, healthy and affordable recipes, and SS4BC, as well as SNAP, program information for RHA residents.

A summer program was also offered to keep youth and families engaged in positive nutrition education messaging and healthy food choices. The summer day program was coordinated with the Summer Food Program and served 45 youth and their families. To assess attainment of program objectives, pre-and post-testing was conducted with 86 children and 20 parents. Positive and significant outcomes were seen in all program objectives. There was an increase in identification of and willingness to try new produce, as well as identification of the 5 food groups and amount of physical activity performed. Additionally, participants were given a post-program survey to gain an understanding of their overall satisfaction, and to receive input on program curriculum refinement and program delivery logistics.

Smart Choices (SC): teacher in-services were provided at the five participating schools reaching 146 teachers and school staff. Resulting classroom nutrition lessons totaled 133, reaching 254 teachers and 1,374 students (un-duplicated), and 2,129 (duplicated) student contacts. Three SC newsletters were distributed to each participating school, totaling 6,007 indirect contacts.

In addition to the parent/school newsletters. The Smart Choices community educator prepared fliers for the Fresh Fruit and Vegetable Program (FFVP) for participating schools in Northern Nevada – the total number of fliers distributed via email to potential audiences of youth, teachers, school administrators and parents was 851,340.

Goal

The goals of the three SNAP Ed Programs are:

- To support activities that ensure food security for all Nevadans especially those that would end childhood and older Nevadan's hunger.
- To improve the health and well-being of infants and mothers by inspiring, educating and building support across our state to make breastfeeding the norm for infant feeding in Nevada.
- To increase Nevadans' consumption of fruits and vegetables by providing knowledge of the benefits of healthy nutrition behaviors and increasing access to healthy affordable foods for Nevadans of all ages.
- To increase consumption low-fat and non-fat milk and milk products, including fortified soy beverages among school-age children. Switch to fat-free or low fat milk and milk products.
- To decrease the consumption of high calorie foods and beverages by providing knowledge of energy balance, portion sizes, and nutrition labels. Maintain appropriate calorie balance during each stage of life – childhood, adolescence, adulthood, pregnancy and breastfeeding, and older age.
- To increase the number of Nevadans who make progress toward meeting the physical activity guidelines.
- To reduce the time that Nevadans spend in non-educational screen time and in sedentary behaviors.

Nevada Radon Education Program - NRS: Health and Nutrition - Washoe County: Safe, Secure and Healthy Communities

Summary of Specific Outcome/Impact Measures to Date

The Nevada Radon Education Program has been the driving force for radon education, awareness and action for thousands in the county since inception in 2008. NREP has distributed 20,270 test kits so far, and 52.9 % or 10,728 of those devices have been used. At least 10,531 homes have been tested in the county, which amounts to 5.6% of the 188,977 housing units

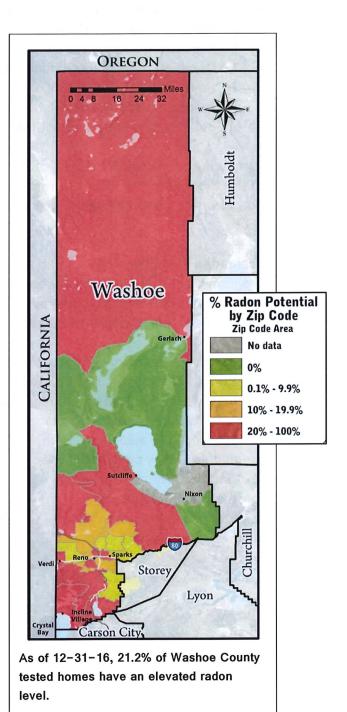
(per U.S. Census data) for Washoe County. At least 1,040 homes have been tested for radon during real estate transactions, 487 homes have been mitigated, and 91 homes have been built with radon-resistant new construction. The program continues to seek more avenues to outreach and educate Washoe County residents while encouraging them to test and reduce their radon risk.

Program Detail

The Nevada Radon Education Program (NREP) is a statewide outreach program, facilitated by two full-time staff, that exists to educate Nevadans about the health risk of radon gas in homes and buildings, how to test for the gas and methods for reducing elevated levels of radon so that citizens can make informed decisions to lower their risk of lung cancer. The program is based in Reno at the Washoe County office of University of Nevada Cooperative Extension.

Since inception in 2008, the program has helped educate Nevadans by providing low-cost radon test kits, information, technical assistance, programs, presentations and literature. The program provides measurement and mitigation advice to homeowners; initiates public outreach and informational activities; promotes testing homes for radon, fixing homes to reduce radon risk, using Radon-Resistant New Construction (RRNC) techniques and testing in real estate transactions; and builds partnerships with other interested groups.

Issue, Situation/Needs Assessment: Radon is a naturally occurring radioactive gas that is the primary cause of lung cancer for nonsmokers and the secondary cause for smokers. The action level for radon, the level where the health risk warrants mitigation, is 4 picocuries per liter of air (pCi/I). The U.S. Environmental Protection Agency (EPA) estimates that one in 15 homes nationwide has elevated levels of radon, while one in five homes tested in Washoe County has an elevated radon level.



Because Nevada lacks any regulations concerning radon, the only way citizens learn about the risk is through education, the first step in risk-reduction. The second step is to test, as testing is the only way to determine a home or building's radon level. Fixing homes with elevated radon levels is the ultimate step in risk-reduction, and building new homes with RRNC is the most superior form of prevention.

NREP's areas of impact are activities that are measured to show actions or changes in behavior after residents gain knowledge on radon. The program focuses on five areas of impact:

- 1. Requesting a radon test kit as a result of outreach and education
- 2. Usage of the kit to determine the home's radon level
- 3. Home mitigation if testing determines a need
- 4. Testing a home during the home purchase process
- 5. Building new homes with RRNC techniques

Targeted Audience: NREP is a statewide federally grant-funded program that operates in most of the counties in Nevada. The program's target audience is all Nevadans, whether they are homeowners, potential homeowners, renters, builders, realtors, medical professionals or youth.

Evaluation Plans: Impact information is collected quarterly and tallied for each county. The program receives testing, mitigation and RRNC information from program test results, radon professionals, radon testing labs, as well as directly from homeowners. Radon test result data is analyzed and updated results are published quarterly, both for counties and for the state.

To determine the effectiveness of presentation outreach, a 13-question pre- and postpresentation evaluation is completed by attendees at many of the presentation programs that NREP provides. The pre-presentation questions provide information on how participants heard

about the program and the level of knowledge the audience has on radon before they take part in the presentation. The post-program questions are designed to determine if the participants are willing to take action based on the information they have gained. The evaluation results are a valuable tool used for planning future outreach as well as improving NREP's delivery of the radon risk message.



Nadia Noel and Susan Howe accepted the National Radon Action Month proclamation from the Washoe County Commissioners on Dec. 13.

2016 Faculty Activities: The NREP educates people about radon's health risk through a variety of methods that include presentations, exhibits, news media, social media, and Cooperative Extension's radon website, www.RadonNV.com and calls to the radon hotline, 1-888-RADON10.

Educational opportunities: National Radon Action Month is the busiest period of time for NREP. Numerous presentations are offered, radio and television public service announcements are heard, proclamations are requested from various governing agencies and free radon test kits are offered. In addition, partnerships and collaborations are formed for test kit distribution and exhibit opportunities. The program also educates the community through television news reports and news articles, as well as through social media, Twitter and Facebook. Radon program staff are available at the Washoe County Cooperative Extension office to answer radon-related questions during business hours and through the radon hotline.

In 2016, NREP offered 16 presentations and six free kit exhibit booths in Washoe County.

- Presentations made at
 - Washoe County Libraries: North Valleys, South Valleys, Sierra View, and Northwest Reno
 - Incline Village Public Works
 - Sun Valley Citizen Advisory Board
 - Sparks Neighborhood Watch meeting
 - Nevada Association of Certified Real Estate Inspectors meeting
 - o EPA Region 9 Radon Stakeholders Meeting
 - Northern Nevada Chapter of International Code Council
 - Nevada Hospital Association
 - St. Mary's Center for Cancer
 - American Institute of Inspectors annual conference
- Proclamation presentations
 - Sun Valley General Improvement District meeting
 - Washoe County Commissioners meeting
 - Washoe County Health District board meeting
- Free test kit events
 - Washoe County District Courthouse
 - Renown's Shine A Light on Lung Cancer
 - Washoe County Healthy Living Forum
 - Nevada Nurses Association's (NNA) annual conference
 - NNA's monthly meeting
 - Nevada Bureau of Mining and Geology's Open House

Results and Outcomes: NREP had direct contact with 1,717 Washoe County residents at presentations, the Washoe County Cooperative Extension office and outreach events. The program had indirect contact with 632 people by way of phone and email. There were also thousands of tweet impressions and post views on the program's Twitter and Facebook pages.

Radon Test Kit Distribution and Usage

People who reside in Washoe County have access to free or low cost radon test devices at the Washoe County Cooperative Extension, partnering locations, outreach events, presentations, and by mail through online ordering or by mail-in coupons. The program advertises through social media, local television news, newspaper articles, the Cooperative Extension website,

newsletters, blogs, and radio and television public service announcements. When test kits are distributed, recipients are educated on how to properly use them by NREP staff or the documents that accompany the device. Potential test kit users also have access to the radon hotline to pose any questions they have on testing procedures.

Results and Outcomes: Residents of the county had at least 22 presentation or event opportunities in cities and towns throughout the county, as well as Cooperative Extension offices and partner locations, to receive a free short-term test kit throughout the year.

- At least 1,896 short-term test kits were distributed in 2016.
- More than 51% of the kits were used within the year they were received.
- At least 1,122 Washoe County homes were tested.
- From various sources, including program distributed test kits and professional radon testers, at least 258 tests were completed during the home purchase process, almost double that of the previous year.

Radon mitigation education: The program encourages residents to mitigate or reduce radon levels if they have confirmed elevated radon levels and to add Radon-Resistant New Construction techniques to their new homes while they are being built. NREP sells an expert level book on radon mitigation at cost or offers it at local libraries, offers a free booklet on RRNC on its website or a hard copy by request, maintains a list of certified radon mitigation professionals with Nevada contractor licenses, and offers radon mitigation educational presentations by certified radon professionals during some NREP educational presentations.

Results and Outcomes: At least 85 homes were reported as mitigated in Washoe County in 2016, and 11 homes were built with RRNC techniques.

Goal

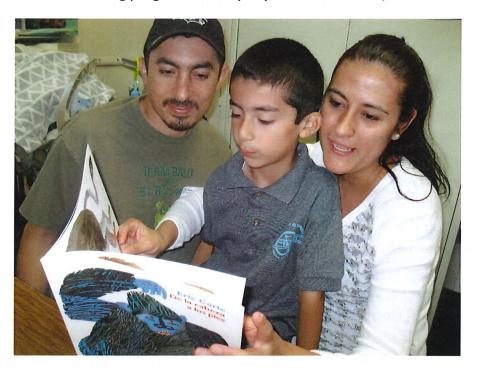
The ultimate long-term goal of the program is to reduce the incidence of lung cancer in the county by having every home in Washoe County tested for radon on a regular basis (every two years, before and after remodeling, or after significant seismic activity). The second objective is that mitigation would be done on all homes that have a confirmed elevated levels of radon. The third ultimate goal would be to have radon legislation that would protect homeowners from radon gas when purchasing homes, when building new homes, or when hiring professionals to test and fix homes.

Future funding is another area of concern, as the program is currently funded by the State Indoor Radon Grant, a federal grant from the EPA. The future is unknown, as the federal budget is currently being debated.

Extension Early Literacy Programs – NRS: Health and Nutrition: Personal and Family Development – Washoe County: Safe, Secure and Healthy Communities; Stewardship of our Community

Summary of Early Literacy Accomplishments in Washoe County in 2016

Early Literacy Programming: 1) improved the literacy skills of parents and young children, 2) increased the amount of literacy and learning activities provided for young children, 3) improved parenting skills, 4) contributed to an eXtension website for child care providers and another for parents with young children, and 5) maintained collaborations with UNR on-campus departments and programs. Major teaching efforts in 2016 included: Family Storyteller (multiple efforts), Little Books and Little Cooks, Striving Readers, eXtension, and University Collaborations. These teaching programs directly impacted a total of 1,133 families.



Program Detail

Family Storyteller is a suite of family literacy programs for parents and their young children and beginning readers. The primary purpose of the program is to increase the amount and quality of time parents and young children spend together in literacy enriching activities and to enhance school readiness and parent engagement. The overall program includes English, Spanish, English Language Learner, Infant/Toddler (English and Spanish), and Native American versions. Program efforts in 2016 primarily focused on the Spanish, English, and Infant/Toddler

(From the Beginning) versions of the program. In the last Nevada legislative session, state funding was designated for school districts to increase the number of children reading at grade level by the third grade. Extension subcontracted with Washoe County School District (\$21,665) to provide the Family Storyteller program (Spanish and English versions) at 19 at-risk elementary schools (Title 1 with school-wide below reading level scores). Target families already or soon will have children attending these select elementary schools.

Evaluation to Date: Although the Family Storyteller has been extensively evaluated in previous years, we collected additional evaluation data from the workshops conducted in 2016. On a scale from 1 (low) to 5 (high), parents were asked to rate their knowledge, skills, and confidence in regards to enhancing their children's literacy development before and after the workshops. The results revealed significant gains in knowledge, skills, and confidence.

	Mean Before	Mean After	<u>t</u>	<u> </u>
Knowledge	3.39	4.82	19.335	.000
Skills	3.43	4.79	18.743	.000
Confidence	3.5	4.84	19.315	.000

Also, 97.8% would recommend the program to other parents. Comparing differences between English-speaking and Spanish-speaking parents shows that Spanish-speaking parents were more likely to recommend the program to others (t = 2.047, p = .045). Spanish-speaking parents also were more likely to rate their knowledge (t = 1.991, p = .049) before the workshop lower than did English-speaking parents; however, there were no significant differences in parental rating of knowledge after the sessions, indicating that Spanish-speaking parents displayed greater gains in knowledge than English-speaking parents.

At the end of each series we asked parents what they gained from the program. Written comments included: "I learned how to read stories to my daughter with more enthusiasm, so she felt she was inside the story." "How to read, explain, to do activities with my daughter." "I learn to read better and to be more patient." "To read slowly, to point at what I'm reading, to ask questions, to praise my son while reading." "More skills to read with my children, and to participate, and to play with them sharing the book." "How good it does to read for pleasure to all our children. Reading for pleasure motivates them instead of reading as a chore."

When asked what they liked best about the program, parents said: "The home activities, songs, books." "The reading skills I learned to read to my daughter." "I was able to teach new things to my son." "The books that my son has thanks to the program." "The confidence between the

instructor and us, the different opinions we shared." "That there are these types of programs that are so important for families."

Although we did not collect new evaluation data for the Infant/Toddler Family Storyteller version (From the Beginning), prior evaluation of the English version has shown that parents show a statistically significant improvement (paired sample t-tests) in their knowledge of critical skills in reading with babies and toddlers, such as holding baby/toddler close to see book, showing front and back of book, pointing to pictures, asking toddler what the picture is, saying the right word, getting baby/toddler's attention, following baby/toddler's lead, answering toddler's questions, letting baby/toddler help turn pages, and copying action in books. Pre- and post-test paired sample t-tests also found statistically significant increases in number of days parents read to their infants and toddlers and number of picture books at home for children's use.

Little Books and Little Cooks is a 7-week early literacy, parenting education, and child health and nutrition program for preschool-age children (3 - 5 years old) and their parents. During the program, children and parents come together to learn about healthy eating and nutrition, gain positive parent-child interaction skills, and practice school readiness skills by reading children's books about healthy eating/nutrition and cooking/eating every week. Each weekly 2-hour session features new topics, a new book about healthy eating, and a new recipe (cooking). This year Extension added a community education component in addition to the family workshops.

For many children, academic difficulties begin before they start school. In a national survey, teachers reported that 35% of kindergarten children were not ready for school. These children struggle uphill from the first day they set foot in school. Poor academic skills in the early years place children at risk, often leading to grade retention, school failure and dropout, delinquency and running away, as well as unemployment and underemployment in adulthood. Children gain critical school readiness skills by engaging in real-life, meaningful activities. Cooking with parents is one educational activity that can help to increase children's abilities in math, science, reading, language, motor development, and social skills in a meaningful and appealing way. The Little Books and Little Cooks program also offers the opportunity to teach parents healthy nutrition and physical activity ideas to fight childhood obesity.

Specific Outcome/Impact Measures to Date: The effectiveness of the Little Books and Little Cooks Program was evaluated using three strategies: 1) a pre and post parent self-report survey instrument (parents' feeding style, child's eating, family's eating style, etc.) based on published and validated tools (Wardle et al., 2001; Wardle et al., 2002), 2) a pre and post observation checklist (child cooking skills, parent-child interaction during cooking, and mealtime

observation) which was created for this program, and 3) an overall post-program evaluation. Paired t-tests were conducted to compare participant's responses and facilitator's observations to pre and post-test items.

1. Children's School Readiness Skills

Parents were asked about children's school readiness before and after the 7-week program and there was significant improvement in several school readiness skills preand post-test:

- Look at pictures and then tell stories (t = 2.29, p < .05)
- Try to write their name (t = 2.27, p < .05).
- Can button, shirt, pants, coats, and zip up zippers (t = 2.37, p < .05).
- Can start to follow rules (t = 3.02, p < .01).

2. Reading Books

- More parents reported that they read books about healthy eating and nutrition after attending the program (43% pre-program to 99% post-program; t = 8.43, p
 < .001).
- Among parents who said that they read books about healthy eating and nutrition, they reported that they read more books about healthy eating, nutrition and/or cooking after attending the program (1 book pre-program to 4 books post-program; t = 6.75, p < .001)

3. Child's Cooking Skills (related to school readiness)

Thirteen children's cooking skills [scale ranging from 1 (not observed) to 3 (consistently observed)] were observed during the first and the last day of cooking with parents. Children significantly improved their cooking skills (12 items) between pre-test and posttest observations:

- Wash hands for 20 seconds before cooking and eating, and when necessary (t = 3.21, p < .01).
- Measure ingredients (using spoons or cups) (t = 8.41, p < .001).
- Peel fresh produce (t = 6.94, p < .001).
- Cut foods with a plastic or dull knife (t = 8.90, p < .001).
- Grate cheese and vegetables (t = 7.27, p < .001).
- Stir ingredients together (t = 5.20, p < .001).
- Arrange foods on a plate (t = 5.94, p < .001).
- Follow steps in the recipe (t = 4.95, p < .001).
- Clean up after cooking (t = 6.39 p < .001).

- Set the table/ serve foods (t = 5.87, p < .001).
- Clear the table after a meal/put things in the trash after cooking or after a meal (t = 4.80, p < .001).

4. Parent-Child Interaction

Parent-child interactions were observed during the first and last day of cooking and mealtime. There was a significant improvement in observed positive parent-child interaction (e.g., parents give praise or physical affection) (t = 4.51, p < .001) and significant decrease in negative parent-child interaction during cooking (t = 2.39, p < 05). Parent-child interaction was also observed during mealtime (between pre and post-test) and children were significantly more likely to try new foods (t = 2.26, p < .05) and parents encouraged children to taste all foods served more often (t = 3.65, p < 01) and did not push children to eat everything on the plate (t = 2.58, p < .05) at post-test.

5. Children's Eating Style

Parents were asked about their child's eating style, including children's enjoyment of food, picky eating, food responsiveness, slow eating, and satiety responsiveness on a scale from 1 = never to 5 = always. No statistically significant pre- to post-test improvement was found.

6. Parent's Feeding Style

Parents were asked questions about parents' feeding style, including parent's encouragement when feeding, emotional feeding, instrumental feeding, and parental control over feeding on a scale from 1 = never to 5 = always. No significant pre- to post-test improvement was found.

7. Frequency of Cooking

Parents were asked about how often they cook with their children both pre and posttest. Parents reported that they cook more often with their children after attending the program (t = 7.82, p < .001).

8. Frequency of Physical Activity

Parents reported that they spent more days doing physical activity for a total of 60 minutes per day (t = 2.84, p < .01) and that their children spent more days doing physical activity for a total of 60 minutes per day (t = 4.47, p < .001).

9. Knowledge of Food Groups

After attending the program, 60% of parents knew the total number of food groups from MyPlate and also named all five groups. (Only one parent knew the total number of food groups and named all five groups at pre-test.)

10. Fruit and Vegetable Consumption

Children's and parents' fruit and vegetable consumption also was assessed by using the fruit and vegetable consumption question of the pre and post self-report survey. Parents and children were more likely to eat more fruits (t = 2.35, p < .05) and vegetables (t = 2.81, p < .01) after attending the program.

11. Consumption of each Food Group (after completing the program)

Parents were asked about their intake of the food groups at home with their children:

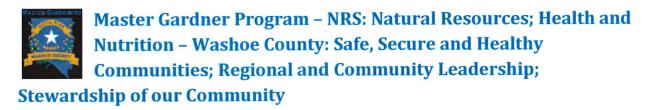
- 52% said that they eat dairy 1-3 times per day.
- 39% said that they eat protein 1 -3 times per day.
- 48% said that they eat fruits 1-3 times per day.
- 38% said that they eat vegetables 1-3 times per day.
- 43% said that they eat grain 1-3 times per day.

12. Program Evaluation (after completing the program):

- 98% of parents reported the highest satisfaction with the program and the mean score was 4.75 (5-point Likert scale).
- 91% of parents reported that their children help them prepare food a little more often or a lot more often.
- 90% of parents reported that their children try new and unfamiliar foods at home a little more often or a lot more often.
- 95% of parents reported that their children are a little more or a lot more willing to try new and unfamiliar foods at home.
- 96% of parents reported that they felt a little more or a lot more confident interacting with their child at home.
- 97% of parents reported that their child felt a little more or a lot more confident about using cooking equipment during cooking.
- 98% of parents reported that they are likely or very likely to continue using what they learned in the Little Books and Little Cooks program in the future.
- 100% of parents would recommend this program to their friends and family.

- 13. The following comments were provided by parents at the end of the program:
 - "In doing the classes our children learned to be more confident in the things that they do."
 - "Everything that was taught was a great help. In general I think it's a very good program."
 - "That my daughter changed her attitude with other children and that we learned lots of things together."
 - "My daughter learn different techniques of cooking."
 - "Children learn to help and we learn to eat healthy."
 - "My kids are more interested in cooking and learning about new foods also the books made it easy to read as a family."
 - "Children were directly involved in all aspect (prep, cook, serving, clean up)."
 - "I learned how to cook healthy food and many other different foods."

Striving Readers: In 2012, Washoe County School District was one of four Nevada school districts to receive a federal pass-through Striving Readers grant to develop a comprehensive effort to improve literacy outcomes for children 0-18. Extension co-wrote the UNCE part of the grant and was tasked with developing and implementing the early language and literacy family engagement component, which included parent-child literacy lessons, an age-paced parenting newsletter, and English and Spanish home visitation curricula. 2016 was the final year of the grant. Research has found that poor literacy skills in the early years have severe consequences later on for children, such as grade retention, school failure and dropout, delinquency, and unemployment and underemployment as adults. The Striving Readers project was a comprehensive integrated approach to addressing student literacy achievement for students at risk of academic failure. The overall project had multiple goals, one of which is to strengthen engagement with families to improve literacy for all children birth through 12th grade. Parent involvement in their children's education has been shown to promote positive academic outcomes for children, such as higher literacy performance, grades, competence, and achievement test scores.



Summary of Master Gardener Accomplishments in Washoe County in 2016

Washoe County Master Gardeners taught 650 participants in the Gardening in Nevada: The Bartley Ranch Series; sold 1,125 strawberry plants through an online sale; completed 79 soil tests; responded to 2,486 plant diagnostic requests; and provided information to 1,711 community members through community events and presentations, including the Reno Home Show and University of Nevada, Reno's Field Day. Master Gardeners volunteered for 9,500 hours in Washoe County. These hours are valued at \$223,820 in Washoe County. These values are based on an estimated dollar value for volunteer time in the U.S. of \$23.56 per hour for 2015 (Independent Sector http://www.independentsector.org/volunteer-time).

Program Detail

Master Gardeners (MG) is an educational and volunteer-recruitment program. Extension trains avid community gardeners in science-based horticulture and environmentally sound gardening practices. Master Gardener volunteers are a critical component of horticulture programs in every land-grant university. Those seeking to become Master Gardener volunteers complete an intensive basic horticulture training including 50 to 80 hours of coursework and hands-on training. They then volunteer at least 50 hours to become a certified Master Gardener volunteer, and must volunteer at least 50 hours each year to retain their certification. Master Gardeners provide research-based horticulture information to Nevadans by answering phone calls, sending out informational materials, conducting workshops, developing community gardens, providing information at farmers markets and other community events, and much more. Master Gardeners expand the reach of Cooperative Extension horticulture professionals and create a vital link between the university, Cooperative Extension and the general public. on their knowledge and training to the public.

Extension Horticulture Programming – NRS: Natural Resources; Health and Nutrition; Community Development – Washoe County: Safe, Secure and Healthy Communities; Regional and Community Leadership; Stewardship of our Community; Proactive Economic Development and Diversification.

Summary of Horticulture Education Accomplishments in Washoe County in 2016

Attendance at the spring Green Industry Training Program in northern Nevada averaged 48 people at each of eight sessions. Some results of two basic classes taught include:

- The Soils, Potting Mixes & Fertilizers class participants showed a 24.2% gain in confidence.
- The Water and Landscapes class participants showed a 15.4% gain in confidence. Some other specific accomplishments achieved as part of the program in northern Nevada include:
 - The program reached 55 students by hosting "Keeping Your Trees Alive During a Drought" with outside speakers funded by a grant from the Nevada Division of Forestry.
 - The program reached 30 attendees at the Nevada Shade Tree Council Arborist Prep Course on "Soil Science and Water Management of Trees."
 - Professor Kratsch was interviewed by Irrigation & the Green Industry Magazine for an article titled, "Is Getting Rid of Turf Really the Answer?" published in the magazine supplement Drought and the Green Industry.
 - Professor Kratsch Received the Nevada Landscape Association President's Award for outstanding service to the industry.

Participation in the Green Industry Training Program's basic training series in Washoe County has increased steadily from 18 in 2011 to 52 (room capacity: 50) in 2016. This reflects the positive impact of the changes made to the program. Three of the five Washoe County nurseries now send their new employees for training each year, as do landscape facilities staff from Truck Meadows Community College and the University of Nevada, Reno campus, and at least two local landscaping companies.

Program Detail

Surveys consistently show that homeowners look to green industry professionals for information on plant and landscape care. The 2012 statewide Horticulture Situational Analysis and the 2011 Comprehensive Regional Water Management Plan drafted by the Northern

Nevada Water Planning Commission cites "the need for more professional education in the green industry, including landscape architects." Horticulture Professor Heidi Kratsch's 2010-2011 surveys of local green industry professionals indicated a desire by the industry for one-day seminars, nursery worker training, and continuing education opportunities for professional certification, all provided during their off-season or at noon during the growing season. Topics deemed important to the industry included diagnosing plant problems, plant insects and diseases, plant identification, integrated pest management, weed management, soil fertility and plant nutrition, native plant landscaping, pesticide certification/safety training, and pruning. In 2016, the Nevada Landscape Association Board of Directors voted to focus their efforts on landscape water conservation issues and education.

Since 2011, northern Nevada's Green Industry Training Program has offered an annual basic training series of eight three-hour classes for new and emerging industry workers at the beginning of the year. Basic training topics include plant diseases, weeds, soils, insects, landscapes, turfgrass maintenance, integrated pest management, pesticide safety and plant identification. During the rest of the year, advanced training classes are offered to provide opportunities for green industry professionals to obtain continuing education credits for professional certification and licensing. Advanced training classes, referred to as the Green Industry Continuing Education Series, are intermittent and only offered when resources and speakers are available. In 2016, there were eight advanced training continuing education classes offered, including four in both English and Spanish. Bilingual classes included pesticide safety, integrated pesticide management, hands-on pruning and planting techniques. Some other topics included artificial turf, keeping trees alive during drought, and soil science and water management of trees.

Summary of Grow Your Own Accomplishments

Since 2011, 5,242 people have been trained in local food production methods, resulting in at least 10 home gardeners deciding to sell their produce to local farmers markets, two people deciding to start a local food business, and 12 people donating excess produce to local food pantries, not to mention the thousands of homeowners who produced food for their own households' consumption, many sharing with neighbors and friends.

Program Detail

A major area of program emphasis for Cooperative Extension is to "improve food security through home and small-scale production." Many communities (29 out of 487 census tracts) in Nevada are considered food deserts: they have limited access to fresh foods. Many Nevadans

desire to grow their own foods to gain access to safe and healthy produce and to become more self-sufficient. An Extension statewide needs assessment published in 2012 reported home and local food production as a top horticultural need and emerging trend for the state. A survey of Extension educators in north and central Nevada indicated almost universal support for a statewide educational, non-volunteer alternative to the Master Gardener Program.

The Grow Your Own, Nevada Program offered two eight-class sessions in 2016: one in the spring and one in the fall. Classes were held at the Washoe County Cooperative Extension office and offered via interactive video at Cooperative Extension offices throughout the state in the counties listed above. Each class was two hours, and topics covered seasonal vegetables, soils, good and bad insects, tomatoes, garlic, composting, canning and preservation, gardening styles, fruit tree selection, hoop houses and pest control. Participants who attended all eight classes in a session received a USB flash drive containing gardening resources. K-12 teachers and Master Gardeners in Reno received discounts.

Results/Evaluation: In addition to the information presented above in the accomplishments section, the participants responding to the aforementioned survey reported the behaviors/facts below. (These survey results are presented here because we cannot be certain these facts reflect a *change* in behavior; we simply know the respondents reported these facts/behaviors after participating in the program.)

- 55 out of 60 respondents (91.7%) said the produce they grow helps feed their family.
- 26 out of 60 respondents (43.3%) said they donate some of their homegrown produce to local food pantries.
- 10 out of 60 respondents (16.7%) said they started their own business producing food for sale.
- 6 out of 60 respondents (10%) said they sell some of their produce at local farmers markets.
- 3 out of 60 respondents (5%) said they helped start a community garden or farmers market.
- 2 out of 60 respondents (3.3%) said the money they earn from selling their produce is an important source of income for their family.
- 68 out of 72 respondents (94.5%) appreciated the diversity of topics in the classes.
- 67 out of 71 respondents (94.4%) will attend future Grow Your Own, Nevada! classes.
- In addition, the number of web visits to www.growyourownnevada.com was 23,237 from January to December 2016, indicating great interest in the program.

Summary of Extension Urban Integrated Pest Management Educational Programs Accomplishments

A retrospective survey of the general public will be implemented in 2017 to determine impacts of our IPM public service announcements (radio and TV) and other educational strategies (public classes, fact sheets, professional trainings). Some additional accomplishments/results include:

- There are 10 IPM series fact sheets displayed at 13 garden centers, seven Cooperative Extension offices and seven Washoe County public libraries. At least 1,000 fact sheets were delivered in 2016 to these sites to replace fact sheets distributed to the public.
- 2000 public service announcements aired 182 on radio, 1,818 on television.
- At the Reno Home Show booth, Master Gardeners answered 235 questions about IPM, pests or pesticide safety. 500 fact sheets (10 of each topic) were distributed.
- 2,689 contacts were made through classes. Master Gardeners reached 50 people at Celebrate Washoe Valley, and 50 people at University of Nevada, Reno's Nevada Field Day. Master Gardeners also distributed 90 IPM fact sheets at Field Day.
- Horticulture staff and Master Gardeners at the Washoe County Cooperative Extension horticulture office answered 1,865 questions that concerned IPM-related topics.
- The Urban IPM team published 67 articles on IPM-related topics in the Reno Gazette-Journal, the Douglas Record-Courier and the Nevada Appeal.

Program Detail

Data from the National Water Quality Assessment Program published in 2006 revealed that the Truckee River had only one pesticide detected in water samples upstream from Reno-Sparks, but 10 compounds were detected downstream of the two cities, suggesting urban inputs to the pesticide load. Historically, studies have shown that homeowners use as much as 10 times more chemicals per acre on their lawns than farmers use on agricultural land. The goal is to train the green industry, Master Gardener volunteers and others who advise the public in pesticide safety practices to help the public improve their skills in selection, use and disposal of pesticides to minimize pesticide pollution of water.

Urban IPM training is incorporated into nearly all of Cooperative Extension's horticulture programs, including Master Gardeners, the Commercial Horticulture Program, and Grow Your Own, Nevada! Classes were offered as part of series in each of these programs, as well as individual advanced training classes throughout the year. Most of the classes offered were live trainings, but interactive video was offered as part of the class in the Grow Your Own, Nevada! Series. In 2016 in northern Nevada, the Urban IPM team delivered 176.8 total hours across 97

classes, including 59 basic training and advanced continuing education classes for professionals (2,110 total contacts) and 38 classes for the general public (913). Examples of covered topics included pesticide regulations; pesticide safety; burrowing pest control methods; bait mixing; pollinator protection plans; and disease, molds and mildew.

One of Cooperative Extension's oldest IPM-specific program is the Weed Warriors Invasive Weed Training. Since 1998, the training has educated many other weed-control programs, including federal agencies and 30 Cooperative Weed Management Areas in Nevada, including the Truckee Meadows Weed Coordinating Group. In 2016, the Washoe County IPM team presented the hands-on training to 80 attendees through trainings in Reno, Carson City and Gardnerville. The Weed Warriors Training focuses on identifying and managing local noxious weeds (species which are or are likely to become detrimental or destructive and are difficult to control or eradicate).

The IPM team also worked to educate the community by handing out fact sheets; making public service announcements; staffing booths at community events; publishing articles and columns; and answering questions via email, phone and walk-in clinics.

Extension Natural Resource Drought and Flood Educational Programming – NRS: Natural Resources; Community Development – Washoe County: Safe, Secure and Healthy Communities; Regional and Community Leadership; Stewardship of our Community.

Drought Resiliency of Small Town Groundwater Supplies: In 2016, the Desert Research Institute (DRI) performed a computer modeling study of the aquifers supplying drinking water to twelve rural northern Nevada towns. Extension obtained a grant to work with DRI on the interpretation of the modeling study and to present summaries of the results to the County Commissions of the counties where the public water supplies were located. The audience for the program included County Commissions, town boards, and the public water supply entities in the towns that were included in the studies. These towns were Lovelock, Winnemucca, Battle Mountain, Elko, Spring Creek, Ely, Eureka, Austin, Hawthorne, Vya, Gerlach, and Wadsworth.

Summary of Accomplishments in Washoe County in 2016

Between October and December, the Extension Water Quality Specialist traveled to Elko, Eureka, Ely, Hawthorne, Battle Mountain, Winnemucca, Lovelock and **Washoe**

Counties and presented the hydrology report at each meeting.

Program Detail

In preparation for educational program development for community officials the Extension water first met with the DRI hydrologists early in 2016 to learn the details of the computer modeling study. The preliminary draft of the study in spring 2016 was reviewed and the Extension Specialist attended several meetings to provide focus on a number of questions relevant to counties. The final report was issued in July 2016. The Extension Specialist also arranged meetings with the Director and the Education Coordinator of the Nevada Rural Water Association and attended their 2016 annual conference.

Awareness Week and Media Campaign for Nevada Flood Hazards: Northern Nevada has experienced major destructive floods approximately every 10 years for the past 160 years. The Carson River Watershed Regional Floodplain Management Plan recommends flood outreach education for the general public, including an annual Flood Awareness Week. The former State Floodplain Manager in the Nevada Division of Water Resources suggested that Cooperative Extension create such a program not just for the Carson Watershed, but for all northern Nevada communities. The Nevada Division of Emergency Management also backed and funded the efforts to motivate the public to prepare for the inevitable disruptions of major river and flash flood events throughout our state.

Summary of Accomplishments for 2016: Using Google Analytics, it was learned that a total of 1,475 separate individuals visited the NevadaFloods.org website Oct. 1 through Dec. 1, 2016. Out of the visits, 78 percent were first-time users. Users viewed an average of 1.89 pages in each session, averaging 1 minute 26 seconds in length. The Reno Office of the National Weather Service promoted Flood Awareness Week on their popular Facebook page. These posts were liked and shared by 331 people. This resulted in a "Post Reach" for the Flood Awareness Week posts on the National Weather Service Facebook page of 5,624 people on the first day and 9,876 people on the second day of Flood Awareness Week. "Post Reach" is defined as the number of people who see the post when it is shown in their News Feed. During the entire week, 33,158 people were reached. Of those, 2,205 actually clicked on the posts to read about flooding and NevadaFloods.org.

Starting in November of 2013, University of Nevada Cooperative Extension faculty member led an inter-agency effort to increase public awareness of and preparedness for flood events in northern Nevada. In 2014, he formed and chaired a Flood Awareness Advisory Committee. They presented northern Nevada's first Flood Awareness Week in November 10-15, 2014. In 2015, he passed the Chairmanship to the Nevada State Floodplain Manager, and he served as an active member of the six-person Flood Awareness Core Group. In 2016, the Flood Awareness Core Group organized 13 public awareness events. Extension faculty created radio ads that aired on KUNR for five weeks, and three full-page ads that appeared in the Reno Gazette-Journal.



MEMORANDUM

DATE: April 3, 2017

TO: Al Rogers, Director, Management Services

FROM: FRANK FLAVIN, WASHOE COUNTY EXTENSION EDUCATOR, NORTHERN AREA DIRECTOR

RE: ANNUAL SUBMISSION OF COOPERATIVE EXTENSION BUDGET PURSUANT

TO NRS 549.020 (1)

The undersigned, having been delegated fiscal authority from the Director of Cooperative Extension, hereby makes the following budget submission pursuant to NRS 549.020:

A. Revenue-County, State and Federal

1. FY 2018 Projected Revenue

Washoe County Special Revenue Account:	\$1,401,383
University (State and non-Sponsored Projects Federal):	\$663,468
Total FY 2018:	\$2,064,851

2. FY 2017 Projected Revenue

Washoe County Special Revenue Account:	\$1,333,455
University (State and non-Sponsored Projects Federal):	\$595,721
Sponsored Projects Received July 1-March 31:	\$704,000
Total FY 2017:	\$2,633,176

3. FY 2016 Actual Revenue

Washoe County Special Revenue Account:	\$1,315,598
University (State and non-Sponsored Projects Federal):	\$530,644
Sponsored Projects Received FY 2016:	\$917,187
Total FY 2016:	\$2,763,429

B. Projected Washoe County Funds Budget FY2018

Personnel Costs	\$1,372,263
Travel	\$21,869
Operating Expenses	\$213,518
Overhead Expenses	\$59,408
Equipment	\$0
Capital Improvements	\$40,000
Contingency Fund	\$384,111
Total	\$2,091,169

C. Budget Narrative for Washoe County Funds Budget FY2018

1. Personnel Costs

Covers all or a portion of salaries and fringe benefits for employees with a University of Nevada, Reno (UNR) home department of Cooperative Extension Northern Area-Washoe County. These positions include faculty, staff, and temporary employees that are providing direct programming or administrative support in the Washoe County office.

2. Travel

Covers mileage reimbursement, in-state, and out of state travel expenses related to Washoe County programs.

3. Operating Expenses

Covers all operating expenses that are not included in the Overhead Expenses category. This would include office supplies, postage, copy/binding, fingerprinting, and other miscellaneous expenses. Also, we are planning to update furniture, computers, and printers in several offices.

4. Overhead Expenses

Covers leases for building and equipment, utilities, and phone costs.

5. Equipment

We don't anticipate any equipment purchases in FY 2018

6. Capital Improvements

In FY 2018, UNR will be redoing the parking lot of the Washoe County office. We are taking this opportunity to install a shade structure along a portion of the rear of the building. This will allow the rear entrance to be covered from the elements and afford exhibit space for volunteers and the public as well as provide the Washoe County Extension office employees a place for breaks and lunches.

7. Contingency Fund

This provides a reserve for unexpected conditions such as a sudden drop in revenues. Grant revenues are extensive and the grant funding for key programs, such as Radon Education and Literacy, may unexpectedly disappear or be greatly reduced. In addition, this fund is used to back-up memo accounts for pending Sponsored Project awards for Washoe County programs where funding is awarded but delayed. UNR allows memo accounts to be created to enable the charging of allowable project costs during grant award processing. UNR requires that the requesting department have discretionary funds to guarantee the requested memo account budget.

Respectfully submitted,

Frank Flavin

Northern Area Cooperative Extension/Washoe County Office

Frank Flavin, Area Director University of Nevada, Reno/408 4955 Energy Way

Reno, Nevada 89502-4105

(775) 784-4848

www.unce.unr.edu A Partnership of Nevada Counties, University of Nevada, Reno

Cooperative Extension Washoe County

Frank Flavin

Washoe County Extension Educator
Northern Area Director









Mission

Cooperative Extension's mission is to discover, develop, disseminate, preserve, well-being of Washoe County residents. and use knowledge to strengthen the social, economic, and environmental

provides research-based information to local residents. As an outreach partnership of the University of Nevada, Washoe County and USDA, Cooperative Extension offerings impact and improve lives of Washoe County residents through a planned educational process. activities to address those needs. Extension provides ongoing program evaluation to ensure educational natural resources. Cooperative Extension identifies critical needs, and designs educational programs and community development; health and nutrition; horticulture; personal and family development, and specifically appropriated for, statutorily established educational programs focusing on agriculture; The Cooperative Extension Fund was established to allocate a 1 cent ad valorem tax apportioned to, and

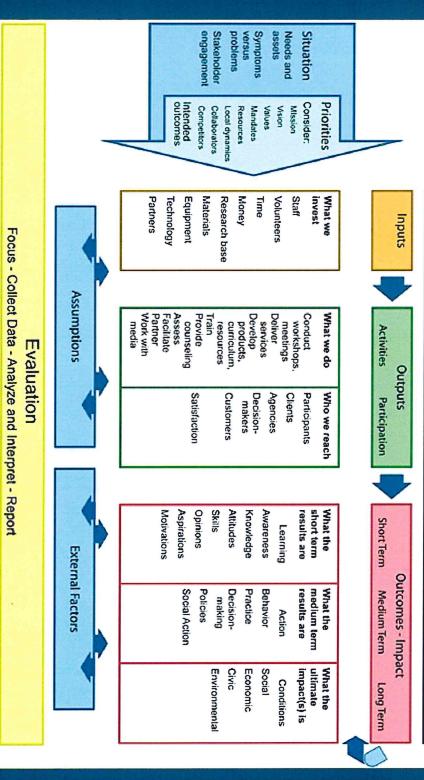
A Piece of History...

Agricultural Extension Service as federal-state-county In 1914 the Federal Smith Lever Act establishes partnership.

By 1916 Ag agents and home demonstrators work in Lyon, Washoe, Elko, Douglas and Clark Counties.







NRS Statutory Program Authorization

- Agriculture
- Community Development
- Health and Nutrition
- Horticulture
- Personal and Family Development
- Natural Resources



4-H Youth Development

Learning/Engagement and Life Skills. Agriculture, Animal Sciences, Healthy Living, Service 4-H believes true leaders aren't born, they're grown. That's why we have 4-H Clubs that teach STEM,

4-H AfterSchool teaches STEM, cultural awareness, arts, citizenship and leadership at area Title I schools

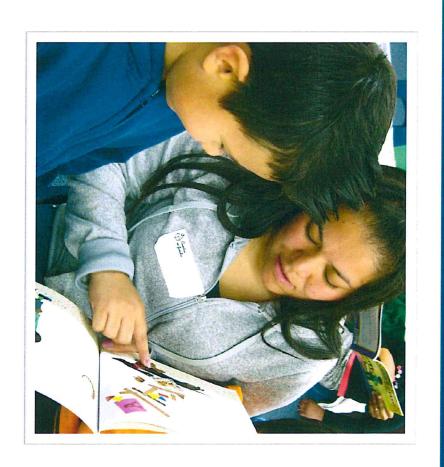
4-H Camp teaches transferable life skills in a fun, experiential learning environment.



Literacy First

Increased...

- books in homes
- time spent reading together
- literacy activities in home
- literacy skills for children
- involvement of parents
- parental confidence
- family enjoyment reading together



Master Gardeners

2016 Program Highlights:

- Strawberry plant sale (2,250 plants sold/2500 donated)
- Conducted 79 soil tests
- In-house plant diagnosis walk-in clinic (2,486 clients served)
- Total Master Gardener Volunteer
 hours: 9,500 (Equivalent to 5.2 FTEs)

MASTER GARDENERS



Green Industry Training

- 796 total direct Green Industry professional contacts:
- Green Industry Basic training (27 out of 29 certified)
- Bilingual Landscaper Training classes for Hispanic landscapers and their supervisors (52).
- Keeping Your Trees Alive during Drought" workshop (51 arborists).
- Qualified Water Efficient Landscaper (QWEL) training and certification
- Partners: TMWA, Nevada Landscape Assoc., May Arboretum
- First class scheduled for October 16-18, 2017

Urban IPM

- \$115,600 in USDA-NIFA funding in 2016:
- 101 total hours of basic and advanced IPM trainings were delivered to Master Gardeners, Green Industry workers and the general public (2,110 total contacts).
- county weed management workers Weed Warriors training offered to 79 Washoe, Carson City and Douglas
- A total of 1,000 of IPM series fact sheets are displayed at 13 garden centers, 7 Extension offices and 7 Washoe County public libraries
- www.manageNVpests.info was accessed by 34,189 visitors (416,823 hits) in

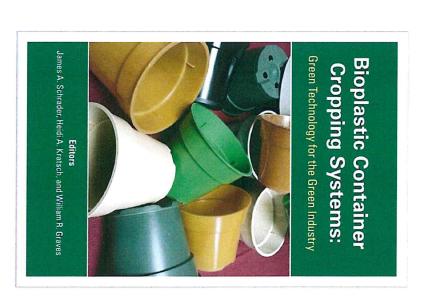
Grow Your Own, Nevada

- Taught twice in 2016, for a total of 16 classes and 1,012 total contacts
- GYO classes are offered free to K-12 teachers/staff.
- commercial gardens food crops in home, community and small Journal focusing on different aspects of growing 26 articles were published in the Reno Gazette
- GYO faculty/staff met with eight organic farmers supports organic farmers in Nevada from Belarus to share how Washoe County Extension



Bioplastic Container Cropping Systems

- Developed 10 biorenewable, bioplastic plant pots
- horticulture industry adoption of the technology. Nevada led the outreach effort to support
- attitudes/behaviors regarding biodegradable plant pots Completed a survey of gardeners in all 50 states (1,528 total respondents) regarding their
- The results were published in December 2016.



Living With Fire

- 16 Number of Washoe County communities reached directly with our:
- 3,024 Number of publications distributed
- o 2,807 Number of direct contacts
- 24 Number of Nevada Wildfire Awareness Month Events or Activities
- 11 Number of community events
- 6 Number of communities we assisted directly
- 11 Number of presentations
- 2 Number of community workshops conducted
- 11 Number of media coverage activity
- 4 Number of fire departments we partnered with
- 2 Number of conferences held in Washoe County that we participated in



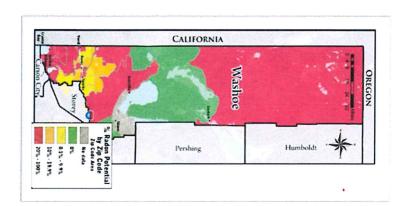
Radon

Issue:

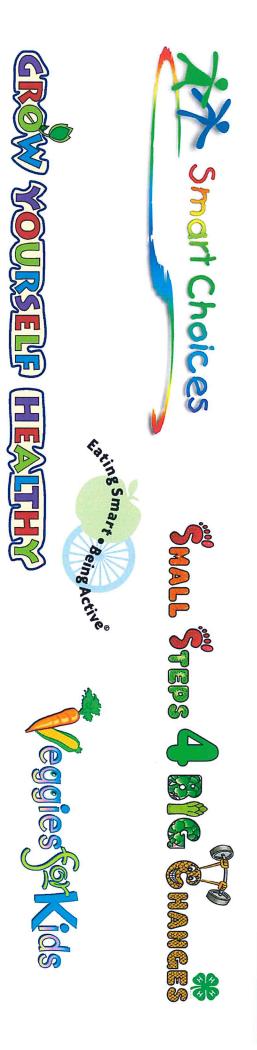
- cause among smokers Radon is the primary cause of lung cancer among nonsmokers, secondary
- Washoe County radon potential is 21.2%
- Washoe County average is 3.31 pCi/l
- Highest result in the state was found in Reno, 195 pCi/l

Actions taken to reduce radon risk:

- Educated at least 2,349 Washoe County residents
- Short-term test kits distributed: 1,896
- Test kits used: 973 or 51.3%
- Homes tested: 1,122
- Homes mitigated: 85
- Homes tested in real estate: 258
- Homes built RRNC: 11

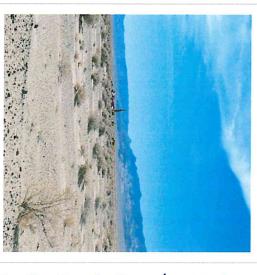


Nutrition Education



about increasing fruit and vegetable consumption, growing gardens, making healthy food choices plus the need for daily physical activity. Nevada Cooperative Extension. Teaching youth and families in Washoe County These are grant-funded SNAP-Ed programs coordinated by the University of

Water Resources



Assessment of Drought Resilience in Rural Northern Nevada:

The NV Division of Emergency
Management wanted to assess the
vulnerability the public water supply
systems of northern Nevada towns to
drought, so they hired DRI for a modeling
study. Extension was given a grant to help

Emergency Planning Committee (LEPC) in October, 2016 Wadsworth, Gerlach and Vya to the Washoe County Local deliver the results. The results were presented for the towns of





Learn everything you need to know before, during and after a flood.

Visit NevadoFloods.org

Flood Awareness Week November 13-19

Go to a flood ower energy event near you.

1115 FALLON - Falon Conversion Celler - 25 pm

1116 CARSON CITY - Non-Cellon Warnari - 12-3 pm

1116 DOUGLAS COUNTY - Community Cellor - 2-7 pm

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1116 DOUGLAS COUNTY - Community Cellor - 2-7 pm

Percentage Funded by Washoe County Washoe County Extension Employees

Admin Assistants (3)	Support Staff - All Programs		Professional (2)	Faculty (2)	Horticulture/Master Gardeners		Faculty (2)	Environmental Science		Faculty (1)	Community Development		Professional (6)	Faculty (1)	4H Youth Development
100%			85%	19%	ers		63%			53%			100%	100%	
			Faculty (2)	Radon			Professional (3)	Nutrition		Faculty (4)	Living with Fire		Professional (3)	Faculty (1)	Early Literacy
			0%				0%			19%			33%	16%	
Professional (1)	Faculty (1)	Director & Facilities		Professional (1)	Faculty (1)	IT and Communications		Support Staff (2)	Professional (1)	Human Resources		Support Staff (1)	Professional (1)	Faculty (1)	Fiscal
90%	38%			22.5%	100%			98%	60%			70%	50%	50%	

UNCE Washoe County All Revenue Sources FY 15-16

