A 2013 NEEDS ASSESSMENT OF EUREKA COUNTY

Eureka County is located in the central-northeast portion of the State of Nevada. Established in 1873, Eureka County has a proud and strong farming and ranching heritage where mining has played an important role in the County’s development. This special publication reviews and updates past needs assessments of Eureka County to implement Nevada Cooperative Extension educational programs in Eureka County.
A 2013 NEEDS ASSESSMENT OF EUREKA COUNTY

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Introduction

Established in 1873, Eureka County is located in the central north-eastern portion of the State of Nevada. According to the 2010 U.S. Census, the county’s total population was 1,987. The county has a total area of 4,180 total square miles and is adjacent to Elko, Lander, Nye, and White Pine counties.

Figure 1 – Eureka County

Extension Educators with the University of Nevada Cooperative Extension are expected to conduct periodic assessments of the needs of the community in which the Extension Educator works. The needs assessment, based on thorough and rigorous scholarly work, serves as the foundation for community educational programming. This special publication summarizes the efforts of the current extension educator in Eureka County to update the 2009 Needs Assessment (UNCE FS-09-42) completed by McCuin, Smith, and Schultz. This special publication also outlines current and potential programming in Eureka County designed to address these issues.

The last needs assessment for Eureka County was published in 2009 (UNCE FS-09-42). McCuin, Smith, and Schultz (2009), using a series of survey and focus group techniques, identified the following needs:

- Adequate and reliable supply of water for residents and industries
- Underage drinking
- Medical care
- Use of illegal drugs
- Retention of a rural atmosphere and quality of life
- Juvenile crime (keeping incidence rates low)
- Noxious weed invasion

McCuin, Smith, and Schultz (2009) concluded that University of Nevada Cooperative Extension is positioned to address the above needs through different educational programs:

- **Water Availability and Reliability**: through educational and research efforts.
- **Youth Crime Rate**: by developing programs and strategies to keep youth crime rates as low as possible.
- **Illegal Drug Use**: through educational programs focused on families by teaching healthy family living techniques to the adult members of households.
- **Economic Development**: through continued research and education regarding economic opportunities that would result in minimal impact on the customs and culture of Eureka.
Existing University of Nevada Cooperative Extension efforts in Eureka County and new programming and research initiatives have begun to address the needs associated with each of these four issues.

2013 Needs Assessment Methodology

Given the potential for survey fatigue, a focus group methodology was used to update the 2009 needs assessment instead of creating a new survey. Using the methodology provided by Krueger and Casey (2009), the needs identified in the 2009 assessment were examined through a series of focus group interviews conducted by the current Extension Educator between January 2013 and July 2013.

According to Krueger and Casey (2009), “A focus group is a special type of group in terms of purpose, size, composition and procedures. The purpose of conducting a focus group is to listen about an issue, product or service. Focus groups are used to gather opinions.” Focus group interviews usually share five primary characteristics, including: (1) people, who (2) possess certain characteristics, (3) provide qualitative data, (4) in a focused discussion (5) to help understand the topic of interest.

As opposed to blind surveys or other techniques, the focus group can significantly improve the quality of programs in three primary ways. First, the focus group can help the researcher gain important understanding of a defined topic through, as Krueger and Casey (2009) argue, “…the eyes and hearts of the target audience.” Through small group and one-on-one interviews, the researcher seeks to learn how the target audience “…sees, understands and values a particular topic and to learn the language used to talk about the topic.” Second, focus groups are useful to test-pilot or prototype programs developed, implemented, and administered by the researcher. Development of different programs using a focus group encourages immediate feedback so that the researcher can make immediate modification of the prototyped program in order to ensure the program more consistently meets the defined needs. This type of prototyping usually leads to greater community buy-in, ensuring a higher probability that the program developed, implemented, and administered by the researcher will be successful. Third, beyond prototyping, the focus group can continue to be helpful once the program is fully up and running by providing routine feedback. Are the needs that led to the development of the program still important? Has the program achieved the anticipated results? What improvements to the program could or should be made? What is working and what is not working? During implementation, the focus group should routinely be used to provide answers to these questions.

Krueger and Casey (2009) also identify several criticisms of focus groups that researchers must be aware of while designing their study. First, focus group participants tend to intellectualize. According to Krueger and Casey (2009), “When focus group participants discuss their past behaviors, there is a tendency for them to portray themselves as thoughtful, rational and reflective individuals.” Although dispassionate reflection is important, the researcher may find valuable insights in employing multiple strategies of inquiry that tease out important emotional concerns of focus group participants. Second, focus groups don’t tap into emotions. Because individual focus group participants might not be aware of the emotions that drive their behavior and may be unable to articulate their emotions, important insights that can help improve programming in the future might be overlooked and not incorporated into program development.

Third, focus group participants may make up answers in order to avoid uncomfortable situations. Krueger and Casey (2009) argue that, “Focus group participants are sometimes asked questions about topics or behaviors where they have limited or no experience. The truest response ought to be ‘I don’t know’, but
that answer can be embarrassing or reflect negatively on the individual…instead of admitting lack of knowledge the individual invents an answer that seems plausible.”

Fourth, dominant individuals can influence and bias results. It is the role of the researcher conducting the focus group to ensure that all participants are given the opportunity to voice their thoughts, feelings, and opinions regarding specific topics. A single dominant voice may suppress important insights from others that could potentially improve programming designed to meet identified needs. Fifth, the results of focus groups cannot always be relied upon. Depending on the situation and the type of information that the researcher is seeking, it may be unwise to use a focus group approach. Multiple forms of inquiry will yield overlapping and potentially confirming results.

In order to address each of these criticisms, an analysis of existing secondary data, including demographic, housing, employment and income, and industry data from the U.S. Census Bureau, and a review of previous needs assessments and studies published by University of Nevada Cooperative Extension faculty, was completed. Multiple one-on-one interviews, instead of group interviews, were also conducted as a way to ensure individuals could speak freely about the concerns they felt were important in Eureka County.

A single-category focus group design, using Krueger and Casey’s (2009) methodology was also used to structure the focus group interviews conducted between January 2013 and July 2013. According to Krueger and Casey (2009), “The ideal design for a focus group study is to conduct focus groups until you have reached the point of theoretical saturation – the point where you are not gaining new insights.” The single-category focus group focuses on one ‘type’ of participant and several individual interviews are conducted with individuals who meet this ‘type’ definition. For example, if the researcher is interested in evaluating a youth leadership development program, the researcher, if using a single-category focus group design, would only conduct interviews of those individuals who participated in the youth leadership development program.

A variation of the focus group methodology is the mini-focus group. According to Krueger and Casey (2009), “Small focus groups, or mini-focus groups, with four to six participants are becoming increasingly popular because the smaller groups are easier to recruit and host and are more comfortable for participants.” Mini-focus groups can also incorporate the use of one-on-one interviews depending on five various factors regarding the type and overall goal of the research being conducted. These five factors include:

- The Purpose of the Study: If the purpose is to understand an issue or behavior, invite fewer people. If the purpose is to test-pilot an idea or materials, invite more people.
- The Complexity of the Topic: More complex, invite fewer people.
- Participants’ Level of Experience or Expertise: More experience, invite fewer people.
- Participants’ Level of Passion about the Topic: More passionate, invite fewer people.
- The Number of Questions you want to cover: More questions, invite fewer people.

The overall purpose of this needs assessment is to understand particular behaviors and needs in Eureka County, thereby necessitating smaller groups including the use of one-on-one interviews. Given the complexity of the needs identified in previous needs assessments in Eureka County, ranging from water and natural resource management to youth violence, vandalism, and illegal drug use to protecting Eureka County’s farming and ranching rural heritage while pursuing appropriate economic development strategies smaller groups, including the use of one-on-one interviews is appropriate. Individual residents of Eureka County who were recruited to participate in this
needs assessment have a high degree of experience and skill with the different issues and needs identified in previous needs assessments. As a result, smaller groups, including the use of one-on-one interviews, are appropriate. Members of the Diamond Valley Producers Co-Op, the Diamond Natural Resource Protection and Conservation Association, and the Eureka County Economic Development Program each have a high degree of passion about the issues and needs identified in previous needs assessments so smaller groups, including the use of one-on-one interviews, are appropriate using the Krueger and Casey (2009) mini-focus group alternative. Finally, given the wide variety of issues and needs identified in previous needs assessments of Eureka County, smaller groups, including the use of one-on-one interviews, are appropriate given the need to review complex economic and demographic data.

For this needs assessment of Eureka County, only individuals with a knowledge of Eureka County going back to at least 2009 were interviewed. For the 2013 needs assessment, a total of 12 separate face-to-face interviews were conducted between January 2013 and July 13 with various community leaders. Eight of these twelve interviews where one-on-one with only one participant being interviewed; two interviews included two participants plus the researcher; one included three participants plus the researcher; and one included five participants plus the researcher. The 18 participants interviewed in these face-to-face interviews included residents of Eureka County, elected and appointed officials currently serving in Eureka County, local, state, and federal employees, and individuals with specific technical expertise in areas such as water and natural resource management, youth development, and community and economic development.

In addition to the 12 separate face-to-face interviews conducted, one additional informal meeting with three additional participants, including one local school teacher, one current county employee, and one retired county employee, was completed. Multiple presentations to the Diamond Valley Producers Co-Op, the Diamond Natural Resource Protection and Conservation Association (DNRPCA), the Eureka County Economic Development Program (ECEDP) Board, and the Central Nevada Regional Water Authority (CNRWA) were also completed between January 2013 and July 2013. Each group represents important economic and political aspects of Eureka County with a diverse membership of agricultural producers, business owners and community leaders, elected and appointed officials, and involved citizens within Eureka County. Feedback regarding the needs identified in the 2009 needs assessment, as well as input regarding existing and possible future University of Nevada Cooperative Extension programming designed to meet those needs, was solicited and received from the members of each group.

Past University of Nevada Cooperative Extension Needs Assessments of Eureka County

McCuin, Smith, and Shultz (2009) completed a needs assessment of Eureka County (UNCE FS-09-42) in 2009. Using a mailed survey and a series of focus group interviews, McCuin, Smith, and Schultz (2009) identified a series of needs for Eureka County. The top ten priorities identified in the 2009 needs assessment mailed survey, using an importance ranking scale of 1 (low) to 5 (high), include:

- Youth Violence/Vandalism (4.70)
- Ground Water Quality and Availability (4.55)
- Surface Water Quality and Availability (4.45)
- Illegal Drug Use (4.41)
- Farming and Ranching (Rural) Heritage (4.38)
• Juvenile Crime (4.35)
• Medical Care (4.34)
• Underage Drinking (4.34)
• Noxious Weeds (4.33)
• Elder Care (4.27)

Using an expert panel to clarify the survey results, community experts and leaders were asked to compare the results of the survey to their own experiences with and within the community of Eureka County. After the results of the expert panel were compiled, McCuin, Smith, and Schultz (2009) identified the following programming areas in which future University of Nevada Cooperative Extension programming in Eureka County could be developed around:

• Adequate and reliable supply of water for residents and industries.
• Underage drinking.
• Medical care.
• Use of illegal drugs.
• Retention of a rural atmosphere and quality of life.
• Juvenile crime (keeping incidence rates low).
• Noxious weed invasion.

Other previous University of Nevada Cooperative Extension publications support the conclusions and needs identified by McCuin, Smith, and Schultz (2009). Singletary, Smith, and Riggs (2002a) and Singletary, Smith, and Riggs (2002b), in their publications Life Skills Learned in 4-H: An Assessment in Eureka County (UNCE FS-02-18) and Managing 4-H: What’s Working and What’s Not Based on a Eureka County Assessment (UNCE FS-02-19), conclude that the County’s 4-H program has become central to addressing various needs in Eureka County associated with youth development including efforts to deal with youth violence and vandalism, illegal drug use, juvenile crime, and underage drinking. According to Singletary, Smith, and Riggs (2002b), “…4-H competitions/shows are useful teaching tools and quality of adult leadership skills is key to achieving a successful 4-H program.” They further conclude that “…there appears to be a critical need to attract children from diverse cultural and ethnic backgrounds and improve volunteer leader training to further strengthen Eureka County 4-H.”

Two additional University of Nevada Cooperative Extension fact sheets, Riggs and Owens (2003) Economic Development: 2002 Eureka County Agricultural Statistics (UNCE FS-03-62) and Sendall, Harris, McCuin, and Singletary (2008) Inter-County Commuting Patterns in Eureka County: Implications for Eureka County’s Economy (UNCE FS-08-33), confirm that community and economic development, identified by McCuin, Smith, and Schultz (2009), is an important need in Eureka County.

According to Riggs and Owens, “Eureka County Nevada is known for its historical ‘BOOM or BUST’ economy. Indeed, the county’s residents have experienced many good and bad years since gold was discovered here in the 1800’s. This is attributed to the reality that here are few economic business sectors within the county to support its tax base. However, the agricultural sector of Eureka County is one that has historically maintained its economic viability.” Underlying the importance of agriculture in Eureka County is the importance of alfalfa hay production, especially in the Diamond Valley especially. Riggs and Owens (2003) found that, in 2002, Sheep and Lamps accounted for 2.0 percent of total agricultural commodity sales, Other Hay sales accounted for 18.0 percent of total sales, Cattle and Caves sales accounted for 36.0 percent, and Alfalfa Hay sales accounted for 44.0 percent of total sales.
Although the viability of agricultural production is, by itself, vital to Eureka County’s long-term economic sustainability, the quality and long-term availability of water, especially in the Diamond Valley, is of equal importance in order to ensure the viability of agricultural production in Eureka County as a counter to the boom-and-bust volatility of mining and natural resource extraction. This suggests that both community and economic development and water management are two overall needs still vitally important to the people of Eureka County.

Sendall, Harris, McCuin, and Singletary (2008) conclude that, “Eureka County has a strong localized competitive advantage in providing jobs, especially in mining, but a severe shortage in housing and a developed commercial sector.” This housing shortage is not evident in Table 3 (see below) largely due to the transient nature of Eureka County’s workforce. During times of economic expansion, the local workforce from Eureka County is imported from the neighboring counties of Lander, White Pine, and Elko counties. During times of economic decline, the workforce in Eureka County simply finds employment opportunities in other counties. Despite the need for new housing, this particular type of housing shortage rarely is evident in existing census data on housing.

Sendall, Harris, McCuin, and Singletary link this shortage in commercial-retail activity and housing to the geographic disconnect between the County’s major population centers, the towns of Eureka and Crescent Valley, and the County’s major mines located approximately 50 to 100 miles from the County’s most populated towns. Although community and economic development is a primary need for Eureka County, as identified by McCuin, Smith, and Schultz (2009), in order to capture a larger portion of the economic activity that is generated by incommuters who work and earn their income in Eureka County but spend their income in neighboring counties like Elko County, Lander County, and White Pine County, further economic development efforts might come into conflict with other identified needs such as protecting and maintaining the County’s rural atmosphere, quality of life, and heritage.

**Review of Demographic, Housing, Employment and Income, and Industry Trends in Eureka County**

In addition to reviewing previous needs assessments for Eureka County, an analysis of various demographic, housing, employment and income, and industry trends for Eureka County, using data provided by the U.S. Census Bureau, was completed. These trends illustrate the importance of already identified needs in Eureka County and the need for additional University of Nevada Cooperative Extension educational programming.

Table 1 presents changes in the total population, population by age category, and median age for Eureka County between 2000 and 2010. Between 2000 and 2010, Eureka County’s total residential population grew by 20.4 percent or by 336 total residents, increasing from a total of 1,651 residents in 2000 to a total of 1,987 residents in 2010. Although the median age of Eureka County’s residential population declined between 2000 and 2010, from a median age of 42.4 years in 2000 to 38.3 years in 2010, a net decline of 4.1 years or 9.7 percent, Eureka County’s total residential population remains measurably older than the State of Nevada’s population which had a median age of 36.9 years in 2010.

Between 2000 and 2010, Eureka County’s total population grew largely because of significant growth in its older population. The population aged 75 or Older grew the most between 2000 and 2010 increasing from 71 in 2000 to 130 in 2010, a net increase of 59 or 83.1 percent. The population aged 60 to 64 Years had the second largest amount of growth, increasing from 81 in 2000 to 133 in 2010, a net decline of 4.1 years or 9.7 percent, Eureka County’s total residential population remains measurably older than the State of Nevada’s population which had a median age of 36.9 years in 2010.

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aged 55 or Older accounted for just 23.9 percent.

The continued aging of Eureka County’s residential population makes the importance of medical care and elder care, two needs identified by McCuin, Smith, and Schultz (2009), even more important. Overall, this aging population will make community and economic development increasingly important as the County will struggle to attract and retain younger working individuals who can help diversify the economy and break the boom-and-bust cycle typical of Eureka County’s economy and many local economies located throughout rural Nevada.

### Table 1
**Total Population, Population by Age, Median Age for Eureka County 2000 and 2010**

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>Percent of Total</th>
<th>2010</th>
<th>Percent of Total</th>
<th>2000 to 2010 Actual Change</th>
<th>2000 to 2010 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population</strong></td>
<td>1,651</td>
<td>100.0%</td>
<td>1,987</td>
<td>100.0%</td>
<td>336</td>
<td>20.4%</td>
</tr>
<tr>
<td><strong>Population by Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 5 Years</td>
<td>97</td>
<td>5.9%</td>
<td>144</td>
<td>7.2%</td>
<td>47</td>
<td>48.5%</td>
</tr>
<tr>
<td>5 to 9 Years</td>
<td>128</td>
<td>7.8%</td>
<td>114</td>
<td>5.7%</td>
<td>-14</td>
<td>-10.9%</td>
</tr>
<tr>
<td>10 to 14 Years</td>
<td>151</td>
<td>9.1%</td>
<td>134</td>
<td>6.7%</td>
<td>-17</td>
<td>-11.3%</td>
</tr>
<tr>
<td>15 to 19 Years</td>
<td>119</td>
<td>7.2%</td>
<td>128</td>
<td>6.4%</td>
<td>9</td>
<td>7.6%</td>
</tr>
<tr>
<td>20 to 24 Years</td>
<td>99</td>
<td>3.6%</td>
<td>96</td>
<td>4.8%</td>
<td>37</td>
<td>62.7%</td>
</tr>
<tr>
<td>25 to 34 Years</td>
<td>187</td>
<td>11.3%</td>
<td>201</td>
<td>10.1%</td>
<td>14</td>
<td>7.5%</td>
</tr>
<tr>
<td>35 to 44 Years</td>
<td>286</td>
<td>17.3%</td>
<td>244</td>
<td>12.3%</td>
<td>-42</td>
<td>-14.7%</td>
</tr>
<tr>
<td>45 to 54 Years</td>
<td>239</td>
<td>14.5%</td>
<td>368</td>
<td>18.5%</td>
<td>129</td>
<td>54.0%</td>
</tr>
<tr>
<td>55 to 59 Years</td>
<td>108</td>
<td>6.5%</td>
<td>168</td>
<td>8.5%</td>
<td>60</td>
<td>54.0%</td>
</tr>
<tr>
<td>60 to 64 Years</td>
<td>81</td>
<td>4.9%</td>
<td>133</td>
<td>6.7%</td>
<td>52</td>
<td>64.2%</td>
</tr>
<tr>
<td>65 to 74 Years</td>
<td>134</td>
<td>8.1%</td>
<td>154</td>
<td>7.8%</td>
<td>20</td>
<td>14.9%</td>
</tr>
<tr>
<td>75 or Older</td>
<td>71</td>
<td>4.3%</td>
<td>130</td>
<td>6.5%</td>
<td>59</td>
<td>83.1%</td>
</tr>
<tr>
<td><strong>Median Age</strong></td>
<td>42.4</td>
<td>-</td>
<td>38.3</td>
<td>-</td>
<td>-4.1</td>
<td>-9.7%</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, 2000 U.S. Census, 2010 U.S. Census*

Table 2 presents changes in different household characteristics in Eureka County between 2000 and 2010. Overall, the total number of households in Eureka County increased from 666 in 2000 to 836 in 2010, a net increase of 170 or 25.5 percent.

Continued growth in the residential population of Eureka County will continue to make ground and surface water quality and availability important needs in Eureka County. This continued growth has also made preservation of Eureka County’s farming and ranching rural heritage difficult as the town of Eureka continues to grow and urbanize.

The household characteristic trends presented in Table 2 further suggests that the residential population of Eureka County has continued to age between 2000 and 2010 making the needs of medical care and elder care identified by McCuin, Smith, and Schultz (2009) still relevant today. Between 2000 and 2010, the total number of households with individuals under the age 18 living in them in Eureka County declined from 234 in 2000 to 228 in 2010, a net decline of six total households or 2.6 percent. Comparatively, the total number of households with individuals aged 65 years of age or older increased from 161 in 2000 to 201 in 2010, a net increase of 40 total households or 24.8 percent.
Table 2
Household Characteristics in Eureka County
2000 and 2010

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>Percent of Total</th>
<th>2010</th>
<th>Percent of Total</th>
<th>2000 to 2010 Actual Change</th>
<th>2000 to 2010 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Households</td>
<td>666</td>
<td>100.0%</td>
<td>836</td>
<td>100.0%</td>
<td>170</td>
<td>25.5%</td>
</tr>
<tr>
<td>Family Households</td>
<td>440</td>
<td>66.1%</td>
<td>495</td>
<td>59.2%</td>
<td>55</td>
<td>12.5%</td>
</tr>
<tr>
<td>Households with Individuals Under 18 Years</td>
<td>234</td>
<td>35.1%</td>
<td>228</td>
<td>27.3%</td>
<td>-6</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Households with Individuals 65 Years or Older</td>
<td>161</td>
<td>24.2%</td>
<td>201</td>
<td>24.0%</td>
<td>40</td>
<td>24.8%</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>2.47</td>
<td>-</td>
<td>2.38</td>
<td>-</td>
<td>-0.09</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Average Family Size</td>
<td>3.08</td>
<td>-</td>
<td>3.07</td>
<td>-</td>
<td>-0.01</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2000 U.S. Census, 2010 U.S. Census

Table 3 presents changes in different housing characteristics in Eureka County between 2000 and 2010 including changes in the total number of owner-occupied and renter-occupied housing units in the County.

Table 3
Housing Characteristics in Eureka County
2000 and 2010

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>Percent of Total</th>
<th>2010</th>
<th>Percent of Total</th>
<th>2000 to 2010 Actual Change</th>
<th>2000 to 2010 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Housing Units</td>
<td>1,025</td>
<td>100.0%</td>
<td>1,076</td>
<td>100.0%</td>
<td>51</td>
<td>5.0%</td>
</tr>
<tr>
<td>Total Occupied-Housing Units</td>
<td>666</td>
<td>65.0%</td>
<td>836</td>
<td>77.7%</td>
<td>170</td>
<td>25.5%</td>
</tr>
<tr>
<td>Owner-Occupied</td>
<td>491</td>
<td>47.9%</td>
<td>556</td>
<td>51.7%</td>
<td>65</td>
<td>13.2%</td>
</tr>
<tr>
<td>Renter-Occupied</td>
<td>175</td>
<td>17.1%</td>
<td>280</td>
<td>26.0%</td>
<td>105</td>
<td>60.0%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2000 U.S. Census, 2010 U.S. Census

Between 2000 and 2010, the total number of housing units in Eureka County grew very little, increasing from a total of 1,025 units in 2000 to a total of 1,076 units in 2010, a net increase of just 51 units or 5.0 percent. Comparatively, Eureka County’s total residential population grew by 336 individuals between 2000 and 2010, an increase of 20.4 percent. This suggests that the development of quality housing to support future economic growth might be another important community need in Eureka County.

Although community and economic development is an important need in Eureka County, the preservation of the County’s farming and ranching rural heritage is still an important need in Eureka County. Future educational programming in Eureka County will have to balance both of these needs.

Table 4 presents current employment characteristics for Eureka County and the State of Nevada for the 2006 to 2010 period.

Although Eureka County had a significantly stronger employment rate (96.3 percent in Eureka County versus 89.6 percent state-wide in Nevada) and a significantly better unemployment rate (3.7 percent in Eureka
County versus 10.4 percent state-wide) over the 2006 to 2010 period than the State of Nevada, the reason behind these strong employment characteristics in Eureka County might be due to the larger number of incommuters that work in Eureka County but live in the adjacent counties of White Pine County and Elko County as identified by Sendall, Harris, McCuin, and Singletary (2008).

<table>
<thead>
<tr>
<th>Category</th>
<th>Eureka County</th>
<th>Percent of Total</th>
<th>State of Nevada</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Labor Force</td>
<td>892</td>
<td>100.0%</td>
<td>1,391,680</td>
<td>100.0%</td>
</tr>
<tr>
<td>Employed</td>
<td>859</td>
<td>96.3%</td>
<td>1,246,387</td>
<td>89.6%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>33</td>
<td>3.7%</td>
<td>145,293</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

Table 5 presents current income characteristics for Eureka County and the State of Nevada for the 2006 to 2010 period.

Over the 2006 to 2010 period, median family income, mean family income, and per capita income were all significantly higher in Eureka County than the State of Nevada. Although positive, this may again be due to the high number of incommuters who live in the adjacent counties of White Pine County and Elko County but work in Eureka County as identified by Sendall, Harris, McCuin, and Singletary (2008). However, the current presence of relatively large median family incomes, mean family incomes, and per capita incomes makes economic development less of a priority need than other needs identified in past needs assessments of Eureka County.

<table>
<thead>
<tr>
<th>Category</th>
<th>Eureka County</th>
<th>State of Nevada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Family Income</td>
<td>$75,179</td>
<td>$64,353</td>
</tr>
<tr>
<td>Mean Family Income</td>
<td>$86,242</td>
<td>$81,443</td>
</tr>
<tr>
<td>Per Capita Income</td>
<td>$30,306</td>
<td>$27,625</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

Table 6 presents the total number of establishments by industry category for 2005 and 2010 in Eureka County using the U.S. Census Bureau’s County Business Patterns for 2005 and 2010.

Between 2005 and 2010, the total number of establishments in Eureka County increased from 30 total establishments, across all sectors, in 2000 to 38 total establishments in 2010, a net increase of eight total establishments or 26.7 percent. The sectors with the largest growth in terms of new establishments between 2005 and 2010 include Utilities (net increase of two new establishments or 200.0 percent), Professional, Scientific, Technical Services (net increase of two new establishments or 200.0 percent), and Health Care and Social Assistance (net increase of two new establishments or 200.0 percent). The growth in Health Care and Social Assistance is particularly important as medical care and elder care were two important needs identified by McCuin, Smith, and Schultz (2009). Continued growth in this industry sector will further help Eureka County in meeting the
two needs of providing adequate quality medical and elder care.

| Table 6 |
|------------------|------------------|------------------|------------------|------------------|
| Number of Establishments by Industry Category for Eureka County | | |
| 2005 and 2010 | | | |

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>Percent of Total</th>
<th>2010</th>
<th>Percent of Total</th>
<th>2005 to 2010 Actual Change</th>
<th>2005 to 2010 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>3</td>
<td>10.0%</td>
<td>3</td>
<td>7.9%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>1</td>
<td>3.3%</td>
<td>3</td>
<td>7.9%</td>
<td>2</td>
<td>200.0%</td>
</tr>
<tr>
<td>Construction</td>
<td>1</td>
<td>3.3%</td>
<td>2</td>
<td>5.3%</td>
<td>1</td>
<td>100.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2</td>
<td>6.7%</td>
<td>1</td>
<td>2.6%</td>
<td>-1</td>
<td>-50.0%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>7</td>
<td>23.3%</td>
<td>8</td>
<td>21.1%</td>
<td>1</td>
<td>14.3%</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>4</td>
<td>13.3%</td>
<td>4</td>
<td>10.5%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Information</td>
<td>1</td>
<td>3.3%</td>
<td>1</td>
<td>2.6%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>1</td>
<td>3.3%</td>
<td>1</td>
<td>2.6%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Professional, Scientific, Technical Services</td>
<td>1</td>
<td>3.3%</td>
<td>3</td>
<td>7.9%</td>
<td>2</td>
<td>200.0%</td>
</tr>
<tr>
<td>Administrative, Support, Waste Management and Remediation</td>
<td>1</td>
<td>3.3%</td>
<td>2</td>
<td>5.3%</td>
<td>1</td>
<td>100.0%</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>1</td>
<td>3.3%</td>
<td>3</td>
<td>7.9%</td>
<td>2</td>
<td>200.0%</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>4</td>
<td>13.3%</td>
<td>6</td>
<td>15.8%</td>
<td>2</td>
<td>50.0%</td>
</tr>
<tr>
<td>Other Services (Except Public Administration)</td>
<td>3</td>
<td>10.0%</td>
<td>1</td>
<td>2.6%</td>
<td>-2</td>
<td>-66.7%</td>
</tr>
<tr>
<td><strong>Total for All Sectors</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>38</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>8</strong></td>
<td><strong>26.7%</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2005 County Business Patterns, 2010 County Business Patterns

As a percentage of the total number of establishments in Eureka County, Retail Trade accounted for the largest number of establishments county-wide in 2010. In 2010, there were eight total Retail Trade establishments in Eureka County accounting for 21.1 percent of all establishments county-wide. Accommodation and Food Services accounted for the second largest number of establishments county-wide in 2010, totaling six total establishments or 15.8 percent of all establishments in Eureka County. Transportation and Warehousing accounted for the third largest number of establishments county-wide in 2010, totaling four total establishments or 10.5 percent of all establishments in Eureka County.

Continued growth in these non-mining industry sectors does indicate that past and current economic diversification efforts in Eureka County are, in-fact, helping alleviate the economic and fiscal problems associated with over-dependence on mining, and the associated boom-and-bust cycle common with natural resource extraction dependence, found in many of Nevada’s rural communities, including Eureka County. However, examination of employment trends in Eureka County between 2005 and 2010 suggests that Eureka County’s economy is still over
dependent on mining and natural resource extraction.

Table 7 presents total employment by industry category for 2005 and 2010 in Eureka County using the U.S. Census Bureau’s County Business Patterns for 2005 and 2010. Due to the relatively low number of employees working in establishments in Eureka County, only total employment ranges were provided by the U.S. Census Bureau for both 2005 and 2010. This makes year-to-year comparison between 2005 and 2010 impossible.

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>Percent of Total</th>
<th>2010</th>
<th>Percent of Total</th>
<th>2005 to 2010 Actual Change</th>
<th>2005 to 2010 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>250-499</td>
<td>250-499</td>
<td>500-999</td>
<td>500-999</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Utilities</td>
<td>0-19</td>
<td>0-19</td>
<td>20-99</td>
<td>20-99</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Construction</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>20-99</td>
<td>20-99</td>
<td>32</td>
<td>32</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Information</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Professional, Scientific, Technical Services</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrative, Support, Waste Management and Remediation</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>20-99</td>
<td>20-99</td>
<td>50</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Services (Except Public Administration)</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>0-19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total for All Sectors</strong></td>
<td>557</td>
<td>557</td>
<td>1,000-2,499</td>
<td>1,000-2,499</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, 2005 County Business Patterns, 2010 County Business Patterns*

Between 2005 and 2010, the total number of employees working in Eureka County increased significantly, growing from an estimated 557 total employees in 2005 to an estimated range of 1,000 to 2,499 total employees in 2010. Although this growth is significant, it is unlikely that Eureka County is benefiting much from this growth due to the large number of incommuters who work in Eureka County but live primarily in the adjacent counties of White Pine and Elko counties as identified by Sendall, Harris, McCuin, and Singletary (2008). Recall that the total number of housing units in Eureka County grew by just 5.0 percent between 2000 and 2010. Without significantly more growth in the County’s available housing stock, this economic leakage associated will likely persist.
The employment by industry data presented in Table 6 also suggests that much more economic diversification is needed in Eureka County. Although there was significant growth in the Utilities, and Professional, Scientific, Technical Services, and Health Care and Social Assistance industry sectors in terms of new establishments, Mining clearly had the largest growth in terms of new employees and still represents the single largest employment sector in Eureka County. Without further economic diversification in Eureka County, the County itself is still very vulnerable to fluctuations in the prices of precious metals and minerals and the very real possibility that a new bust cycle in the mining industry may lead to a severe and sudden economic decline in Eureka County as no other industry in the County is positioned to employ the same number of individuals that the Mining industry sector currently does.

Summary of the 2013 Focus Group Research

Using the 2009 needs assessment of Eureka County, completed by McCuin, Smith, and Shultz (2009), as a guide, a series of focus group sessions and interviews were conducted between January 2013 and July 2013. The 2009 needs assessment of Eureka County, using a mail survey, identified ten primary needs:

- Youth Violence/Vandalism
- Ground Water Quality and Availability
- Surface Water Quality and Availability
- Illegal Drug Use
- Farming and Ranching (Rural) Heritage
- Juvenile Crime
- Medical Care
- Underage Drinking
- Noxious Weeds
- Elder Care

Seven program areas, using an expert panel, were also identified in the 2009 needs assessment, including:

- Adequate and reliable supply of water for residents and industries.
- Underage drinking.
- Medical care.
- Use of illegal drugs.
- Retention of a rural atmosphere and quality of life.
- Juvenile crime (keeping incidence rates low).
- Noxious weed invasion.

Using a single-category focus group design, individuals with knowledge of Eureka County going back to at least 2009 were interviewed and asked about the relative current importance of each of the ten needs identified in the 2009 needs assessment. Focus group participants were also asked to assess the relative importance of each of the seven program areas identified in the 2009 needs assessment after the secondary data on different demographic, housing, employment and income, and industry trends, presented in the previous section, was presented to them. Focus group participants were also asked to help group each of the ten needs and each of the seven program areas into four general needs categories, including:

- Water Management – Quality and Supply
- Natural Resource Management
- Youth Development
- Community and Economic Development
These four needs categories were chosen as a way of matching the ten needs and seven program areas to the six general University of Nevada Cooperative Extension program areas including:

1. Agriculture
2. Community development
3. Children, Youth and Families
4. Health and Nutrition
5. Horticulture
6. Natural resources.

The results of the 2013 focus groups and interviews resulted in the formation of the following matrix presented in Table 8. Focus group participants were able to list the needs and program areas in multiple categories. As Table 8 illustrates, several of the ten needs and several of the seven program areas identified in the 2009 needs assessment are listed several times in different needs categories. This result suggests that the needs and program areas identified in the 2009 needs assessment are inter-related and that future University of Nevada Cooperative Extension programming and research in Eureka County should take into account this inter-dependence of needs and program areas.

### Table 8
2013 Needs Assessment Matrix for Eureka County

<table>
<thead>
<tr>
<th>2013 Needs Category</th>
<th>2009 Needs (Mailed Survey Results)</th>
<th>2009 Programming Areas (Expert Panel Ranking)</th>
</tr>
</thead>
</table>
| 1. Water Management – Quality and Supply | • Ground Water Quality and Availability  
• Surface Water Quality and Availability  
• Farming and Ranching (Rural) Heritage | • Adequate and Reliable Supply of Water for Residents and Industries.  
• Retention of a Rural Atmosphere and Quality of Life |
| 2. Natural Resource Management | • Ground Water Quality and Availability  
• Surface Water Quality and Availability  
• Farming and Ranching (Rural) Heritage  
• Noxious Weeds | • Adequate and Reliable Supply of Water for Residents and Industries.  
• Retention of a Rural Atmosphere and Quality of Life  
• Noxious Weed Invasion |
| 3. Youth Development | • Youth Violence/Vandalism  
• Illegal Drug Use  
• Juvenile Crime  
• Underage Drinking | • Underage Drinking  
• Use of Illegal Drugs  
• Juvenile Crime (Keeping Incidence Rates Low) |
| 4. Community and Economic Development | • Ground Water Quality and Availability  
• Surface Water Quality and Availability  
• Farming and Ranching (Rural) Heritage  
• Medical Care  
• Elder Care | • Adequate and Reliable Supply of Water for Residents and Industries.  
• Retention of a Rural Atmosphere and Quality of Life |
For example, management of the Diamond Valley Aquifer, a large freshwater aquifer located in Diamond Valley in Eureka County, has implications for water management, natural resource management, and community and economic development. Currently, water in the Diamond Valley Aquifer is pumped and used primarily for agricultural purposes. According to the Nevada State Engineer (2014), 124,700 acre feet of total annual groundwater rights in Diamond Valley is used for agricultural purposes accounting for approximately 95 percent of the 131,150 acre feet of total annual groundwater rights in the valley. Mining and milling uses account for 2.5 percent of total annual groundwater rights. Commercial, domestic, municipal and quasi-municipal uses account for 2.0 percent of total annual groundwater rights and stockwater accounts for 0.5 percent of total annual groundwater rights in Diamond Valley.

The Diamond Valley Aquifer is also one of the most oversubscribed groundwater basins in the state. The Diamond Valley Aquifer, according to the Nevada State Engineer (2014), has an estimated annual perennial yield of approximately 30,000 acre feet of water per year. Estimated total pumping of water from the aquifer is approximately 98,300 acre feet per year. This level of over pumping has led to a significant decline in the water level in Diamond Valley as the aquifer has fallen approximately 35 total feet in the past 15 years and approximately 23 total feet in just the past 9 years.

Continued decline in the water level could lead to a potential collapse of the Diamond Valley Aquifer and threaten the long-term viability of agricultural activity throughout the valley. Collapse of the aquifer (both a water management and natural resource management issue) could lead to a collapse in the alfalfa hay production (a community and economic development issue) in the Diamond Valley. Needs impacted by this possibility include ground water quality and availability and farming and ranching (rural) heritage. Program areas impacted by this possibility include adequate and reliable supply of water for residents and industries and retention of a rural atmosphere and quality of life.

Implications for future University of Nevada Cooperative Extension programming and research in Eureka County, based on this 2013 needs assessment of Eureka County, are presented in the following section.

Implications for Future University of Nevada Cooperative Extension Programming and Research in Eureka County

The University of Nevada Cooperative Extension already has developed, and is currently implementing and administering, a considerable amount of programming in Eureka County. Several important new programming and research efforts, each related to the four needs categories identified in Table 8, have already been developed and implemented in Eureka County. This section provides a brief summary of some of those efforts.

Water Management – Quality and Supply

In the focus group interviews conducted between January 2013 and July 2013, management of the Diamond Valley Aquifer emerged as the single largest priority facing Eureka County. In response, the current Extension Educator has developed a comprehensive study of the Diamond Valley Aquifer in partnership with other University of Nevada Cooperative Extension faculty, faculty from the University of Nevada, Reno’s Department of Political Science, the University of Nevada, Reno’s Department of Geography, and several external individuals and entities with knowledge of the Diamond Valley Aquifer. The general purpose of this study is to identify primary natural resource management and other issues pertaining to the Diamond Valley Aquifer in Eureka County in order to better understand the aquifer’s past, present, and future sustainability. This study is being
completed in partnership with Eureka County’s current efforts to develop a comprehensive water management plan specifically for the Diamond Valley Aquifer.

Natural Resource Management

In the focus group interviews conducted between January 2013 and July 2013, the management of noxious weeds and invasive pinyon-juniper throughout Eureka County were identified as the primary natural resource management concerns. To address these concerns, the current Extension Educator in Eureka County is currently working closely with representatives from the U.S. Bureau of Land Management (BLM), Eureka County, and other University of Nevada Cooperative Extension faculty and staff to develop a comprehensive pinyon-juniper and noxious weed management program in Eureka County. This program will rely on the existing University of Nevada Cooperative Extension Bootstraps curriculum currently being employed in Lander County. In addition to a pinyon-juniper management component, a noxious weed management component will be developed and added to the existing University of Nevada Cooperative Extension Bootstraps curriculum.

Current research is also being conducted on the possibility of adding a biochar production component to the existing University of Nevada Cooperative Extension Bootstraps curriculum for Eureka County. Biochar is a soil amendment used in agricultural production designed to increase water absorption and retention levels in soil (water management) allowing growers to use less water to grow higher yields of their crops (community and economic development).

Youth Development

In the focus group interviews conducted between January 2013 and July 2013, diversification of programming and project offering in Eureka County’s 4-H program was identified as a top priority. Expansion and growth of the Eureka County 4-H program, including the program’s reintroduction to the town of Crescent Valley, was also identified as a top priority. Since August 2012, the current Extension Educator has made diversification of the Eureka County 4-H program and its overall growth a top priority. Since August 2012, the Eureka County 4-H program has grown from just 13 enrolled students to a total of 65 as of August 1, 2013 with a new community club in Crescent Valley. Working with University of Nevada Cooperative Extension faculty in Lander County, the Austin 4-H Community Club in Lander County was moved to Eureka County and absorbed into the Eureka County 4-H program. New 4-H programming, including a STEMS (science, technology, engineering, and mathematics) curriculum using the Lego Robotics programs is currently being developed.

Community and Economic Development

Although focus group participants made preservation of Eureka County’s farming and ranching (rural) heritage a top need, community and economic development, including diversification of the County’s overall economy, was also identified as a high priority. Many of the new University of Nevada Cooperative Extension programming and research initiatives listed in this section, including the Diamond Valley Aquifer project (water management) and the biochar component of the proposed University of Nevada Cooperative Extension Bootstraps in Eureka County project (natural resource management) have strong and obvious implications for community and economic development in Eureka County.

Conclusion

The University of Nevada Cooperative Extension’s mission is to discover, develop, disseminate, preserve and use knowledge to strengthen the social, economic and environmental well-being of people. University of Nevada Cooperative Extension programming and research initiatives are
developed through rigorous scholarly work conducted in periodic needs assessments of the communities in which Extension faculty work.

The 2013 needs assessment of Eureka County, using a single-category focus group design, identified four primary needs categories including (1) water management – quality and supply, (2) natural resource management, (3) youth development, and (4) community and economic development. Further University of Nevada Cooperative Extension programming and research development, implementation, and administration in Eureka County will continue in partnership with the residents of Eureka County as different opportunities arise for cooperation and collaboration.

References


Sendall, B., Harris, R. T., and G. McCuin, & L. Singletary. 2008. Inter-County Commuting Patterns in Eureka County: Implications for Eureka County’s Economy. UNCE Fact Sheet-08-33. University of Nevada, Reno: Reno, NV.

