8.0 CONCLUSIONS-"STABILITY"

During the last two decades, Eureka County has experienced significant mining activity especially in the northern part of the County. Approximately 29 percent of Nevada's 2017 gold production comes from Eureka County mines (See Figure 3-10). However, the mine workforce and associated population largely reside outside the County. Table 3-3 shows trends in the Eureka County labor force as compared to resident employment. The total number of jobs in Eureka County in 2016 was 4,491 slightly lower than 2012 at 4,736 jobs. The resident labor force saw small declines between 2016 and 2017 and have remained relatively stable of the past eight years. There are several reasons for this condition. Most notably gold prices have stabilized and range between \$1,200 and \$1,350 per ounce.

Due to historic employment trends and residency, Eureka County derived most of its mining related benefits through local tax revenues such as sales tax collections, property tax, and net proceeds of mines tax (See Figure 4-2). The private sector in Eureka County traditionally saw little direct benefit as the resident labor force is about 23 percent of the entire mining workforce in Eureka County. Employment gains have been muted as were personal income and wages of Eureka County residents.

In terms of per capita income Eureka County ranked 13th among Nevada's 17 counties in 2016 (Table 3-5). The local retail and service sectors saw little increase in activity as the demands for goods and services largely went elsewhere. Eureka County even experiences a poverty rate higher than the State of Nevada as a whole.

Eureka County housing and property values remain some of the most affordable in all of Nevada (See Figure 2-7). Due to the County's remote location, construction of stick-built housing and even the availability of financing have been very limited. Over 62 percent of housing units in Eureka County were manufactured homes in 2017 (Table 2-3). However, with the anticipated long-term nature of several mining projects in Eureka County, new conventional stick-built homes and rental housing may increase. Other sectors of the Eureka County economy remain stable with little noticeable change during mining cycles. Agriculture, for example, remains one of the County's base industries and has been relatively stable. However, its total output is sometimes affected by mining due to acquisitions of ranch operations and the change in place and manner of water use. Several large ranches in northern Eureka County are now owned by mining companies. Currently, mining companies own over 51 percent of all agricultural private lands in Eureka County and over 56 percent of total private lands in the County. Since 2013 mining companies have purchased approximately 1,300 acres.



Since the beginning of the current mining expansion (2004 -), the population of Eureka County has exhibited small and consistent increases (See Figure 2-1). Historically, mining operations in Eureka County were primarily located north of Interstate 80 with a few smaller operations scattered throughout the County. As a result, the significant growth in the Eureka County workforce at Carlin Trend mines did not translate into large local population gains due to the proximity of neighboring communities outside Eureka County.

Several mining projects with strong prospects of reaching full operations in and around the Diamond Valley/Town of Eureka area could add significant increases in operation phase employment not including any of Barrick's existing operations at Cortez Hills and Bald Mountain. As Barrick's operations move further south along the Carlin trend, an increasing number of employees will choose to live in the Diamond Valley/Town of Eureka area. Barrick's Horse Canyon/Cortez unified project (Gold Rush Deposit) is the company's next flagship project located six kilometers from the Cortez mine, is one of the largest and highest-grade gold discoveries of the last decade. Measured and indicated resources stood at 10.09 million ounces at the end of 2017. Operational employment is expected to be on par with Barrick's other major Carlin Trend mines.

Eureka County made substantial public expenditures over the last ten years just to maintain basic government services such as public safety, municipal utilities, and services to meet the projected demands of mining related growth. At the same time, Eureka County remains mindful of cyclical downturns in mining and must be prepared to handle significant losses in tax revenues as seen from 2013 to 2017. In 2017 Eureka County government employment reached its lowest point since 2003. Total government revenues peaked in 2009 and 2011 at just over \$32 million in comparison to the \$20.5 million collected in 2017. Eureka County maintains several government funds (i.e future reserve fund) to offset future inevitable declines in the mining industry when the non-renewable mineral resources are mined out. The cyclical nature of mining will ultimately result in future downturns and contractions in local economic activity which will erode fiscal conditions in Eureka County. The dual mandate, to accommodate growth and plan for future declines, places Eureka County in a challenging fiscal position going forward

Population and Housing

Future population growth will likely alter the demographic characteristics of Eureka County. Several mining projects with strong prospects of reaching full operations in and around the Diamond Valley/Town of Eureka area could add several hundred new employees for the operational phases. As Barrick's operations move further south along the Carlin trend, an increasing number of employees will choose to live in the Diamond Valley/Town of Eureka area. Since 2010 the population of Eureka County has fluctuated between 1,900 and 2,030 people, a relatively stable period.



The population of Eureka County is somewhat older than the State of Nevada. With an inflow of a working age population, the average age is expected to decrease, family households and households with children will likely increase as a percentage of total households in Eureka County. The overall household size will increase as working age adults are more likely to be married and have children.

New housing demand could increase due to an influx of temporary and permanent workers. The demand for temporary housing options as well as more conventional housing structures will likely expand the Eureka County housing stock in Table 2-3. One notably trend in Table 2-3 is the declining number of manufactured homes. The year over year (2016-2017) changes in Eureka County population were small.

Eureka County Economy

The local private sector economic opportunities are likely to increase as compared to previous mining cycles that left wage, employment and income largely unaffected in Eureka County and accrued largely to Elko and Lander Counties. Mining exploration and development projects which are now moving south along the Battle Mountain and Carlin Trends, should have significant impacts on local economic sectors. As seen in Table 3-2, resident employment could rise over the next couple of years as unemployment rates suggest that workforce immigration is needed to fill new jobs. Eureka County's 2017 unemployment rate at 2.6 percent is near an all-time low. Prospects for employment gains remain intact as development of several mining projects are still moving forward. Total local employment (jobs held by residents of Eureka County) could increase. The high wages in the mining industry will increase Eureka County personal income, household income, and per capita income above the levels seen in Table 3-6.

Eureka County mining output as measured by net proceeds of mines is seen in Figure 3-9. Taxable sales may continue at elevated levels especially during periods where major project expenditures for start-up-oriented investment occur. Local trade and services may expand which will be beneficial to most residents in Eureka County. Presently, the trade and services sector of the local economy is very narrow. Increased population and wages will support expanded activity.

Other important elements of the local economy such as agriculture and travel and tourism should remain largely unchanged although some negative adverse impacts could occur in those two sectors given potential environmental impacts associated with proposed mine projects. A significant change in public land management because of an endangered species listing of the sage grouse could curtail future growth in all sectors of the Eureka County economy. Sage grouse management could impact the level of activity on public lands managed by BLM and limit mining operations and production as well as exploration activities not only for precious



metals but industrial minerals and energy. Vast areas of Eureka County have been designated as critical habitat. Even worse is the uncertainty imposed by BLM management directives with respect to Sage Grouse. The current model of mining companies is to purchase agricultural properties for a variety of reasons including acquisition of appurtenant water rights, mitigation options, and insulation from impacts to other private property interests.

Mine owned ranches and farms are sometimes not operated in a manner which maximizes the economic outputs from operation. This often results in reductions in livestock numbers, forage and hay production from these lands resulting in decreases in overall agricultural commodity sales for Eureka County. Even considering some declines in livestock, average farm agricultural output increased from just over \$291,000 in 2007 to just over \$356,000 in 2012.

Local Government Fiscal Conditions

In 2014 Eureka County experienced declines in major mining related tax revenue sources such as taxable sales and net proceeds of mines. The declines are largely due to lower production, lower commodity prices, and changes to net proceed calculations. In more recent years gold production appears to have stabilized and revenues have begun to rise from recent lows. In response to lower taxable sales, net proceeds, property tax revenues, Eureka County reduced government expenditures for many discretionary areas such as major capital improvements (Table 4-8). This situation is not unexpected, and Eureka County manages downturns in revenue by utilizing accumulated ending fund balances while reducing government expenditures.

Over the past several years, Eureka County committed substantial resources to increasing its ability to accommodate increases in population and workers by upgrading facilities and infrastructure. With recent mining trends and exploration activity now focusing future growth and development on the Town of Eureka and Diamond Valley areas, the current pause in economic activity and population growth are temporary. The anticipated number of future jobs in the area could well exceed the current service levels in nearly all categories. With the potential for several hundred new employees coming to the area over the next several years, major expenditures can be anticipated for public safety, utility operations, general administrative services and health care.

Education

Permanent population increases will also affect the Eureka County School District. With an increase in permanent working age population, school enrollments will increase and probably return to historic peaks experienced in the 1990s. As seen in Figure 5-1,



changes (increases and decreases) in mining activity have a direct impact on schools because the population is driven by working age people, many with children who move into and out of the area. The Crescent Valley school has significant capacity and can absorb relatively large increases in enrollment, if they occur. Increases in teaching and non-teaching staff will be needed to the extent growth occurs. One recent trend in school population is the increasing number of Eureka County children enrolled in Kindergarten through the sixth grade.

Social Indicators

Social indicators in Eureka County have remained relatively consistent over time. Voting, voter registration, crime, traffic, and access to health care show stable trends. Growth in Eureka County over the next several years may have some influence on social indicators. There is no evidence to suggest that large influxes of a mining related workforce will alter voting patterns. Little change in voting patterns has occurred in other northeastern Nevada communities. It has been evidenced in other cases that crime rates and domestic issues will rise in proportion to the population. Temporary construction workforces will likely add to crime rates during the periods they are in Eureka County and will require greater levels of law enforcement resources and other public safety services. Large construction workforces operating in Eureka County are somewhat different than conditions experienced in recent times. The need for health care and health care access will increase proportionally with population gains.

Natural Resources

Other than site specific impacts, recent mining projects have had little long-term impact on natural resources in Eureka County because most mining projects have been relatively short-term in nature, practice modern reclamation standards, and implement effective mitigation measures. Several current and proposed projects in Eureka County are likely to have much longer operating lives as opposed to most of mining projects in Eureka County. The total number of projects and increased duration of operations is likely to have a cumulative impact on natural resources beyond site specific impacts. In many instances, the impacts will be linked to water use. In the past, most mining water use was temporary (10-15 years in duration) and largely non-consumptive. However, the increased duration and more consumptive uses of water will have more long-term impacts to natural resources including wildlife habitat and forage and water for ranching operations. Several measures of water use are included in Section 7.0 such as groundwater wells, water levels, and stream flows for selected locations in Eureka County. Additionally, precipitation records and historic temperatures for southern Eureka County are included in Figure 7-7, 7-8 and 7-9.



Livestock and crop production could diminish to some extent as more water is converted to mining and milling uses and mining companies purchase ranching and farming operations. The long-term pumping and consumptive uses of the Mt. Hope Project are predicted to result in the loss of surface water resources, notable declines in groundwater, and declines in water dependent resources within the project area. The areal extent of the impacts and duration is unlike any other project in Eureka County in recent memory. Both BLM and the Nevada Division of Water Resources have entered into a long-term monitoring program with Eureka Moly to ensure that identified impacts from the Mt. Hope Project are detected and hopefully properly mitigated. Eureka County has been granted the ability to participate and provide input in this process. A wide variety of natural resources including but not limited to vegetation, wildlife habitat and surface waters will be monitored. With the increase in operational duration, additional municipal and domestic water withdrawals will occur to support growth.

Additional reductions of authorized AUMs on public lands are predicted to occur due to site specific project needs and the impact created because of mining operations. Additionally, a reduction in public land grazing continues to be advocated by a variety of entities even though substantial reductions have already occurred over many decades. As AUMs for domestic livestock have been reduced (See Figure 7-1), growth in feral horse population remains largely uncontrolled. Current populations of feral horses in Eureka County greatly exceed the population levels considered to be sustainable over the long-term with other multiple uses. Much forage loss, adverse impacts to riparian areas and degraded range conditions can be attributed to uncontrolled and over-populated horse herds. Adequate management of these animals is needed to protect the resource for future environmental and socioeconomic needs.

