8.0 CONCLUSIONS-"THIS TIME THINGS ARE DIFFERENT"

During the last two decades, Eureka County has experienced significant mining activity especially in the northern part of the County. Approximately 36 percent of Nevada's gold production comes from Eureka County mines (See Figure 3-10). However, the mine workforce and associated population largely resided outside the County with the exception of the Ruby Hill project near the Town of Eureka. 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 2011 was 4,413 as compared to the resident labor force of 1,115.

There are a number of reasons for this condition. The northern portion of Eureka County is sparsely populated with the exception of Crescent Valley. Furthermore, northern Eureka County mines are within close proximity to other population centers such as Elko, Carlin, Spring Creek and Battle Mountain. Finally, employer provided transportation to and from the worksite has a significant influence on employee place of residence.

As a result of this dynamic, Eureka County has derived most of its mining related benefits through revenues such as sales tax collections, property tax, and net proceeds of mines tax (See Figure 4-2). The private sector in Eureka County has seen little direct benefit. Employment gains were muted as were personal income and wages of Eureka County residents. In terms of per capita income Eureka County ranked 14th among Nevada's 17 counties in 2010. 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 more 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 70 percent of housing in Eureka County were mobile homes in 2010 (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 will 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.

The effect of past mining operations has meant real net gains in the public sector through improved local source revenues although those gains were partially offset by the lack of growth related benefits for local residents in terms of income, employment and business activity. In other words, because mining activity did not substantially benefit the private sector, favorable fiscal conditions emerged in Eureka County because very little growth related expenditures occurred. The lack of growth and growth related impacts in terms of public expenditures created a situation where local government revenues, at times, would outpace local government expenditures. Because mining related tax revenues are largely viewed by Eureka County as temporary sources even local government employment and wages remain relatively modest in the County.

Beginning in 2010 historic growth patterns began to change. Eureka County started to experience local population gains (See Figure 2-1). The population gains were due primarily to the in-migration of working age adults relocating to the County for employment. The majority of the population gains are a direct result of mining and related support services. Gains in local workforce participants will likely change many aspects of the socio-economic conditions of Eureka County. Additionally, many proposed mining projects will increase the full-time, temporary, and effective day-time population of the County as well as commuting patterns and the movement of goods. Large scale growth related impacts from mining projects are a relatively new phenomenon in modern day Eureka County.

Unlike the bulk of previous mining projects that were located in areas primarily north of I-80, new mining projects coming on line in the near future will have a greater impact on the County in terms of increasing the resident population of workers and by hosting more mining operations that will draw upon Eureka County resources. For example, Barrick Gold is currently building a man-camp at the JD ranch in central Eureka County. The facility is designed to accommodate as many as 1,000 workers, essentially developing a new town with many essential services provided by Eureka County. The Mt. Hope Project just north of the Town of Eureka has the potential to increase the current population of southern Eureka County by as many as 600 persons, a 50 percent increase. Additionally, there are a number of proposed project that may have an impact to southern Eureka County in the next 5 to 10 years. They include:

- Gibellini Vanadium Mine Project by American Vanadium projected to have approximately 80 employees.
- Pan Gold Project by Midway Gold; projected to have approximately 150 employees
- Bald Mountain Project by Barrick Gold; projected to have approximately 150 employees.
- Gold Bar Gold Project by McEwen Mining; projected to have approximately 100 employees.
- Numerous current exploration projects that have yet to define projects scope include:
 - Lookout Mountain by Timberline Resources



- Horse Canyon and Cortez Unified Exploration Project by Barrick Gold
- Ruby Hill Bullwhacker Expansion by Barrick Gold

The end result will be socio-economic and fiscal conditions in the County being significantly different going forward. Permanent population growth will likely continue in southern Eureka County as well as the Crescent Valley area, pushing the total county population well above 3,000 in the near future and higher in the long-term. Such gains in population will largely occur through inmigration. With the Mt. Hope Project alone, the County population is predicted to easily reach 2,600 over the next 2-3 years. Other mining projects in the area will also add to the permanent resident population.

Daytime and temporary populations will also increase. Daytime and temporary populations include workers who commute to Eureka County and spend one or more nights in the vicinity of the work site during the work week. Currently, the mines in northern Eureka County bus employees daily for work shifts, primarily from residency locations outside Eureka County. Both the Mt. Hope Project and Barrick Mines will have workforce elements which contribute to the temporary population by providing options for workers to live part-time during the workweek in Eureka County. Local residents especially young adults will find more employment opportunities and may choose to stay near home in Eureka County instead of moving away.

Due to the anticipated changes in population growth and location of mining projects, Eureka County has made substantial public expenditures over the last two 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 must be mindful of cyclical downturns in mining and must be prepared to handle significant losses in tax revenues. 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 also plan for further declines, places Eureka County in a challenging fiscal position.

Population and Housing

The increase in population growth will likely change the demographic characteristics of Eureka County. The average age, household composition, and household size will be influenced by future population gains. Average age is expected to decrease, family households and households with children will likely increase as a percentage of total households in Eureka County, and the overall household size will increase as working age adults are more likely to be married and have children. These changes are different

from recent demographic trends shown in Section 2.0.

New housing demand will increase as a result of 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. The increase in demand could result in higher rents and prices.

Eureka County Economy

The local private sector economic opportunities are likely to increase substantially as compared to previous mining cycles that left wage, employment and income largely unaffected in Eureka County. As seen in Table 3-2, resident employment and the local unemployment rate will likely fall over the next several years. The unemployment rate will be driven down below 6 percent. Jobs held by local residents will likely move well above the 1,115 reported in 2011. Total local employment (jobs held by residents of Eureka County) could increase by several hundred. Both direct and indirect mining jobs will materialize in the local economy. As shown in Figure 3-3, jobs located in Eureka County and the resident labor force will move higher. 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 will continue to rise above those levels seen in Figure 3-9. Taxable sales will likely continue at elevated levels for a number of years to come. Local trade and services will likely 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 offerings.

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 projects. The number of proposed projects increases the likelihood of impacts. Although the current model of mining companies is to purchase agricultural properties for a host of reasons including acquisition of appurtenant water rights, mitigation options, and insulation from impacts to other private property interests, these 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.

Local Government Fiscal Conditions

Unlike previous years, Eureka County is poised to see substantial increases in local government expenditures linked to population related impacts and growth. In preparation for impacts associated with proposed mining projects, Eureka County has already committed substantial resources to increasing its ability to accommodate increases in population and workers by upgrading facilities and infrastructure. Population growth will drive annual increases in local government operational costs and expand service demands. Demands on local government services will likely exceed the current service levels in nearly all categories. Major expenditures can be anticipated for public safety, utility operations, general administrative services and health care. As seen in Figure 4-8, annual expenditures will likely mirror annual revenues and erode surplus revenues which accrued to Eureka County over the last few years.

Education

Permanent population increases will 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 Mt. Hope Project alone will likely increase school enrollments possibly reaching capacity of the existing facilities. Increases above the Mt. Hope Project population may necessitate expansion of school buildings and expenditures by the District for new facilities. The Crescent Valley school has significant capacity and can currently absorb relatively large increases in enrollment, if they occur. Increases in teaching and non-teaching staff will be needed.

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 Mt. Hope Project may place as many as 600 to 900 construction phase employees in southern Eureka County. Traffic patterns and commuting could change dramatically in the future resulting in increases in the average daily traffic counts and accident rates on Eureka County roads. 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. This is partly due to that fact that most mining projects have been relatively short-term in nature, practice modern reclamation standards, and implement effective mitigation measures. A number of current and proposed projects in Eureka County are likely to have much longer operating lives as opposed to the majority 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.

Livestock and crop production will likely 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 much 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 realized 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 as a result 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.