



**US Department of the Interior
Bureau of Land Management
Battle Mountain District Office**

Resource Management Plan and
Environmental Impact Statement



SOCIOECONOMIC BASELINE ASSESSMENT REPORT

NOVEMBER 2011

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ACRONYMS AND ABBREVIATIONS

Full Phrase

AMS	Analysis of the Management Situation, US BLM, Battle Mountain District Office
AUM	animal unit month
BLM	United States Department of the Interior, Bureau of Land Management
BMDO	United States Department of the Interior, Bureau of Land Management, Battle Mountain District Office, Nevada
decision area	lands within the planning area that are administered by the United States Department of the Interior, Bureau of Land Management and are the subject of the Battle Mountain RMP.
EIS	environmental impact statement
NDOT	Nevada Department of Transportation
OHV	off-highway vehicle
ONRR	United States Department of the Interior, Office of Natural Resources Revenue
PILT	payment in lieu of taxes
planning area	all lands, regardless of ownership, within the United States Department of the Interior, Bureau of Land Management, Battle Mountain District Office.
public lands	lands administered by the United States Department of the Interior, Bureau of Land Management
RECO	renewable energy coordination office
RMIS	Recreation Management Information System, a BLM recreation database. United States Department of the Interior, Bureau of Land Management.
RMP	resource management plan
SRP	special recreation permit
Socioeconomic study area	all lands, regardless of ownership, within the four counties (Esmeralda, Eureka, Lander, and Nye) in which the planning area is located.
US	United States
US Forest Service	United States Department of Agriculture, Forest Service

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EXECUTIVE SUMMARY

The United States (US) Department of the Interior, Bureau of Land Management (BLM) Battle Mountain District Office (BMDO) is preparing a comprehensive Resource Management Plan (RMP) and associated Environmental Impact Statement (EIS) to guide management of BLM administered public land (surface lands and federal minerals) within the District. The RMP/ EIS will be prepared as a dynamic and flexible plan to allow management to reflect the changed needs of the planning area and will replace the existing 1997 Tonopah RMP and 1986 Shoshone-Eureka RMP. The BMDO is responsible for the management and stewardship of approximately 10.5 million surface acres of BLM-administered land as well as a significant area of federal mineral estate within the Battle Mountain planning area in Nevada. This report has been prepared to support the RMP process.

The objectives of this report are to:

1. Compile and document the socioeconomic conditions of the planning area, which encompasses four counties: Esmeralda, Eureka, Lander and Nye;
2. Summarize the results of two socioeconomic workshops the BLM held with local communities in June 2011;
3. Assess the relationship between the management of BLM lands and local communities on both a Field Office-wide scale and local level;
4. Document input from communities on how management could be revised; and
5. Outline methods to be used in the RMP process for assessing potential impacts to social and economic conditions.

BACKGROUND OF SOCIOECONOMIC ANALYSIS IN THE PLANNING AREA

Analysis of social and economic conditions and their relation to public lands is required as a component of the RMP process as defined in Appendix D of BLM Handbook H-1601-1, Land Use Planning Handbook (BLM 2005). Social and economic input was solicited during the public scoping period for the RMP, which included two meetings in June 2011. In June 2011, the BLM hosted two meetings focused exclusively on the socioeconomic conditions of the planning area; these workshops are described below.

SUMMARY OF SOCIOECONOMIC WORKSHOPS

The first of the two socioeconomic workshops was held on June 14, 2011, from 8:00 a.m. to 12:00 p.m. at the BLM Battle Mountain District Office in Battle Mountain, Nevada. The second of the two socioeconomic workshops was held on June 16, 2011, from 1:00 p.m. to 5:00 p.m. at the Tonopah Convention Center in Tonopah, Nevada.

Output from the two socioeconomic workshops stressed the importance of BLM lands to the local and regional economy. Mining, agriculture, and livestock grazing as integral parts of the regional economy, were discussed at length. Primary concerns included access to public lands, future economic development, and environmental and socioeconomic implications for

renewable energy development. Additionally, workshop participants stressed the importance of improved collaboration with local officials, organizations, and communities. Participants included local officials, representatives of industry, and BLM and EMPSi personnel.

PLANNING AREA SOCIOECONOMIC PROFILE

The planning area for the BMDO RMP consists of approximately 13.5 million acres of land, including 10.5 million acres of public land administered by the BLM. The planning area also encompasses lands managed by other federal, state, and private agencies as well as Indian reservations within Esmeralda, Eureka, Lander, and Nye Counties. The BLM does not manage surface lands for other federal entities; therefore, the RMP will cover a decision area of 10.5 million acres of BLM land (surface).

Public involvement is an integral and important part of land use planning. Opportunities for public involvement and comments are provided throughout the planning process. The BLM uses the information from public and other sources to determine current resource conditions, changes needed in managing these resources, and desired conditions for public lands the BMDO manages.

This socioeconomic report will provide a detailed analysis of the four counties within the planning area (Esmeralda, Eureka, Lander, and Nye) and provide feedback from workshops. Overall this report will highlight resource concerns, provide insights and feedback from the two socioeconomic workshops, and be integrated into the RMP. Primary resource concerns include BLM lands and their relationship to the prominent mining, agricultural, and livestock grazing industries. Workshop feedback has revealed that the public would like to maintain consistent collaboration with the BLM on land and resource management decisions.

ECONOMIC AND SOCIAL INDICATORS FOR LAND USE PLANNING

Key economic and social indicators have been identified based on a review of literature and input received during the public scoping process in early 2010 and economic strategy workshops in June 2011. These indicators are provided as a basis for assessment in the RMP process.

Important general social and economic indicators for local communities include population trends, demographics, employment by job sector, personal income, and ethnic and racial makeup of the area. Indicators specific to public lands include extent of recreational use (including hunting and fishing, birdwatching, visitor days, as well as motorized and nonmotorized recreational use), livestock grazing as measured in animal unit months (AUMs), and energy development and production, particularly for alternative energy development (including geothermal production), oil production, and the extraction of minerals. Rights-of-way (ROWs) and other land use management, including land disposal, are also important to examine.

In addition to the indicators listed above, social and economic impacts on key groups with a vested interest in local public land management are important. Results from the economic analysis will be applied in measuring the social impacts to determine impacts of different planning alternatives on groups. Important groups that have been identified in the planning area include:

- Ranchers and livestock grazing lessees and permittees;
- Private landowners;
- Minerals and oil and gas leaseholders;
- Renewable energy leaseholders;
- Right-of-way holders;
- Recreational users; and
- Individuals and groups who prioritize resource protection.

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CHAPTER I

INTRODUCTION

The United States (US) Department of Interior, Bureau of Land Management (BLM), Battle Mountain District Office (BMDO) is preparing a resource management plan (RMP) to provide land use management direction for BLM-administered (public) land and federal subsurface mineral estate. The BMDO is responsible for the management and stewardship of approximately 10.5 million surface acres of BLM-administered land within the Battle Mountain RMP planning area in Nevada.

The Battle Mountain RMP will update and replace the existing Shoshone-Eureka and Tonopah RMPs that were developed in 1986 (BLM 1986) and 1997 (BLM 1997), respectively. As part of the RMP process, the BLM is engaging local communities to better understand the relationship between public land management and socioeconomic conditions. Also, as part of the process, the BLM will analyze the impacts to the human environment, including social and economic conditions. This report has been prepared to support the RMP process and builds upon other outreach efforts, including public scoping.

The objectives of this report are to do the following:

1. Compile and document the socioeconomic conditions of the planning area, which primarily encompasses four counties: Esmeralda, Eureka, Lander, and Nye;
2. Summarize the results of socioeconomic workshops the BLM held with local communities in June 2011 (see **Chapter 4**, Economic Strategy Workshops).
3. Assess the relationship between the management of BLM lands and local communities on both a District Office wide scale and local level;
4. Document input from communities on how management could be revised; and
5. Outline methods to be used in the RMP process for assessing potential impacts to social and economic conditions.

The information presented herein has been researched and validated through a variety of sources, including literature review of published and unpublished documents; review of data from the BLM, partners, other state and federal agencies and local County government; statistical data sources; and responses received through the public scoping process and during economic workshops held in the planning area in June 2011. This report was prepared pursuant to Appendix D of the BLM Handbook H-1601-01, Land Use Planning Handbook (BLM 2005).

I.1 SOCIOECONOMIC STUDY AREA OVERVIEW

The BMDO is responsible for the management and stewardship of approximately 10.5 million surface acres of BLM-administered land within the BMDO RMP planning area in central and south-central Nevada. In addition to BLM lands, other federal, state-owned, and private lands are present in the planning area (**Figure I-1**, Battle Mountain District Office RMP Planning

Area). An overall breakdown of land status of the planning area is shown in **Table I-1**, Land Status in the BMDO RMP Planning Area. The acres of public lands in each county are shown in **Table I-2**, Land Status for Lands within the BMDO RMP Planning Area by County.

Table I-1
Land Status in the BMDO RMP Planning Area

Surface Ownership	Approximate Acres (in planning area)
BLM	10,448,700
US Forest Service	2,400,000
Private	607,300
Bureau of Indian Affairs	9,800
Bureau of Reclamation	3,700
Water*	2,700
Department of Defense	1,700
Department of Energy	1,600
Total	13,475,500

Source: BLM 2011a

*Water represents lakes and ponds

Table I-2
Land Status for Lands within the BMDO RMP Planning Area by County

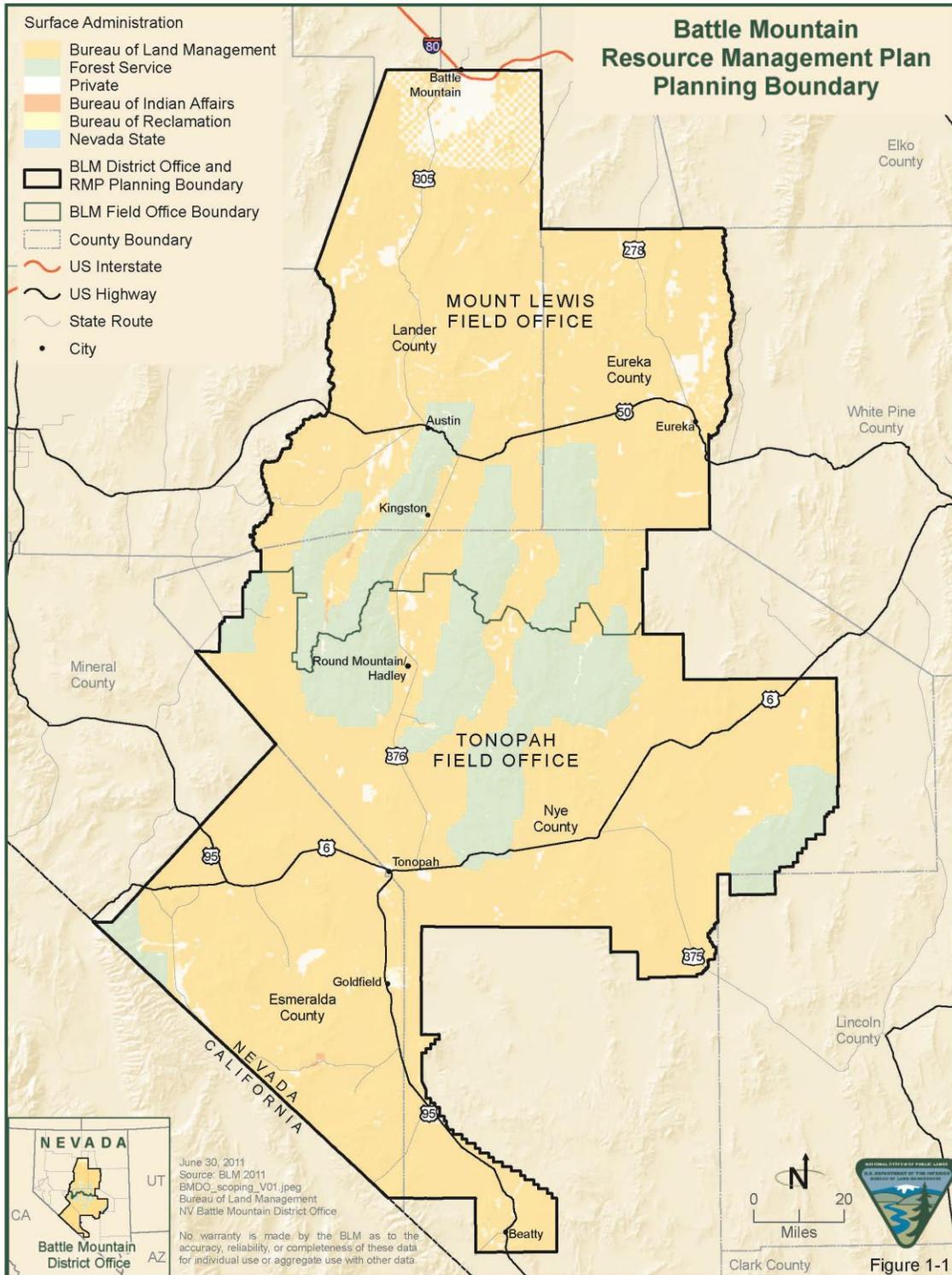
Surface Ownership	Esmeralda	Eureka	Lander	Lincoln	Nye	Battle Mountain District Office
BLM	2,159,700	1,459,900	2,520,200	200	4,308,600	10,448,700
US Forest Service	67,000	143,800	295,200	29,100	1,864,700	2,400,000
Private	61,200	84,700	353,200	X	108,200	607,300
Bureau of Reclamation	X	X	3,700	X	X	3,700
Bureau of Indian Affairs	3,000	X	X	X	6,800	9,800
Department of Defense	X	X	X	X	1,700	1,700
Department of Energy	X	X	X	X	1,600	1,600
Water*	X	700	700	X	1,000	2,700
Total	2,291,200	1,689,100	3,173,000	29,300	6,292,600	13,475,500

Source: BLM 2011a

*Water represents lakes and ponds

The 10.5 million acres of public land administered by the BLM in the BMDO planning area includes a diverse range of natural landscapes and unique social and economic conditions, ranging from agricultural and grazing lands, to mining towns, to rural communities and large expanses of federally managed land. Nevada's mountain ranges and wide open valleys are home to wildlife, livestock, and wild horses and burros. Opportunities for recreation abound from fishing, hunting, hiking, horseback riding, and camping to visiting ghost towns, petroglyph sites, rock hounding, and stargazing (BLM 2011a).

I-1 **Figure I-1, Battle Mountain Resource Management Plan Planning Boundary**



This report documents conditions in the socioeconomic study area, which includes all lands in Esmeralda, Eureka, Lander, and Nye Counties, Nevada. The study area includes a diverse range of natural landscapes and social and environmental conditions. This report aims to identify the key social and economic issues in the study area and determine the factors influenced by BLM land management.

BLM lands and management have an important presence in the area. While the acreage and influence of the BMDO RMP planning area are discussed in this report, it should be noted that, of the four counties in the planning area, all have lands that extend into adjacent BLM District Offices. Nye County has land that spreads into three other BLM District Offices: the northwest tip of Nye County is in the Carson City District Office; the northeast portion of Nye County extends into Ely District Office; the southern portion of Nye County is in the Southern Nevada District Office. Lander County has a large parcel of land at its northern end that extends into the Elko District Office. A large proportion of Eureka County also extends into the Elko District Office. Esmeralda County is almost entirely within the Battle Mountain District Office; however, a proportion of the county at the southernmost tip extends into the BLM Southern Nevada District Office (BLM 2011a).

CHAPTER 2

REGIONAL DEMOGRAPHICS AND ECONOMIC CONTEXT

Local and regional demographic characteristics and economies are affected by public land uses within the planning area. Similarly, social structure and values within the region influence the demand for recreation and other opportunities provided by public lands as well as the acceptability of proposed land management decisions. In addition, economic and demographic statistics are primarily reported by county. For these reasons, demographic, economic, and social data are presented for the socioeconomic study area, which includes all lands within the four counties that primarily comprise the planning area (Esmeralda, Eureka, Lander, and Nye). A state context is provided for comparison when available, and more-detailed descriptions of individual counties and municipalities are presented as appropriate. US Census Bureau data presented includes 2000 census data, 2010 census data, where available, and American Community Survey data. American Community Survey estimates are based on data collected over a 5-year time period (2005-2009). The estimates represent the average characteristics of population and housing between January 2005 and December 2009 rather than single point in time. The American Community Survey is referenced within this document as BLM 2009. [

Information reported for all four counties may include demographics that fall outside the planning area. Economic Profile System – Human Dimensions Toolkit (EPS-HDT) data from Headwater Economics, which comprises most data for this report, generally considers demographics and social and economic statistics that represent entire counties; it is important to note that large proportions of county lands and county populations lie outside of the planning area. For this reason, in many cases, statistics used in this report are actually representative of the larger geographic area, often outside of the BMDO. The majority of the population of Nye County, for example, resides in the city of Pahrump, which lies outside of the BMDO planning area. Efforts have been taken to qualitatively describe the planning area to avoid misrepresentation of the social and economic trends of the BMDO land area.

It is likely that the counties containing the most public land within the planning area or the most intensively used public land would be most affected by changes in resource management. Similarly, the counties with the most public land acreage are likely to be the most affected by funding to states and counties through federal payments in lieu of taxes (PILT) and uses of the public lands. Tables presenting socioeconomic information by county and for the study area as a whole, where appropriate, are included in **Appendix A**, Study Area Demographic and Economic Data.

Information was collected from several sources, including Headwater Economics' EPS-HDT (Headwaters Economics 2011), US Census Bureau, US Bureau of Economic Analysis, and other data for Esmeralda, Eureka, Lander, and Nye Counties and the state of Nevada. Current, historic, and forecast population statistics, age distribution, housing, and education level are the demographic data provided. Economic characteristics discussed include employment levels and

industries, major employers, income, government revenues and expenditures, and dependence on resources administered by the BLM. Data in **Appendix A** represents the most current information available to the greatest extent possible.

2.1 STUDY AREA DEMOGRAPHICS

2.1.1 Population and Migration

The study area total population was 52,491 in 2010, with populations ranging from 783 in Esmeralda County to 43,946 in Nye County. The vast majority of people in Nye County reside in the town of Pahrump, which had a total population of 36,441 in 2010. Other population centers in Nye County include Tonopah – the county seat – which had a population of 2,478 in 2010 (US Census Bureau 2010). Population centers for Esmeralda County include the town of Goldfield, which had a population of 268 in 2010, and Silver Peak, which had a population of 476 in 2010 (US Census Bureau 2010). Population centers in Eureka County include the towns of Eureka (1,351 people in 2010), Crescent Valley (population 392 in 2010), and Beowawe (population 636 in 2010). The primary population center for Lander County is the county seat, Battle Mountain, which had a population of 3,635 in 2010 (US Census Bureau 2010).

In 2010, population density varied from approximately 0.2 people per square mile in Esmeralda County to approximately 2.4 people per square mile in Nye County. Overall, the average population density between the four counties in the study area was 1.7 people per square mile, significantly less than the Nevada state average (24.6 people per square mile). Similarly, in 2000, population density varied from approximately 0.3 people per square mile in Esmeralda County to approximately 1.8 people per square mile in Nye County, which was significantly less the Nevada state average (18.2 people per square mile). Refer to **Appendix A, Table A-1**, Study Area Population Density (2000-2010).

Appendix A, Table A-2, Study Area Population Totals (1980-2010), shows that total population increased significantly in the study area since 1980, with the highest growth rates occurring from 1980 to 1990. All counties increased in population from 1980 to 1990, with a low of 29.1 percent population increase in Eureka County and a high of 96.5 percent population increase in Nye County. Between 1980 and 1990, the total study area's population increased by 78.4 percent, which exceeded the state's population increase of 50.1 percent. The growth rate was varied for each county from 1990 to 2000, with Esmeralda County experiencing a 27.6 percent population decline and Nye County experiencing a 82.7 percent population increase. Counties such as Esmeralda are susceptible to abrupt population declines due to some communities' dependence on the mining industry. For example, in 2009, 41 residents left the community of Silver Peak due to a mine layoff (Brean 2010). The boom and bust nature of the mining industry likely attributes to the fluctuating populations of the county.

Between 1990 and 2000, the total study area's population increased by 51.8 percent, which was below the state's population increase of 66.3 percent. From 2000 to 2010, the study area's population increased by 28.3 percent, which was below the state's population increase of 35.2 percent. Overall, Esmeralda County experienced a very slight population increase from 1980 to 2010 (up 0.77 percent), while the other three counties experienced substantial population increases from 1980 to 2010. Lander County experienced a moderate population increase from

1980 to 2010 (a 41.7 percent population increase), and Nye County experienced the largest population increase (a 385.7 percent population increase). Between 1980 and 2010, the four counties within the study area averaged a 247.7 percent population increase, which is higher than the state of Nevada's population increase in this same time period (a 187.2 percent population increase). It should be noted that despite the rapid growth, total population density remains very low in the study area when compared to the state of Nevada.

Population in the planning area is projected to experience an overall increase for all counties in the planning area from 2010 to 2030 based on Nevada State Demographer's Office projections. Populations are projected to increase by approximately 25 percent for Eureka County and 221 percent for Nye County between 2010 to 2030. The populations of Esmeralda and Lander County are projected to fluctuate every five years from 2010 to 2030, but overall both counties are projected to experience a slight population increase in this time period. Refer to **Appendix A, Table A-3**, Study Area Population Projections (2010-2030).

Immigration plays a significant role in the demographics of the state of Nevada, and throughout the four counties in the Battle Mountain District Office. Esmeralda and Nye Counties have large populations (75.3 percent and 71.4 percent, respectively) that were born in another state. Refer to **Appendix A, Table A-7**, Study Area Place of Birth (2005-2009). In Esmeralda County, over 75 percent of the current population was born outside the state of Nevada. Eureka (60.4 percent), Lander (57.4 percent), and Nye (71.4 percent) Counties all have a larger percentage of their population born outside the state of Nevada than for the entire state of Nevada, (56.6 percent).

Feedback from planning area community workshops held in June 2011 indicated that some cities in the planning area experience a seasonal population increase in the summer months. Goldfield has seasonal summer spikes in population, and Fish Lake Valley has weekend population spikes. Retirees account for a large part of the population increase in Fish Lake Valley and Goldfield.

2.1.2 Age

As of 2008, the median age of residents in the four study area counties ranged from 38.3 in Lander County to 51.6 in Esmeralda County. All counties have a median age higher than the Nevada state average (35.9 years). The total study area's median age is 43.8 years. (Headwaters Economics 2011). **Appendix A, Table A-4**, Study Area Age of Population (2008), shows the age structure for each of the four counties in the study area.

2.1.3 Social Indicators

Social characteristics and attitudes within the planning area are affected by the surrounding demographic and economic trends. Changes in regional industry sectors or local population influx for example, can affect the predominant lifestyles and attitudes of the local residents. Social indicators such as education level and crime rate are important measures and can provide valuable information on the impact of economic changes in a community such as boom and bust cycles in employment or a regional economic down-turn.

Education

Education level of local residents is often tied to other socioeconomic factors including employment and income levels. In the study area, there is a wide range of educational

attainment. **Appendix A, Table A-5**, Study Area Educational Attainment for Population 25 Years and Older (2005-2009), examines these statistics. A large proportion (15.1 percent) of Lander County has attained a total education level below 9th Grade, whereas only 2.9 percent of Eureka County's population has attained a total education level below 9th Grade. Statistics for higher education also vary throughout the counties. Of the residents of Esmeralda County, 7.3 percent have received a graduate or professional degree, whereas only 1.6 percent of Lander County Residents received a graduate or professional degree. Three of the four counties in the planning area fall below the state level of 7.2 percent attainment of graduate or professional degrees by a significant margin (Eureka County had a 3.4 percent attainment for graduate or professional degrees; Lander County had a 1.6 percent attainment level; Nye County was 2.4 percent). Likewise, all counties within the planning area fell below the state level of 14.3 percent attainment for Bachelor degrees.

Crime rate

Crime rate can be indicative of the degree of economic and social stability in a region. In 2005 in the study area, based on local law agency reporting, counties had violent crime rates (including murder/manslaughter, rape, robbery, and aggravated assault) well below that of the state as a whole (608 per 100,000 residents). Lander County was highest for the study area (416 per 100,000), while Nye (282 per 100,000), Eureka (273 per 100,000), and Esmeralda (233 per 100,000) were all significantly lower (Disaster Center 2011).

2.1.4 Language and Place of Birth

Language Spoken at Home

The primary language spoken at home is one indicator of the diversity of an area. In the study area, the percent of the population that speaks English only ranges from a low of 73.1 percent in Lander County to a high of 97.0 percent in Eureka County (US Census Bureau 2009). Percentage of homes that spoke languages other than English at home ranges from a high of 26.9 in Lander County to a low of 3.0 percent in Eureka County. The majority of these homes speak Spanish. In comparison, approximately 72.5 percent of the state population speaks English only, and 27.5 percent speak languages other than English (US Census Bureau 2009). Refer to **Appendix A, Table A-6**, Study Area Language Spoken at Home (2005-2009).

Place of Birth

The place of birth of current community residents provides important information about migration into a community. More than 85 percent of all study area residents were born in the US. When the state of birth is examined, however, differences between counties appear. As discussed in Section 2.1.1, Population and Migration, above, there is a large range for state of birth in the different study area counties; approximately 37 percent of Eureka County residents were born in the state of Nevada, while only 11 percent of Esmeralda County residents are native Nevadans (US Census Bureau 2009). Additionally, all four counties in the planning area have a smaller proportion of residents born outside of the US than the state of Nevada; 18.7 percent of Nevada residents were born outside of the US, whereas the counties in the planning area range from 13.8 percent in Esmeralda County to 1.9 percent in Eureka County (US Census Bureau 2009). Place of birth compared to current residence can have important social

implications for communities, as it impacts the ties that residents have to the community and the region. Refer to **Appendix A, Table A-7**, Study Area Place of Birth (2005-2009).

2.1.5 Household Characteristics

The number of housing units in the study area changed for all counties between 2000 and 2005-2009. Esmeralda County and Nye County increased their housing units by 3.2 and 3.9 percent, respectively. Eureka County and Lander County decreased their number of housing units by 2.2 percent and 17.7 percent, respectively (US Census Bureau 2000; US Census Bureau 2009). Refer to **Appendix A, Table A-8**, Study Area Household Characteristics (2000 to 2005-2009 Comparison). The sharp change in the number of housing units in Lander County is representative of the “boom or bust” nature of the mining industry, which has resulted in periods of rapid growth and corresponding economic declines throughout the county (Lander County 2001).

Housing vacancy rates in the study area are extremely high for some counties, with rates close to 50 percent of housing units, notably Esmeralda and Eureka Counties. Refer to **Appendix A, Table A-8**, Study Area Household Characteristics (2000 to 2005-2009 Comparison). Vacancies are listed by the US Census Bureau either as a homeowner vacancy or a rental vacancy. Homeowner and rental vacancy rates were highest for Esmeralda County at 4.4 percent and 18.3 percent respectively (US Census Bureau 2009). Eureka County had a 0 percent homeowner vacancy rate and 14.2 percent rental vacancy rate. Lander County had a homeowner vacancy rate of 3.7 and a rental vacancy rate of 0. Lastly, Nye County had a homeowner vacancy rate of 5.3 percent and a rental vacancy rate of 10.6 percent.

2.1.6 Income Distribution and Poverty Level

Income Distribution

The study area population represents a wide range of income levels. Overall median household income increased for all counties between 2000 and 2005-2009. Eureka County boasted the highest median household income of \$61,472 per 2005-2009 averages, whereas Nye County had the lowest (\$42,192) in 1999 dollars, not adjusted for inflation (US Census Bureau 2000; US Census Bureau 2009). Per capita income follows similar trends from 2000 to 2005-2009, with all counties increasing per capita income in that time period. Esmeralda County and Eureka County both boasted increases of over \$10,000 per capita income between 2000 and 2005-2009 (US Census Bureau 2000; US Census Bureau 2009). Refer to **Appendix A, Table A-9**, Study Area Income Distribution (2000 to 2005-2009 Comparison).

The income distribution of the four counties in the planning area can be better understood when compared to the income distribution of the state of Nevada. The 2000 Census indicated that the state of Nevada as a whole boasted a higher per capita income (\$21,989) than any of the four counties in the planning area. The per capita incomes of the counties in the planning area ranged in 2000 from a low of \$16,998 in Lander County to a high of \$18,971 in Esmeralda County. Similarly, the state of Nevada also had a higher median household income (\$44,581) than any of the four counties in the planning area in the year 2000. Median household incomes ranged from a low of \$33,203 in Esmeralda County to a high of \$41,417 in Eureka County (US Census Bureau 2000).

As per 2005-2009 averages, both Esmeralda and Eureka Counties boasted higher per capita incomes (of \$30,763 and \$29,080 respectively) than the state of Nevada (\$27,395). Lander and Nye Counties both fell below the state average, with per capita incomes of \$23,233 and \$21,283, respectively. As per 2005-2009 averages, all counties in the planning area, with the exception of Eureka County (\$61,472) had median household incomes below the state average of \$55,585 per capita (US Census Bureau 2009). Refer to **Appendix A, Table A-9**, Study Area Income Distribution (2000 to 2005-2009 Comparison).

Income Source

Income is derived from two major sources: (1) labor earnings or income from the workplace; and (2) non-labor income including dividends, interest, and rent (collectively often referred to as money earned from investments) and transfer payments (payments from governments to individuals; age-related, including Medicare, disability insurance payments, and retirements). Labor income is the main source of income for all study area counties. However, non-labor income from rent, dividends, and other sources provides a significant percentage of income for some counties.

Nye County has the highest percent of personal income contributed by non-labor income at 45 percent, which is slightly above the study area average of 41 percent. Esmeralda, Eureka, and Lander Counties all fall below the state average of 35 percent of income deriving from non-labor income, at 33 percent, 23 percent, and 23 percent, respectively (Headwaters Economics 2011). For more details regarding income source, refer to **Appendix A, Table A-10**, Study Area Labor and Non-Labor Income (2008).

One segment of labor income of note is proprietors' income, defined as income received by businesses that are operated by their owners, including wage, rent, and profit payments. In the study area, non-farm proprietor's income comprises from 0.4 percent of labor income in Eureka County to 7.7 percent in Nye County. All counties in the planning area are below the Nevada average of 10.2 percent non-farm proprietors' income. For all counties, farm proprietors' income is above the Nevada state level of 0.1 percent. Farm proprietors' income ranges from a low of 1.6 percent in Nye County to a high of 18.4 percent in Esmeralda County (BEA 2010). Refer to **Appendix A, Table A-11**, Study Area Proprietors' Income (2008).

Farm proprietors' income is positive for all counties, except for Esmeralda, for which there is no data available. This positive income indicates that income received (e.g., total cash receipts and other income) from farming is higher than costs and debts (e.g., total production expenses) associated with farming. Refer to **Appendix A, Table A-17**, Study Area Agricultural Data (2008).

Income Inflow and Outflow

Data collected for personal income may not accurately reflect the money available in a local community if a high percentage of area workers live outside of the county. Inflow of earnings from those commuting into study area counties was compared to outflow of earnings from those commuting out of the counties to work. Net flow, also known as net residential adjustment, is simply inflow minus outflow; if a county has positive net flow, this indicates that the commuters who live within the county are bringing more income into the county than commuters from elsewhere are taking out.

In Fiscal Year 2008, Eureka and Lander Counties both experienced negative net residential adjustments, indicating that there is significant in-commuting to these counties from other counties. In contrast, Esmeralda and Nye Counties both had positive net residential adjustments, indicating that these counties may act as bedroom communities, with income derived from people commuting out of the county to work exceeding the income from people commuting into the county. Refer to **Appendix A, Table A-12**, Study Area Income Inflow and Outflow (2008).

Additional loss of income from the local economy, or leakage, is likely to occur in some study area communities due to lack of local retail stores. The prominence of the mining industry is essential to supporting the local retail industry, and economic strategy workshops discussed the possibility of expanding the retail industry in certain areas of BMDO. Refer to **Chapter 4**, Economic Strategy Workshops, and **Chapter 6**, Economic Impact Analysis Strategy for further information.

Poverty Level

The percent of people below the poverty level, according to 2005-2009 estimates, ranged from 4.8 percent in Eureka County to 16.2 percent in Nye County. Esmeralda and Eureka Counties experienced a reduction in people below poverty level between 2000 and 2005-2009; Lander and Nye Counties experienced an increase in people below the poverty level between 2000 and 2005-2009.

These figures can be better understood when compared to the state average. In 2000, Esmeralda and Nye Counties had individual poverty levels that were above the state average, whereas Eureka and Lander Counties had poverty levels that were just slightly (1 to 2 percent) below the state average. In 2005-2009, Esmeralda and Eureka Counties had individual poverty levels that were below the state average, whereas Lander and Nye Counties had individual poverty levels that were both about 5 percent greater than that of Nevada (US Census Bureau 2000; US Census Bureau 2009).

Statistics for families below poverty varied for each county from 2000 to 2009. Esmeralda and Nye Counties were at or below the state average (7.5 percent) in 2000, whereas Eureka and Lander Counties (12.5 percent and 12.6 percent, respectively) were both about 5 percent above the state average. In 2009, Esmeralda and Eureka Counties both fell below the state average for families below poverty level, whereas Lander and Nye Counties (17.1 percent and 10.6 percent, respectively), both held averages that were higher than the state of Nevada's (8.0 percent of families below poverty level). Refer to **Appendix A, Table A-9**, Study Area Income Distribution (2000 to 2005-2009 Comparison). Poverty levels are further discussed in **Section 5.1**, Low-income Populations.

2.1.7 Employment of Residents

Employment can be viewed as a key economic indicator, as patterns of growth and decline in a region's employment are largely driven by economic cycles and local economic activity. Employment patterns are shown for the four study area counties in **Appendix A, Table A-13**, Study Area Employment Characteristics (2005-2009).

Based on these data representing 2005-2009 averages, the agriculture, forestry, fishing and hunting and mining category provides a major source of employment throughout the study area, particularly in Esmeralda, Eureka, and Lander Counties; over 40 percent of Eureka County is employed in these industries. These employment numbers are particularly significant for the context of this report, as they reflect potential economic ties to use of public lands. Construction also plays a large role in the regional economy, as it accounts for at least 10 percent of employment in each county. It should be noted that construction in the area is closely tied to the mining industry; data likely represents construction associated with mine development or expansion.

Additionally, retail trade plays an important role in the economies of Lander and Nye Counties (14.8 and 10.4 percent, respectively). Education, health care, and social assistance are other major parts of the economy for the counties of the study area. Eureka County's economy, for example, is comprised of 16.2 percent of jobs in education, healthcare, and social assistance (US Census Bureau 2009). Public administration employs a significant number of people in both Esmeralda and Eureka Counties, at 16.5 and 9.8 percent of the work force, respectively (US Census Bureau 2009). For more information, please see **Appendix A, Table A-13**, Study Area Employment Characteristics (2005-2009) and **Section 2.2**, County Summaries.

The arts, entertainment, recreation, accommodation and food services industry accounts for 22.7 percent of Nye County's overall employment; however, 3,094 of the 3,458 jobs in this industry are located in the city of Pahrump, meaning that at least 89.5 percent of these jobs are located outside of the BMDO planning area (US Census Bureau 2009). Outside of Pahrump, only 364 of the 15,206 total jobs in Nye County are in the arts, entertainment, recreation, accommodation and food services industry (US Census Bureau 2009). It is important to delineate between trends of entire counties and the areas of those counties that are contained within the BMDO planning area. For example, in 2003, the casino industry employed the largest number of people in the city of Pahrump (Nye County 2003). The area of Nye County that resides within the BMDO planning area is more sparsely populated than the area of Pahrump, and is more likely to be aligned with the general social and economic trends of the other counties within the BMDO.

2.2 COUNTY SUMMARIES

The following section provides brief summaries of the demographic and economic trends for each of the six study area counties. Refer to **Appendix A**, Study Area Demographic and Economic Data, for complete demographic and economic data tables. The county descriptions below are contrived primarily from county websites and data from Headwaters Economics and the US Census Bureau.

It is important to note that throughout this report, data is often representative of entire counties, regardless of whether or not the entire county exists within the planning area. Nye and Eureka Counties have large proportions of their land area that exist outside of the Battle Mountain District Office. Of Nye County's approximate 11,613,500 acres, 5,324,900 acres (46 percent) lie outside of the planning area. Eureka County has a total land area of 2,673,300 acres; about 986,200 acres (37 percent) lie outside of the planning area. Lander and Esmeralda Counties have total land areas of 3,529,500 acres and 2,295,300 acres, respectively.

Approximately 90 percent of the land, or 3,173,200 acres, in Lander County lies within the planning area and 99.8 percent, or 2,291,804 acres, in Esmeralda County lies within the planning area (BLM 2011a).

Land area and population are not necessarily correlated. In Nye County, for example, the city of Pahrump accounts for most of the county's population, yet Pahrump is not in the planning area. In contrast, Lander and Esmeralda Counties' populations exist within the Battle Mountain District Office; therefore, the data and descriptions that relate to these counties more accurately depict the planning area.

2.2.1 Esmeralda

Esmeralda County is a rural county with a large amount of undeveloped open space; the largest town in the county is Goldfield with an estimated population of 415 (Esmeralda County 2011). The entire county has a population below 1,000 and has experienced a slight decrease in population over the last ten years (US Census Bureau 2009). The county has always been sparsely settled except during the first decade of the 20th century when the population of Goldfield reached perhaps as many as 30,000 as a result of a gold mining boom (Esmeralda County 2011). The mines were largely tapped out by the end of the 1910s and the economy and population declined afterwards.

Population density as of 2010 was estimated to be approximately 0.2 people per square mile, among the lowest densities for counties in the continental US. Today, the sparsely populated county continues to rely on a mining, ranching, and agricultural economy as well as tourism, recreational resources, and an emerging potential for renewable energy production (Esmeralda County 2010). Recreationally, Esmeralda County offers hunting, fishing, hiking, and four-wheel drive trails as well as old mining camps and ghost towns (Esmeralda County 2011). The economic strategy workshops stressed the significance of the retiree population in Esmeralda County. Fish Lake Valley, for example, has a 30 to 40 percent retirement base; and recreation, especially birding, is attractive for retirees. Participants of the economic workshops also expressed the desire and demand to build a better retirement base in the community of Goldfield.

Median household income was \$44,118 (per 2005-2009 average); per capita income was \$30,763; and 7 percent of people fell below the poverty level. Unemployment rates in the county have ranged from a high of 8.6 percent in 2000 to a low of 3.2 percent in 2007. Unemployment in 2010 was 8.3 percent (BLS 2011). Esmeralda County had the largest proportion of government-employed workers in 2008, at 20 percent, with the national average at 13.5 percent (Headwaters Economics 2011). Refer to **Appendix A, Table A-9**, Study Area Income Distribution (2000 to 2005-2009 Comparison) and **Appendix A, Table A-16**, Study Area Unemployment Levels by County (1990-2010).

2.2.2 Eureka

Like Esmeralda County, Eureka County is a rural county. The Eureka County economy is primarily dependent on ranching, agriculture, and mining (Eureka County 2011a). The town of Eureka was settled in 1865 after the discovery of a rich ore deposit in the area and was designated the county seat in 1873. Beowawe, now largely abandoned, was originally established as a supply point for mining districts in the area. Demand for energy and precious metals has

historically bolstered economic activity through the production of gold. Eureka has gone through “boom and bust” cycles, which are inherent in a mining economy. This requires the county to carefully consider efficient uses of land and facilities. Eureka County, at just under 2,000 people, has the second smallest population of any county in the state of Nevada (Eureka County 2011b; US Census Bureau 2010).

Population density as of 2010 was estimated at around 0.5 people per square mile, which is extremely low when compared to the state of Nevada, at 24.6 people per square mile (US Census Bureau 2010). Mining comprises a large proportion of the economy in Eureka County. Agriculture, although it comprises a much smaller portion of the total labor force, is vital to the county’s economy and has been a steady economic force for decades. Recently, travel, tourism and recreation have grown in importance to the local economy (Eureka County 2003).

Median household income was \$61,472 as per 2005-2009 average, which is the highest of all four counties in the planning area, and this makes Eureka the only county above the state average of \$55,585 in median household income for 2005-2009. Eureka also had the lowest rate of persons below poverty (4.8 percent for 2005-2009) of any of the four counties in the planning area (US Census Bureau 2009). As per 2005-2009 averages, Eureka County had the highest percentage of people employed in the agriculture, forestry, hunting and fishing, and mining industries at 41 percent (US Census Bureau 2009).

It should be noted that for Eureka County (and other counties as well), the statistics provided by the US Census Bureau and other similar sources are representative of the larger demographic and geographic area outside of the Battle Mountain District Office and should be received in that context. Eureka County’s population, for example, totaled 1,987 people in 2010 (US Census Bureau 2010). There are, according to the Eureka County Profile, only three established communities in the county: Eureka, Crescent Valley, and Beowawe. Only one of these established communities – the town of Eureka – exists within the planning area. The majority of the County’s residents live in the unincorporated town and county seat of Eureka, and a remaining number of people live in Crescent Valley and Beowawe. The 2000 Census reported that 1,103 people lived in the Eureka Census County Division and 548 lived in the Beowawe census county division (Eureka County 2011b). Eureka County is over 2,673,300 acres, and over such a large expanse of land, resources vary geographically and different areas are inclined to different industries. Beowawe, for example, is home to a 17.7 MW geothermal power station, owned by Terra-Gen Power, which started producing energy in 2006 (Nevada Energy 2011). Additionally, North America’s largest gold mines are currently located in the north part of Eureka County (Eureka County 2011b).

2.2.3 Lander

Lander County is a county of about 6,000 people (US Census Bureau 2010). The Town of Battle Mountain is the seat of government for Lander County. The Town of Battle Mountain began as a rail stop servicing the Battle Mountain Mining District, formed in 1866. The rail line is still in service and has been a major factor in the economic life and resulting urban form of Battle Mountain. The town continues to serve as a regional center in support of mining, ranching and tourism (Lander County 2011). Kingston Canyon is an historic mining district which dates back to silver mines in the 1860s, and now hosts some of the best varied trout fishing in the state

(Lander County 2011). About 30 percent of people privately employed in Lander County are employed in the mining industry (Headwater Economics 2011). Lander County's economy has been dominated by mining, but agriculture also plays a significant role in the local economy, including the production of high quality alfalfa and alfalfa seed. Over 85 percent of the county is currently public land managed by federal agencies. Lander's population density as of 2002 was estimated at around .99 people per square mile (Lander County 2011).

2.2.4 Nye

Nye County has experienced considerable population growth in the last few decades: the population of Nye was about 9,000 people in 1980; 18,000 people in 1990; 32,000 people in 2000, and about 44,000 people in 2010 (US Census Bureau 1995, 2000, 2010). Nye County is the third-largest county in the continental United States in terms of land area, and the vast majority of this land area is managed by the federal government. Of the 11,560,960 acres that comprise Nye County, 822,711 acres, or just over 7 percent of the total, is private land (Nye County 1994). As of 1990, 18 percent of Nye County residents made their living in mining, which includes oil and gas extraction (Nye County 1994). Additionally, a number of ranchers graze cattle on allotments in Nye County. Many of the retail and service establishments in the county draw a substantial portion of their business from tourism and recreation visitors using and viewing attractions on public lands throughout Nye County and adjacent counties (Nye County 1994).

The city of Pahrump comprises a significant proportion of the population of Nye County, yet lies outside of the Battle Mountain District Office. In 2000, Pahrump had a population of 24,631, and Nye County's population was 32,485 (US Census Bureau 2000). The 2005-2009 American Community Survey estimates that Pahrump had a total population of 35,930 and Nye County had a total population of 42,934 (US Census Bureau 2009). Throughout this report, US Census Bureau data is used to describe Nye County as a whole.

2.3 LOCAL ECONOMIC ACTIVITY AFFECTED BY PUBLIC LAND USES

The BLM's management of public lands contributed more than \$112 billion to the national economy in 2010 and supported more than 500,000 American jobs in 2010 (BLM 2011c). Local economies realize direct and indirect benefits from expenditures and revenues generated by a variety of activities in the BLM BMDO decision area. In Nevada, it is estimated that a total of more than 5,000 direct and indirect jobs are supported by BLM management of activities on public lands. Refer to **Table 2-1**, Direct and Indirect Jobs in Nevada Supported by BLM's Management of Public Lands (Fiscal Year 2010).

Activities that tend to have the greatest economic influence include recreation, mining and energy resource development, and livestock grazing. Public lands managed by the BMDO cover approximately 52 percent of total land area in the four county study area (US Census Bureau 2000; BLM 2011a). Additional public lands managed by other district offices contribute to the economy of some area counties. Activities that are directly and indirectly impacted by BLM management decisions are discussed in the sections below.

Table 2-1
Direct and Indirect Jobs in Nevada Supported by BLM's
Management of Public Lands (Fiscal Year 2010)

Economic Area	Direct Jobs	Total Jobs
Minerals	125	221
Geothermal and Wind Energy	193	393
Timber	22	47
Grazing	200	352
Recreation	2702	4096
Total	3,242	5,110

Source: BLM 2011c

2.3.1 Activities Directly Impacted by BLM BMDO Management

The BLM collects revenues from recreation and commercial activities that take place on the nearly 48 million acres of public land that it administers in Nevada, and a portion of these revenues are redirected back to the state and county governments. These revenues are collected from facilities, such as fees from campgrounds, from BLM recreation permits (special, competitive, organized group activity, and event use permits), mining leases and mineral revenues, grazing fees, and forestry (wood products; seeds; timber, etc.) sales. **Table 2-2**, BMDO Receipts (Fiscal Year 2010), shows the revenues collected by the BLM BMDO in 2010. Additional revenues are collected from royalty payments for oil and gas and minerals extraction; royalties are discussed further in **Section 2.3.3**, Market and Commodity Values.

Table 2-2
BMDO Receipts (Fiscal Year 2010)

Resource	Total
Recreation fees*	\$864
Grazing Fees**	\$496,905
Right-of-way***	\$642,147
Salable Mineral Materials	\$62,916
Forestry	\$8,599

Source: BLM 2011a; BLM 2011f

*This number includes organized group event receipts and commercial receipts from 11/05/09 to 9/22/10

**The BLM-administered range in the planning area is permitted at a level of 368,078 AUMs of forage (BLM eGIS data 2011). This figure includes 362,869 active AUMs and 5,209 AUMs of temporarily suspended use. Cost per AUM in the planning area is \$1.35 per AUM. Multiplied by the total number of AUMs, this means that there are \$496,905 in grazing fees within the BMDO.

***The figure for total dollar amount of BMDO ROWs for Fiscal Year 2010 includes \$445,022.72 for Linear Rights-of-Way and \$197,124.00 for Communication Sites. The total for all ROWs is a resulting \$642,146.72, and this number represents the entire BMDO.

2.3.2 Non-market Values

Some of the most important socioeconomic factors associated with planning area BLM-administered lands are the non-market values offered by public lands management. Non-market values are the benefits derived by society from the uses or experiences that are not dispensed through markets and do not require payment. For example, there are unique and sensitive

natural and cultural resources on public lands. These values enhance the quality of life and enjoyment of place, thereby improving regional and local economic conditions. Proximity to undeveloped natural lands and the resources they harbor, including scenic vistas and recreational and wildlife viewing opportunities, add non-market value to the area. Two examples of non-market benefits available from public land resources include the enhancement value of open space and ecosystem services, both discussed below.

Open Space: Enhancement Value and Attracting Non-labor Income

Open space can be an important contributor to quality of life for communities adjacent to public lands providing scenic views, recreational opportunities, and other benefits. In addition, non-market resources may provide indirect economic benefits. Enhancement value is the tendency of open space to enhance the property value of adjacent properties. Public lands in the planning area may provide enhanced value to adjacent private parcels. Open space is generally seen as an enhancement value, especially if the open space lands are not intensively developed for recreation purposes (Fausold and Lillieholm 1996).

Additionally, open space may attract new residents who in turn bring new sources of income to the area. Communities adjacent to public lands offer a high level of natural amenities that often attract retirees and others with non-labor sources of income, as well as sole proprietors and telecommuters who bring income from other regions into the local economy. These new residents, in turn, spur economic development. Residents who rely on non-labor income become both a pool of customers and clients for new business and a potential source of investment capital (Haefele et al. 2007).

Ecosystem Services

Ecosystem services are those goods that an ecosystem provides for human use. Examples include provision of fresh water and air, regulation of wastes, maintenance of biodiversity, formation of soil, and protection from natural hazards. Recent models have been created to assess the economic benefits of ecosystem services so that these economic values can be incorporated into the planning process. Some recent studies have created models to assess the monetary value of ecosystem services. A study based in the Pike San Isabel National Forest of Colorado's Front Range, for example, determined the total value of ecosystem services to be \$2,208 per acre per year in 2008 (Bacigalupi 2010).

2.3.3 Market and Commodity Values

Recreational Use

Planning area public lands provide recreational opportunities for both local residents and tourists from outside the area, and these recreational opportunities represent an important contribution. Planning area public lands support a variety of activities, including camping, hiking, horseback riding, off-road vehicle driving, and target shooting. Migrating and resident wildlife provide plentiful opportunities for observation, photography, and hunting. Former mining towns offer historic recreation opportunities.

The BLM collects recreation data by recreational activity for each field office and maintains this data in BLM's Recreational Management Information System (RMIS). **Table 2-3**, Trends in Visitation (2005 to 2010), provides data for the study area. A visit is defined as one person's

trip, or visit per day (each day counts as a visit), to planning area on public lands. A visitor day is a common unit of measure of recreation use among federal agencies. One visitor day represents an aggregate of twelve visitor hours at a site or area (BLM 2006b). Approximately 291,000 recreational users visited the planning area in 2008. Based on Recreation Management Information System (RMIS) data, the most popular of activities in the BMDO are camping and picnicking, off-highway vehicle (OHV) travel, non-motor sports, interpretation, education, and nature study, and hunting. Percentages for all activities are shown in **Table 2-4, Activities of Visitors to the BMDO (Fiscal Year 2008)**. Much of the recreation occurs as dispersed recreational use. Notable developed recreation sites include Hickison Petroglyph Recreation Area, Mill Creek Recreation Site and Rhyolite Historic Town.

Table 2-3
Trends in Visitation (2005 to 2010)

Data	2005	2006	2007	2008	2009	2010
Visitors	271,700	289,200	296,200	291,000	296,200	299,162
Visitor Days	246,000	247,700	291,000	305,000	291,000	293,910

Source: BLM 2011e

Table 2-4
Activities of Visitors to the BMDO (Fiscal Year 2008)

Activity	Percent
Camping & Picnicking	35
OHV Travel	13
Specialized Non-Motor Sports & Activities	12
Interpretation/Education/Nature Study	10
Hunting	9
Non-Motorized Travel	8
Specialized Motor Sports & Activities	6
Pleasure driving	3
Fishing	2
Miscellaneous Activities	1
Swimming & Other Water Based Activities	<1
Winter/Non-Motorized Activities	<1

Source: BLM 2011g

In addition to visitor information, the BMDO collects information on special recreation permits issued in the planning area. The BLM requires special recreation permits for commercial uses, competitive events, organized groups, and recreation use within certain special areas. Special recreation permits allow specified recreational uses of public lands and related waters with applicable stipulations. Many of the commercial permits, such as those issued to hunting outfitters and guides, are used throughout the district. Competitive permits, such as OHV races, are confined to a preapproved race route. A large percentage of the races that have occurred in the BMDO have taken place in the Tonopah Field Office resource area. Less than 10 special recreation permits per year exist in the entire BMDO over the last 10 plus years. The BLM

received \$864.41 from special recreation permit fees in fiscal year 2010 (BLM 2011f). Refer to Table 2-2, BMDO Receipts (Fiscal Year 2010).

In addition the recreation data presented for the BMDO in the tables above, it is likely that recreation on other federal and state lands in and around the study area contributes to the local economy. Notable areas for recreation outside of the planning area include Death Valley National Park and Humboldt-Toiyabe National Forest.

Recreational activity has important economic value both in terms of the satisfaction it provides local residents and the economic activity it generates for the regional economy. In terms of economic activity, recreation generates additional spending in the local economy that supports jobs and income. Economic stimulus occurs as non-residents to the area spend money in the local economy that generates additional spending by local residents. A 2007 study found that non-wildlife based outdoor recreation resulted in \$1.5 billion in trip expenses and sporting equipment in Nevada in 2007. Wildlife based recreation contributions resulted in an additional \$344 million in retail sales. Indirect expenditures added additional economic benefits throughout the state (Outdoor Industry Foundation 2007).

Employment in recreation and tourism is not collected as a separate industry category; therefore, data on jobs generated are estimates only. Jobs are generally reflected in the arts, entertainment, recreation and accommodation services and retail trade sectors. These sectors varied by county, accounting for a combined total of approximately 5.7 percent in Eureka County, 8.1 percent in Esmeralda County, 23.3 percent in Lander County, and 33.1 percent in Nye County. (US Census Bureau 2009). It should be noted that not all of this employment is related to travel and recreation and that other industrial sectors may also contribute jobs. Furthermore, some of this employment is likely related to the other federal lands in the area, notable US Forest Service lands, although the BLM contribution is expected to be significant.

Mineral and Energy Resources

In addition to federal minerals underlying BLM lands, the BLM is also responsible for administering federal mineral estate underlying lands managed by other agencies, or on reserved mineral estate underlying private lands. Generally, mineral management programs include locatable minerals (e.g., metals and gypsum), leasable minerals (e.g., fluid leasable such as oil and gas and geothermal, and solid leasable such as coal), and saleable mineral materials (e.g., common varieties of sand and gravel, clay, and rock). The economic contributions of different categories of resources in the BMDO are examined in depth below. Renewable energy is discussed in a separate section immediately following.

Locatable Minerals

Hard rock mineral extraction has historically played a critical role in the economy for the counties in the planning area. Many of the towns in the planning area were formed as a result of mining booms in the early 20th century. Today, mineral extraction continues to represent a significant contribution to the local economy. The BMDO manages one of the largest BLM non-energy minerals program in the US. Hard rock mining employs more people in the District than any other business (BLM 2011g). For the four county region overall, mining represented approximately 44 percent of the total employment in 1998 and 20 percent in 2008 (Headwaters Economics 2011). The relative importance of mining has fluctuated over time in response to

changeable demand for minerals and resource availability. The growth and decline inherent in the "boom and bust" cycles of a mining economy continues to play a role in the local economy.

In 2008, locatable minerals represented over 90 percent of total employment for Eureka County, largely as a result of the Newmont Mining Corporation, the largest employer in the county. Mining sector employment levels for other counties ranged from 6 percent in Esmeralda to 30 percent in Lander County (see **Appendix A, Table A-14** Study Area Employment - Mining (2008)). The largest mining surge in state history occurred from 2005 to 2008 until the onslaught of the economic recession. It is important to note that employment statistics in **Table A-14** do not include employment data for government, agriculture, railroads, or the self-employed because these are not reported by County Business Patterns. As previously stated, this data is county-wide and BMDO-specific information may differ; in Eureka County, for example, the majority of employment is outside of the BMDO.

Minerals found in the planning area include gold, silver, copper, molybdenum, barite, vanadium, and lithium. Mines operating in the Battle Mountain District produced 1,254,708 ounces of gold; 2,176,221 ounces of silver; 23,733,389 pounds of copper and 305,120 tons of barite in 2009 (BLM 2011h). The BMDO planning area contains over 60,000 mining claims. There are 149 authorized and pending notices and 89 authorized and pending Plans of Operations for exploration and mining activities in the BMDO planning area (BLM 2011h). New development of mineral resources within existing claims and outside of current permitted mine boundaries at idle and active mine sites is possible as new ore deposits and extensions of existing ones are discovered. Development would continue at a rate determined by the price of minerals in the market place and technological advances that lower the price to mine and process ore. As of August, 2011, gold was valued at \$1,700 an ounce (Associated Press 2011). In the previous five years, gold has been valued at \$1,225 (2010), \$972 (2009), \$871 (2008), \$695 (2007), and \$603 (2006) an ounce (National Mining Association 2011). The most active mining areas are adjacent to or in the Reese River Valley, Crescent Valley, and the Great Smokey Valley (BLM 2011). Unlike leasable minerals, no federal royalties are collected or dispersed associated with locatable minerals. **Table 2-5**, BMDO Mineral Production Statistics, shows mineral production in the BMDO for 2008.

Table 2-5
BMDO Mineral Production Statistics (2008)

	Battle Mountain District	Nevada
Gold (ounces)	3,420,004	6,037,000
Silver (ounces)	1,135,118	8,430,000
Barite Production (tons)	343,423	573,000
Copper (pounds)	10,808,208	142,794,000

Source: BLM 2011g

Leasable Minerals – Oil, Gas, and Coal

Nevada is currently not a major producer of leasable minerals compared to other western states. Oil production in Nevada has fallen off since the early 1990s and has flattened out at less than 500,000 barrels per year. Most of Nevada's oil production, totaling about 455,000 barrels during 2009, comes from several small oil fields in Railroad Valley in Nye County (Nevada

Commission of Mineral Resources 2011). The planning area includes the Railroad Valley area, and a total of 10 producing oil fields including the following: Trap Springs, Eagle Springs, Grant Canyon, Kate Spring, Ghost Ranch, Sand Dune, Bacon Flat, Sand Spring, and smaller fields such as Duckwater and Currant. There are currently 674 authorized oil and gas leases and 2 pending leases covering more than 1,210,805 acres in the Battle Mountain district. Approximately 771 oil and gas wells have been drilled in the planning area since 1954. The total hydrocarbon production in 2008 amounted to 413,000 barrels of oil (BLM 2011g).

With new technologies such as horizontal drilling drawing off investment and drilling equipment, it is highly unlikely that oil production in the study area would markedly increase in the next 10 years, barring another large discovery in Nevada (BLM 2006a and 2008). Some BLM land with oil resources is available for competitive leasing. A total of 155 parcels within the Tonopah Planning Area were analyzed for leasing in the 2011 oil and gas lease sale environmental assessment. Three parcels have been removed due to no surface occupancy restrictions and 19 deferred due to potential resource conflicts (BLM 2011b). The next lease sale is scheduled for December 2011.

Leasable minerals do not represent a significant source of income or employment in the study area based on most recent data. Oil and gas extraction and coal mining did not provide a measurable source of employment as of 2008 data (Headwater Economics 2011).

Saleable Minerals

Deposits located in the Battle Mountain District include diatomite, specialty clays, pumice, decorative stone, aggregates, sand and gravel. The commodity is sold to individuals and corporate entities through negotiated sales. Federal, state, local government and non-profit organizations are permitted free use of these materials for qualified purposes. Common use area means a generally broad geographic area from which the BLM can make disposals of mineral materials to many persons, with only negligible surface disturbance. A Community Pit is a small defined area from which the BLM can make disposals of mineral materials to many persons. **Table 2-6**, BMDO Study Area Mineral Materials Use (2008), shows current levels of mineral materials use by site type. In addition, there are about 170 material site rights-of-way issued to the Nevada Department of Transportation for sand and gravel (BLM 2011g). In Fiscal Year 2010, \$62,916 of receipts were paid to the BMDO for saleable mineral material sales (BLM 2011f).

Table 2-6
BMDO Study Area Mineral Materials Use (2008)

Active or Pending Gravel Pits	248
Community Pit	1
Common use area	1
Negotiated sales	39
Free use permits	75
Lander County Pits	92
Eureka County Pits	41
Nye County Pits	22
Esmeralda County pits	6

Source: BLM 2011f

Renewable Energy

The study area contains potential resources for renewable energy production including geothermal, solar (photovoltaic applications and concentrating solar power applications) and wind. The Secretary of the Interior issued Order No. 3283 on January 16, 2009, to enhance renewable energy development on public lands, including the creation of Renewable Energy Coordination Offices (RECOs) to support the permitting of environmentally responsible wind, solar, biomass and geothermal operations and electrical transmission facilities on public lands. The Battle Mountain RECO was established in 2009 to support the Secretary's goal. Details of active and pending projects in the planning area are discussed below by resource (BLM 2011h).

Solar. There is one active project, Tonopah Solar Energy Crescent Dunes Project, located in Nye County approximately ten miles northwest of Tonopah. The record of decision for the project was signed in December 2010 and construction began in April 2011, with production anticipated for 2013 (NREL 2011, Tonopah Solar Energy 2009). The completed project will produce approximately 110 megawatts (MW) of power. A Programmatic Solar EIS is being developed by the BLM Washington Office. There are two areas being evaluated in the Battle Mountain District in this report; fifteen miles south of Goldfield; and ten miles north of Tonopah in Esmeralda County (BLM 2011h).

Wind. There are four wind projects in the monitoring stage. Meteorological towers are located six miles west of Beatty in Nye County, northwest of Carvers in Nye County, twenty five miles west of Silver Peak in Esmeralda County, and thirty miles east of Austin in Lander County.

Geothermal. The 2003 BLM/National Renewable Energy Laboratory study identified the Battle Mountain District as one of the BLM planning areas with the highest potential for geothermal resources (BLM 2011g). The BMDO currently has 86 authorized geothermal leases, covering 97,005 acres, 2 pending geothermal applications, covering 12,137 acres, as well as one recently permitted plan of development for geothermal leasing in Grass Valley, and one existing geothermal plant in Jersey Valley. About 20 percent of the land within the Battle Mountain District lies in potentially valuable for geothermal resource areas, located mainly in the Esmeralda and Lander Counties. Pending lease application sites cover less than one percent and are near town of Carvers in Nye County and in Crescent Valley located in Lander County (BLM 2011g). The next geothermal lease sale is scheduled for March 2011 (BLM 2011h).

Federal Lease Revenue

Lease holders competitively bid, pay an initial bonus, and subsequently pay rent for the right to develop the resources on public lands, these funds are collected and subsequently distributed to the federal and state government and are known as lease revenue, and in the case of rents, lease royalties. Lease revenues and royalties to the state and county provide an additional economic benefit of mineral resource extraction. Federal mineral lease revenues are collected by the Office of Natural Resources Revenue (ONRR) within the Department of the Interior. Approximately 50 percent of the revenues are transferred to the Nevada State Treasurer. Nevada received over \$12,900,000 in federal lease revenue/royalties disbursement in Fiscal Year 2010 (ONRR 2011), primarily from oil and geothermal leases. This portion, in turn, is distributed to counties, cities, and school districts.

Revenues from mineral resources extraction in the BMDO provide benefits to local communities. The contribution of geothermal lease revenue directly to study area communities is shown **Table 2-7**, Study Area Federal Mineral Lease Revenues Disbursement, Geothermal Lease Revenue (Fiscal Year 2010). Additional revenue is contributed from oil and gas leasing. Total for oil lease revenue/royalties in 2010 was \$3.49 million for the state of Nevada (ONRR 2011). Specific information by county is not available for oil and gas royalties, however, the majority of the oil development in the state of Nevada is within the study area, therefore it can be assumed that the distribution to counties in the study areas was significant, particularly for Nye County where a majority of development is located.

Sustainable Development

Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Goals for the BLM in the state of Nevada encourage sustainable development practices. For example, one of the long-term goals of the Nevada BLM is to create opportunities for Nevada's communities through the use of public lands and their resources. This goal is to be balanced against the Nevada BLM vision to preserve the character of the landscape, preserve cultural and social values, and protect ecosystems, all while maintaining access to the important resources found on public lands.

Table 2-7
Study Area Federal Mineral Lease Revenues
Disbursement (Geothermal Lease Revenue)*
(Fiscal Year 2010)

County	Total
Esmeralda County	\$380,625
Eureka County	\$12,969
Lander County	\$148,106
Nye County	\$140,913

Source: ONRR 2011

*County breakdown not available for other lease revenue

This vision is similar in purpose to the goals of sustainable development, and illustrates how, in several ways, many of the tenets of sustainable development have already been implemented into BLM land management. A BLM RMP ensures that lands are managed in accordance with law, that goals for the resource are set, and ways these goals are to be met are agreed upon; within the process of preparing an RMP lies the opportunity to implement sustainable development by determining the allowable activities in the planning area.

The BMDO has initiated a sustainable development working group to determine how the public lands in the planning area might be best managed and developed. Due to the long history of mining in the area, re-use of previously disturbed lands is of key interest. It is therefore suggested that the RMP include viable options for changes in land status of disturbed mined land to allow productive post-mining land use. One example includes the allowance of other post-mining land uses as part of the initial permitting process.

To monitor the progress of an implemented course of action toward sustainable development, it is necessary to develop a set of indicators. Sustainable development indicators can give an idea of whether or not a set of actions are leading to the desired outcome. In a RMP sustainable development can be measured through the contribution made by the RMP to the economic, social, and environmental benefits to the region. Through the selection of appropriate indicators, the benefits of sustainable development can be quantified, and progress toward sustainability measured. Indicators are further discussed in **Chapter 6**, Economic Impact Analysis Strategy.

Agriculture and Livestock Grazing

Agriculture and in particular livestock grazing has traditionally played a role in the study area and continues to be important today. There were 362 farms totaling 1,238,342 acres in the study area in 2007 (US Department of Agriculture, National Agricultural Statistical Service 2007). Agricultural data are represented in **Appendix A, Table A-17**, Study Area Agricultural Data (2008). BLM management actions have the potential to influence farming due to the purchase of farmland.

Livestock grazing, grazing authorizations, and livestock uses are measured in AUMs. An AUM is the amount of dry forage required to sustain one “animal unit” for one month; this equates to a forage allowance of 26 pounds per day. For authorization calculation purposes, an animal unit is one cow and her calf, one horse, or five sheep or goats. Depending on the composition and weight of animals in the herd, actual forage use may vary. The BLM-administered range in the planning area is permitted at a level of 368,078 AUMs of forage (BLM 2011g, AMS). This figure includes 362,869 active AUMs and 5,209 AUMs of temporarily suspended use. In 2009, approximately 90 percent of the allotment permits were for cattle, 10 percent for sheep, and less than one percent for horse grazing. There are 85 allotments that are used by 74 livestock operators (BLM 2011g, AMS).

The BLM calculates federal grazing fees annually in March based on a formula that is calculated using the 1966 base value of \$1.23 per AUM for livestock grazing on public lands in western states. Annual adjustments are based on three factors: current private grazing land lease rates, beef cattle prices, and the cost of livestock production. The federal grazing fee for 2011 is \$1.35 per AUM. The grazing fee has been at this level since 2007 (BLM 2011d).

Generally, there is a correlation between ranch land values and federal grazing permits, with ranches that hold such permits having a higher value (Winter and Whittaker 1981). This value is based on the premise that the permit’s value reflects, at least to some extent, the capitalized difference between the grazing fee and the competitive market value of federal forage. It also reflects the requirement for the permittee to hold private base property to which the federal permitted use is attached, giving the base property holder priority for renewal over other potential applicants. This value is recognized by lending institutions during a loan process and by the Internal Revenue Service when a property transfer occurs.

Permit values fluctuate based on market forces but generally depend on the number of AUMs and other terms of the lease or permit. Permit values may vary widely, depending on the location and the estimated average value of replacement forage. In 2011, the average fee per AUM on private lands in Nevada was \$11.00 (US Department of Agriculture, National

Agricultural Statistical Service 2011a). Based on 368,078 active (including temporarily suspended) AUMs in the planning area, the total annual grazing value of all traditional leases would be approximately \$4,048,858. Under the current federal rate of \$1.35 per AUM, the comparative total annual grazing fee would be \$496,906 which is \$3,551,953 less than the private grazing fee for all authorized grazing in the planning area.

Livestock grazing on public land continues to be important to local economies within Nevada. **Appendix A, Table A-17**, Study Area Agricultural Data (2008), presents the value of livestock sales for 2007, the year of the most recent Census of Agriculture.

Local Government Revenues

Payments in Lieu of Taxes

PILT are federal payments to local governments that help offset losses in property taxes due to nontaxable federal lands within their boundaries. Congress appropriates PILT annually, and the BLM administers disbursement to individual counties. PILT are determined according to a formula that includes population, the amount of federal land within the county, and offsets for certain federal payments to counties, such as timber, mineral leasing, and grazing receipts. PILT payments are transferred to state or local governments, as applicable, and are in addition to other federal revenues, including those from grazing fees. The study area counties received nearly \$4.0 million in PILT in 2009 (**Table 2-8**, Study Area PILT (Fiscal Year 2010)).

Table 2-8
Study Area PILT (Fiscal Year 2010)

Location	PILT Amount
Esmeralda County	\$100,926
Eureka County	\$ 275,208
Lander County	\$ 806,114
Nye County	\$ 2,810,172
Study Area Total	\$3,992,420
Nevada	\$ 22,753,204

Source: US Department of the Interior 2011

Money may also be transferred to state and local governments due to BLM activities. Activities including land sales and exchanges and fees collected from the Taylor Grazing Act totaled over \$430,000 for Fiscal Year 2009. Refer to **Table 2-9**, BLM Payments to States and Local Governments, Fiscal Year 2009 (2010 \$s).

Table 2-9
BLM Payments to States and Local Governments, Fiscal Year 2009

Location	Total BLM Payments	Proceeds of Sales	Taylor Grazing Act
Esmeralda County	\$11,848	631 (5.3%)	11,217 (94.7%)
Eureka County	\$119,319	259 (0.2%)	119,060 (99.8%)
Lander County	\$161,028	5,966 (3.7%)	155,062 (96.3%)
Nye County	\$143,827	12,029 (8.4%)	131,798 (91.6%)
Study Area Total	\$436,021	18,884 (4.3%)	417,137 (95.7%)

Source: BLM 2009

CHAPTER 3

SOCIAL CONDITIONS

The BMDO encompasses a geographically and socioeconomically varied region. The approximate 10.5 million acres of land that BLM administers within the BMDO is sparsely populated with considerable mining and agricultural economies. The population is diverse and ranges from multigenerational families to seasonal retirees and weekend tourists to temporary residents that work in the agricultural and mining industry. Regardless of their longevity to the region, most residents have a strong connection to public lands – administered by the BLM, the US Forest Service, and other entities – that surround and encompass their community, and view them as playing a significant role in their personal quality of life. For local residents, these lands provide economic opportunities, recreation, open space, a connection to the western historic landscape, and other intangible benefits.

Current social issues related to public land management in the planning area include continued importance of the local energy and mineral extraction industries as well as the agricultural industry, the potential for the development of renewable energy and its implications, and the adaptation of local culture and infrastructure that may be essential to accommodating more retirees and tourists. Additional social themes identified include a desire to effectively manage water resources and maintaining a positive relationship between government offices and local residents. This chapter describes the communities and interest groups whose social or economic interests are tied to public lands.

3.1 STUDY AREA COUNTIES AND COMMUNITIES

As discussed in **Chapter I**, Introduction, the socioeconomic study area contains communities with diverse social and economic values. Groups and individuals who have similar values but may not represent a physical community or region are discussed in **Section 3.2**, Affected Groups and Individuals.

The socioeconomic study area is generally of rural character with large tracts of public lands. The largest cities within the planning area are Battle Mountain (population 2,871 in 2000) and Tonopah (population 2,627 in 2000). In total, approximately 52,491 people resided within the socioeconomic study area in 2010. It should be noted that some of this population is located in cities outside of the BMDO boundaries. For example, the city of Pahrump comprises a significant proportion of the population of Nye County yet lies outside of the Battle Mountain District Office.

The communities next to BLM-administered public lands are an important component of the planning area's socioeconomic makeup. Residents in these communities may recreate on public lands and benefit directly from the resources on public lands. Many communities in the planning area are dependent on natural resources for their economic livelihood, including everything from passive non-consumptive uses (e.g., off-highway vehicle recreation) to traditional resource extraction (e.g., mining).

3.2 AFFECTED GROUPS AND INDIVIDUALS

In addition to those living within the planning area, there are specific groups to whom management of public lands is of particular interest. These include private livestock grazing lessees and area ranchers, mineral estate owners, oil and gas leaseholders, and renewable energy leaseholders. Furthermore, special interest groups and individuals who represent resource conservation or resource use perspectives constitute additional groups with an interest in planning area public lands management. Refer to **Chapter 4**, Economic Strategy Workshops, for more information on the social values of affected groups and individuals.

3.2.1 Ranchers and Livestock Grazing Lessees

Ranching and agriculture are an important part of the planning area's history, culture, and economy. Ranchers face such challenges as fluctuating livestock prices, increasing equipment and operating costs, fluctuating water availability, and changing federal regulations. Additional income sources are often necessary to continue ranching, and ranchers or their family members may also work in other sectors of the economy. Agriculture and livestock grazing are historical uses of public lands in the planning area and continue to be important to the way of life and economy in the region, particularly for certain areas. In 2008, for example, farm jobs accounted for 7.8 percent of total employment in Esmeralda County. In the same year, farm jobs accounted for 1.8 percent of total employment in Nye County; 3.7 percent of total employment in Lander County; and 3.3 percent of total employment in Eureka County (Headwaters Economics 2011).

3.2.2 Private Landowners

Neighboring landowners adjacent to public lands are an important group to consider in the planning process. Based on comments at the economic workshop, there is concern among some local area residents regarding the lack of private land available for commercial and residential development. In addition, local private landowners are concerned about how the development on public lands may impact the quality or quantity of local natural resources, in particular, water. Additional planning issues of importance to private landowners include rural lifestyle preservation.

3.2.3 Minerals and Oil and Gas Leaseholders

Development of mineral resources is the main driver of the economy throughout much of the planning area. Mineral estate leases cover the various extractable minerals found within the planning area, including gold, silver, copper, molybdenum, barite, vanadium and lithium. Details of the contributions of these resources are discussed in **Chapter 2**, Regional Demographics and Economic Context. Leaseholders are particularly interested in keeping restrictions on leasing minimal in order to keep and costs and delays of production low.

3.2.4 Renewable Energy Leaseholders

Due to increasing fossil fuel prices and federal incentives for renewable energy development, interest in non-traditional energy leasing opportunities on public lands is of increasing importance. Renewable energy resources available in the planning area include geothermal, solar, and wind. Renewable energy leaseholders would be interested in management direction that supports development of these resources in a timely, cost-efficient manner.

3.2.5 Right-of-way Holders

The BMDO currently manages rights-of-way for land uses such as roads, power lines, natural gas pipelines, water lines, telephone lines, communication sites, and ditches and canals on public land. Renewable energy rights for wind and solar area also granted as rights-of-way leases. Right-of-way holders are primarily concerned with continued access to right-of-way lands. Requests for rights-of-way are likely to increase in the next 20 years due to increased interest in renewable energy and the potential for growth and development. As energy development continues, energy rights-of-way, such as electric transmission lines and regulations that allow for right-of-way access and use, are likely to increase in importance.

3.2.6 Recreational Users

Recreational visitors to the planning area include both local residents and those who are traveling through the area to get to Las Vegas, Reno, central California, Salt Lake City, or locations across the west. Approximately 52,500 people live within the four county study area, and many of these residents utilize public lands for recreational activities such as off-highway vehicle use, horseback riding, hiking, mountain biking, camping, fishing, and hunting.

3.2.7 Individuals and Groups Who Prioritize Resource Protection

Various individuals and groups at the local, regional, and national levels are interested in how the BLM manages public lands. Many of their concerns regard wildlife, water quality, and visual quality. They value public lands for open space, wildlife, recreation, scenic qualities among other aspects. Non-profit organizations, such as The Wilderness Society, with a stake in wildland preservation, have cited the importance of including an assessment of the non-market benefits provided by public lands in the socioeconomic analysis for the RMP/ EIS. Non-market benefits include ecosystems services such as clean air and water, as well as the values of open space for the local community.

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CHAPTER 4

ECONOMIC STRATEGY WORKSHOPS

On June 14 and 16, 2011, the BMDO hosted two economic strategy workshops in Battle Mountain and Tonopah, Nevada, respectively. In total, 22 citizens, local government representatives, and local interest group representatives attended the workshops. The purpose of these workshops was to obtain input on how local populations interact with public lands. The BLM intends to complete a collaborative, community-based RMP that reflects careful consideration of the local and regional factors unique to the Battle Mountain District Office RMP planning area. To this end, these workshops provided an opportunity for stakeholders from local communities to participate in the planning process. Attendees discussed economic trends in the region and developed visions for the economic future of their communities. The attendees also discussed how BLM management of public lands is tied to the economy in local communities and in the region as a whole. Detailed records of the workshops, including notes and record of attendees, are included in **Appendix B**, Economic Workshop Records.

4.1 ECONOMIC TRENDS AND LONG-TERM VISIONS

At the workshops, current and historical socioeconomic data were provided for study area socioeconomic conditions by county. Sources of data include the Headwaters Economic Profile System, US Census Bureau, Bureau of Economic Analysis, Nevada State Demographer's Office, and other local sources. Data were presented for demographics, employment sectors, unemployment, housing, and income. Natural resource economic data for the study area, including those for agricultural and mining production, were presented. BLM land ownership and specific contributions to the local economies, such as receipts from recreation fees, grazing fees, and rights-of-way were presented.

To determine what the workshop participants envision for the local economy in the coming years, regional potential evaluations were completed in small groups at both workshop locations. These forms attempted to capture the desired long-term conditions for planning area communities. Workshop participants first rated each item on the form individually from 1 to 5 in importance for the local and regional economy, with five being the highest importance.

It should be noted that the regional potential evaluations were different for each of the two socioeconomic workshops. The workshop held in Battle Mountain ranked items for their importance (on a scale of 1 to 5, 5 being the most important) based on four criteria: significance to the Mount Lewis Field Office; significance to the Tonopah Field Office; opportunities; constraints. The regional workshop held in Tonopah ranked items for their importance based on three criteria: significance to the BMDO (current and future value); opportunities; constraints.

The results of the regional potential evaluations were assessed and mean values were calculated with regards to each item of interest. Group discussions at the workshops focused on data sets presented at each workshop, as well as the value placed on items of interest in the regional

potential evaluations. Additionally, group discussion delved into the importance of certain industries to the local economy, as well as natural resource concerns and demographic trends.

Summaries of the regional potential evaluations, as well as discussion notes, are included for each workshop in **Appendix B**, Economic Workshop Records. Input from each workshop location has been consolidated and is represented in **Tables B-2 and B-3**, Summary of Regional Potential Evaluations. It should be noted that this exercise represents only one method of input from the communities; the consensus regional potential evaluations are not likely to represent all the views of all participants and do not attempt to predict BLM management direction. Additionally, it should be noted that the criteria for the regional potential evaluations varied between workshops as described above. This was decided via discussion between workshop participants and leaders after the first workshop in Battle Mountain.

4.2 ROLE OF PUBLIC LANDS IN LOCAL COMMUNITIES

4.2.1 Connection Between BLM Lands and Local Communities

Workshop participants discussed specific uses of public lands. The current and desired future uses varied by community. The communities within the planning areas and within each county have diverse resources, constraints, and priorities. For example, the three Esmeralda County representatives described the various conditions for each of three county districts. One district is constrained by lack of private land, while another district is constrained by a lack of water and the third by a lack of population. Desired future conditions are explored in the regional potential evaluations discussion (**Section 4.1**, above). Based on the workshop discussions, mining, livestock grazing, and government offices were seen as key current uses of public lands. Mining is a critical driver of the economy throughout BMDO. Local communities are heavily dependent on this source of employment to support local retail. Livestock grazing represents another important historical and current use of public lands. Government offices help to provide stability and employment, which is useful for communities, especially considering the boom and bust nature of the large mining economy. Recreation, tourism, and retirees are also seen as integral parts of the regional economy.

In addition to inherent integral parts of the economy, such as mining and agriculture on BLM lands, participants stressed the importance of roads on BLM lands. Public lands play an important role in both motorized and nonmotorized recreation for planning area communities, workshop participants suggested that historical roads should be kept open, and that local people should be considered with regards to road access. Additionally, workshop participants expressed concerns about water as a resource, citing issues of over-allocation in certain counties. Participants stressed the importance of responsible water usage with regards to renewable energy projects. For example, David Sweetman, of the Esmeralda County Land Use Advisory Committee, suggested that dry cooling be used in place of wet cooling in any concentrated solar power project in order to mitigate water consumption.

The planning area communities have a strong connection with BLM lands; the BLM currently communicates with counties over planning issues and participants expressed desire for this trend to continue and improve. Specific directions for BLM management are included below in **Section 4.2.2**, Recommendations for BLM Management Direction.

4.2.2 Recommendations for BLM Management Direction

Workshop participants were asked how the BLM can partner with the regional community to help it reach its potential. Specific BLM management actions or directions were identified that would help communities reach the desired outcomes or expectations for public lands in the region. Workshop participants urged the BLM to recognize the unique needs of the different planning area regions. Key points from recommended actions are summarized as follows:

- Consider the impacts of project siting and water consumption before any renewable energy development. Any large scale projects (whether renewable or not) should consider overall impacts to the local community. Dry cooling was suggested by workshop participants to mitigate water consumption with regards to solar energy. Participants also requested that transmission lines for new renewable projects be clustered as to mitigate extent of impacts.
- Consider the importance of recreation and determine ways to heighten recreational values. For example, one Commissioner for Esmeralda County has attempted to receive a Recreation and Public Purposes Act lease from the BLM to be able to stock Silver Lake with fish.
- Work to perform environmental restoration on environmentally damaged areas such as abandoned mines; rehabilitate natural seeps and springs; clean up noxious weeds. Reimburse counties for costs of environmental damage.
- Attract and retain government services: workshop participants appreciate the proximity of BLM field offices to local communities, as they often provide employment opportunities. Participants stressed that they would like to have more government facilities in their communities.
- Widen Cumulative Effects Study Areas in BLM Environmental Assessments and EISs to consider a broader area of cumulative effects.
- Emphasize collaboration with the local community, government, and interest groups. Engage key community leaders. Participants expressed a general sentiment that communication with the counties should continue and improve. In the creation of any land management plans, participants urged the BLM to be diligent about communicating with counties in the BMDO.
- BLM should set up training for its newly hired staff in local culture, attitudes, and economy.
- Continue to keep historical roads open; allow local residents to be considered for road access. Continue to allow access to public lands.
- Maintain flexibility in the permitting process in order to be adaptable to changes in industry. Keep language of managerial documents open-ended as to explore secondary uses of a project site, aside from just reclamation, after a project is exhausted.
- Expedite environmental assessment documents whenever possible. Namely, streamline NEPA and the land use permitting process in order to move projects

along. Additionally, consider adding to the RMP land availability for projects, as well as lands identified for disposal.

Complete economic strategy workshop records, including regional potential evaluations and workshop summaries are included in **Appendix B**, Economic Workshop Records.

CHAPTER 5

ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, requires that federal agencies identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Guidance for evaluating environmental justice issues in land use planning is included in the BLM planning handbook, Appendix D (BLM 2005). Environmental justice refers to the fair treatment and meaningful involvement of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws, regulations, programs, and policies. It focuses on environmental hazards and human health to avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations. Low-income populations are defined as persons living below the poverty level based on total income of \$11,136 for an individual and \$22,314 for a family household of four for 2010, based on preliminary data (US Census Bureau 2010). Black/African American, Hispanic, Asian and Pacific Islander, American Indian, Eskimo, Aleut, and other non-White persons are defined as minority populations.

5.1 LOW-INCOME POPULATIONS

The planning area is characterized by a diverse range of incomes, and incomes have increased for all counties as well as for the state of Nevada since 2000. In 2000, all counties within the BMDO planning area fell below state levels for median household income and per capita income. Also in 2000, Esmeralda and Nye Counties were both above the state level for persons below poverty level, at 15.3 and 10.7 percent, respectively (US Census Bureau 2000). Estimates from 2005-2009 averages indicate that Lander and Nye Counties had relatively high percentages of persons below poverty level (16.0 and 16.2 percent, respectively) when compared to the state average of 11.1 percent. In contrast, Esmeralda and Eureka Counties fell below the state average of persons below poverty level, at 6.9 and 4.8 percent, respectively.

Estimates from 2005-2009 averages indicate that Esmeralda and Eureka Counties had per capita incomes (\$30,763 and \$29,080, respectively) that were above the state level of \$27,395. Lander and Nye Counties fell below the state level at per capita income values of \$23,233 and \$21,283, respectively. Estimates from 2005-2009 averages ranged significantly for median household income. Only Eureka County (\$61,472) had a median household income that was above the state of Nevada's (\$55,585). Nye County had the lowest median household income, of \$42,192 (US Census Bureau 2000; US Census Bureau 2009). See **Appendix A, Table A-9**, Study Area Income Distribution (2000 to 2005-2009 Comparison), for more details of study area counties.

5.2 MINORITY POPULATIONS

The social and economic context of the study area varies among the four counties. **Table 5-1**, Study Area Population by Race/Ethnicity (2010), describes the estimated 2010 racial and ethnic composition of the study area. In 2010, approximately 73.5 percent of Nevada's population was identified as White and not of Hispanic or Latino origin. People of Hispanic or Latino descent (of any race) accounted for 26.5 percent of the total state population (US Census Bureau 2010). In the study area as a whole, approximately 78.5 percent of the total population was identified as White and non-Hispanic/Latino origin in 2010. Hispanics/Latinos of any race accounted for more than 14 percent of the total study area population. Of this group, the majority identified themselves as white (8.8 percent of total population), or some other undefined race (6.7 percent of total population).

Table 5-1
Study Area Population by Race/Ethnicity (2010)

Population	Esmeralda County	Eureka County	Lander County	Nye County	Study Area Total	Nevada
Not Hispanic or Latino, by Race						
Total	663 84.7%	1,749 88.0%	4,556 78.9%	37,979 86.4%	44,947 85.6%	1,984,050 73.5%
White alone	605 77.3%	1,662 83.6%	4,259 73.7%	34,663 78.9%	41,189 78.5%	1,462,081 54.1%
Black or African American alone	0 0.0%	2 0.1%	17 0.3%	836 1.9%	855 1.6%	208,058 7.7%
American Indian or Alaskan Native alone	33 4.2%	42 2.1%	197 3.4%	592 1.3%	864 1.6%	23,536 .09%
Asian alone	3 0.4%	18 0.9%	20 0.3%	547 1.2%	588 1.1%	191,047 7.1%
Native Hawaiian and Other Pacific Islander alone	0 0.0%	0 0.0%	1 0.0%	179 0.4%	180 .03%	15,456 .06%
Some other race	1 0.2%	1 .1%	0 0%	53 0.1%	54 .1%	4,740 .2%
Hispanic or Latino, by Race						
Total	120 15.3%	238 12.0%	1,219 21.1%	5,967 13.6%	7,554 14.4%	716,501 26.5%
White alone	56 7.2%	113 5.7%	594 10.3	3,092 7.0%	3,855 7.3%	324,607 12%
Black or African American alone	0 0%	0 0%	3 0.1%	38 0.1%	41 0.1%	10,568 .4%

**Table 5-1
Study Area Population by Race/Ethnicity (2010)**

Population	Esmeralda County	Eureka County	Lander County	Nye County	Study Area Total	Nevada
American Indian or Alaskan Native alone	0 0%	5 0.3%	45 0.8%	111 0.3%	161 0.3%	8,526 .3%
Asian alone	0 0%	0 0%	1 0%	25 0.1%	26 .05%	4,389 0.2%
Native Hawaiian and Other Pacific Islander alone	0 0%	0 0%	0 0%	32 0.1%	32 .1%	1,415 .0%
Some other race	51 7.2%	100 5.0%	496 8.6%	2,220 5.1%	2,866 5.5%	320,053 11.9

Source: US Census Bureau 2010

Note: The sum of the six race groups may add to more than the total population because individuals may report more than one race.

Table 5-1, Study Area Population by Race/Ethnicity (2010), shows that Lander County was the most diverse county in the planning area with approximately 21 percent of the population of Hispanic/Latino origin. All other counties in the planning area had a smaller proportion of people who identified themselves as Hispanic/Latino, ranging from 12 percent in Eureka County to just over 15 percent in Esmeralda County. All counties in the planning area were well below the state level of 26.5 percent Hispanic/Latino origin (US Census Bureau 2010).

People in the majority of the planning area identified themselves as white; a total of 85.6 percent of the population of non Hispanic-Latino descent identified themselves as white. Other races represent a significantly smaller segment of the population. A total of 864 people or 1.6 percent of the study area population identified themselves as American Indian or Alaskan Native alone of and of non Hispanic-Latino descent; 855 people, also 1.6 percent, identified themselves as Black or African American alone. A total of 588 people (1.1 percent) identified themselves as Asian alone, and 180 people (.03 percent) identified themselves as Native Hawaiian and Other Pacific Islander alone (US Census Bureau 2010). Of those of Hispanic-Latino descent, the majority of identified themselves as white (14.4 percent of total study area population). Those of Hispanic-Latino descent and racial minorities comprised less than one percent for American Indian or Alaskan Natives, Black or African Americans, Asians and Native Hawaiian or Other Pacific Islanders (US Census Bureau 2010).

Due to low population levels, Esmeralda, Eureka, and Lander Counties each contain a single census tract for each county, therefore county data is representative. For Nye County, 2010 race and ethnicity data is not currently available at the census tract level, however, impacts on individual communities and census tracts within Nye County are represented in **Table 5-2**, Nye

County Census Tracts by Race/Ethnicity (2010), below, and generally reflect trends seen in county-wide data, the one exception is census tract 9603, which has 35 percent Hispanic/Latino population.

**Table 5-2
Nye County Census Tracts by Race/Ethnicity (2010)**

Geography	Tract 9601	Tract 9602	Tract 9603	Tract 9604.01	Tract 9604.02	Tract 9604.03	Tract 9604.04	Tract 9604.05	Tract 9604.06
Total population	2,330	2,545	2,488	6,158	5,192	5,405	7,522	3,929	8,377
Hispanic or Latino, by Race									
	244	219	817	776	667		1105	540	
Total Hispanic/Latino	<hr/>								
	10.4%	8.6%	32.8%	12.6%	10.8%		14.7%		
White	111 4.8%	125 4.9%	520 20.9%	357 5.8%	266 5.1%	329 6.1%	485 6.4%	280 7.1%	619 7.4%
Black or African American	0 0%	0 0%	0 0%	2 0.0%	10 0.2%	8 0.1%	11 0.1%	7 0.2%	0 0%
American Indian or Alaskan Native	33 1.4%	4 .2%	0 0%	14 0.2%	19 0.4%	5 0.1%	16 0.2%	10 0.3%	10 0.1%
Asian	0 0%	0 0%	2 0.1%	4 0.1%	4 0.1%	4 0.1%	6 0.1%	2 0.1%	3 0.0%
Native Hawaiian and Other Pacific Islander	0 0%	1 .0%	0 0%	3 0.0%	6 0.1%	10 0.2%	9 0.1%	3 0.1%	0 0.0%
Some other race	87 3.7%	65 2.6%	277 11.1%	328 5.3%	311 6.0%	356 6.6%	264 3.5%	195 5.0%	337 4.0%
Not Hispanic or Latino, by Race									
			1,671	5,382					
Total not Hispanic/Latino	<hr/>								
			67.2%	87.3%					
White	1,762	2,163	1,556	4,906	4,207	4,258	6,021	3,134	6,656

	84.4%	93.0%	93.1%	91.2%	93.0%	91.5%	90.8%	92.5%	91.0%
Black or African American	6 .3%	72 3.1%	12 1.3%	132 2.5%	50 1.1%	118 2.5%	194 2.9%	56 1.7%	196 2.7%
American Indian or Alaskan Native	232 11.1%	17 0.7%	21 1.3%	57 1.1%	47 1.0%	61 1.3%	47 0.7%	30 0.9%	80 1.1%
Asian	16 0.8%	14 0.6%	20 1.2%	80 1.5%	63 1.4%	54 1.2%	104 1.6%	45 1.3%	151 2.1%
Native Hawaiian and Other Pacific Islander	1 0%	6 0.3%	1 0%	29 0.5%	21 .05%	13 0.3%	45 0.7%	24 0.7%	39 0.5%
Some other race	1 0.0%	5 0.2%	1 1.0%	13 0.2%	6 0.1%	4 0.1%	6 0.1%	1 0.0%	16 0.2%

Source: US Census Bureau 2010

Census tract 9805 has a population of 0 and is not included in this table

Note: The sum of the six race groups may add to more than the total population because individuals may report more than one race.

5.3 NATIVE AMERICAN POPULATIONS

Data in Table 5-1, Study Area Population by Race/Ethnicity, indicate that Native Americans (and Alaskan Natives) account for a small percentage of the study area population. Members of the Shoshone and Paiute tribes traditionally have lived in and around the study area. A total of 864 individuals, or 1.6 percent of the study area population, identify themselves as Native American or Alaskan Native (US Census Bureau 2010).

5.4 NATIVE AMERICAN POPULATIONS

Data in Table 5-1, Study Area Population by Race/Ethnicity, indicate that Native Americans (and Alaskan Natives) account for a small percentage of the study area population. Members of the Shoshone and Paiute tribes traditionally have lived in and around the study area. A total of 864 individuals, or 1.6 percent of the study area population, identify themselves as Native American or Alaskan Native (US Census Bureau 2010).

Policies established in 2006 by the BLM and US Forest Service, in coordination with federal tribes, ensure access by traditional native practitioners to area plants. The policy also ensures that management of these plants promotes ecosystem health for public lands. The BLM is encouraged to support and incorporate into their planning traditional native and native practitioner plant-gathering of plants for traditional use (Boshell 2006).

5.5 ENVIRONMENTAL JUSTICE POPULATIONS AND RMP ANALYSIS

Due to the low percentage of individuals in minority groups or low income populations in the planning area overall, it is not likely that considerations for environmental justice populations will require modification of RMP alternatives or mitigation measures.

For all geographic areas examined in the study area, the percentage of minority individuals or individuals below poverty level does not exceed the national average by 20 percentage points or more or 50 percent of the total population, meaning that the counties do not have a minority population according to CEQ guidelines. Impacts on regional and local environmental justice populations will be addressed in the RMP/EIS following standards and guidelines set forth in Executive Order 12898 and BLM planning manual Appendix D (BLM 2005).

CHAPTER 6

ECONOMIC IMPACT ANALYSIS STRATEGY

6.1 INTRODUCTION

The BMDO rests in the heart of Nevada and represents well the remoteness of the landscape between population centers. There is an abundance of selected mineral resources within the district boundary which allows for considerable economic activity which supports the local economy. Results from the economic strategy workshops held in June 2011 depict communities who wish to retain access to public lands and existing features of the natural landscape while diversifying economic opportunities. Some issues apply for the study area as a whole while some are location-specific. Key Issues are presented below.

6.2 KEY ISSUES RELATED TO BLM MANAGEMENT IDENTIFIED BY GEOGRAPHIC LOCATION

Management recommendations for the BMDO were provided during the economic strategy workshops held in Battle Mountain and Tonopah, Nevada, and are summarized in Section 4.2.2. This section outlines the socioeconomic concerns identified during the workshops specific to the Mount Lewis and Tonopah Filed Office Management Areas. These concerns are not intended to be a list of issues but rather provide a theme for evaluating each individual area and examining the collective impacts by alternative BLM management actions.

Mount Lewis Field Office:

- Maintaining and improving diversity in the local economy; diversifying the local economy helps stimulate economic well-being, while maintaining the same way of life and retaining local ownership of “mom and pop” stores.
- Dependency on government; community dependency on PILT funds for local government budgets is a concern, as is lack of private lands for development.
- Potential for development; local communities should evaluate whether to develop local retail or promote industrial development in the long term and the factors associated with that development.
- Potential for retirees recruitment; communities should continue to evaluate the role that a greater retired population could contribute to local economic well-being and develop as an industry.
- Retaining government offices; there is local consensus that retaining government offices locally provides stability to the local economy.
- Flexibility in the BLM permitting process. There is a desire for more flexibility in the process, specifically, once a certain project or operation has completed its lease term, there would be the ability to pursue secondary uses of the lease area if the benefits exceeded the costs; thus postponing reclamation until all beneficial opportunities have been exhausted.

- Cooperation between government and local communities. Economic workshop participants expressed interest in the idea of streamlining the NEPA process. Additionally, participants desire the RMP to include land available for “land swap” and/or the “checkerboard” land identified for disposal.

Tonopah Field Office

- Water availability is an overriding issue for any development occurring in the area. Water over-allocation limits opportunities.
- Mining regulations and permitting; mining is important to the local economy, yet it takes years to get permits and there is much bureaucracy to contend with.
- Energy development. Energy development boasts both challenges and opportunities. There is consent that wind generation does not offer substantial employment opportunities beyond the construction phase.
- Industry opportunities. Participants expressed desire for opportunities for small-scale manufacturing and other non-agricultural based industries in the region.
- Tourism opportunities; there is potential to develop tourism however, there is local resistance to tourists and there is a lack of tourist services.
- Recreation opportunities; considerable recreational opportunities exist in the region, including hunting, fishing and hiking. Some activities, such as bird watching, have the potential to attract retirees and provide economic benefits to the area. Additional infrastructure, such as a packing station, would add to these opportunities.
- Retaining government offices; government offices support local economic activity and provide services.
- Environmental Restoration; opportunities include restoration of abandoned mines (retaining some mines for tourism opportunities), rehabilitation of natural seeps and springs, and the cleanup of noxious weeds.

6.3 KEY INDICATORS FOR ANALYSIS

Key indicators that will be used in the socioeconomic impact analysis in the EIS are listed below. Changes to these indicators will be measured based on BLM management alternatives proposed in the EIS.

Public Land Contributions

- Recreation Use
- Hunting and Fishing Visitor Days and/or Visitor Use Numbers
- Other Recreation Visitor Days and/or Visitor Use Numbers
- Grazing Animal Unit Months
- Alternative Energy Development and Production

- Oil Production (barrels)
- Geothermal production
- Minerals (salables, other leasable, locatables)
- Environmental/Ecological Restoration (acres)
- Land Use and Rights-of-way (acres)
- Ecosystem services

Social and Economic Contributions

- Population (growth projections)
- Changing Demographics (selected indicators)
- Employment (numbers by sector)
- Income (personal income)
- Ethnic and Racial Characteristics of the Region
- Subsistence Contributions
- Open space (land enhancement value and attracting non-labor income)

6.4 ANALYTICAL METHODS TO BE USED

The study area will be broken down using a tiered approach: (1) a four-county study area; (2) the RMP planning area; and (3) regions of the BMDO as appropriate. Data, where available, will be broken down in the same configuration. Community level data will be provided if available and if they add meaning to the analysis. One to five years will represent the short-term analysis spectrum. The long-term analysis will make assessments through the planning horizon of 20 years.

6.4.1 Economics

Through the use of a regional input-output multipliers (such as the US Bureau of Economic Analysis' Recreation Management Information System II), an assessment of impacts to selected industrial sectors of the economy will be evaluated. These multipliers will be applied to changes in final demand resulting from the differing BLM management alternatives in the RMP. The results will measure the change in the level of output, employment, and income for those industrial sectors impacted by each action. Impacts will be measured by category and cumulatively in a regional setting. Additionally, an assessment of impacts to non-market values offered by public lands management will be evaluated. For a discussion of non-market values, refer to Section 2.3.2, Non-Market Values.

6.4.2 Social Conditions

Results from the economic analysis will be applied in measuring the social impacts. A narrative discussion of the impacts to communities and groups that results from a change to baseline conditions will measure social change. The analysis will be sensitive to those who are in local communities and to vulnerable groups (e.g., environmental justice populations) that may be impacted.

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CHAPTER 7

CONCLUSION

Large variations in the BMDO planning area make generalizations about social and economic conditions complex. The vast expanse of BLM land (approximately 10.5 million acres) that comprises the planning area naturally has varying resources, accessibility, and utilizations. These conditions influence the overall social and economic trends of the planning area. Additionally, two field offices, the Mount Lewis Field Office, and the Tonopah Field Office, exist within the planning area. Due to the large acreage of public lands in the four study area counties, the overall contribution of public lands to local economies is significant.

Influence of public lands at the local level is especially important, particularly in locations where public lands provide a source of employment, such as ranching, mining, or energy production; or a significant contribution to quality of life for local residents, such as recreational activities availability or open space preservation. Concerns differ between and even within counties, as resources and values are unique to individuals, individual communities and geographic locations. At the economic workshops, these unique concerns were discussed at length. At the Tonopah meeting, for example, representatives of Esmeralda County expressed concerns about three key communities within the county: Fish Lake Valley experiences weekend population spikes and is seeing a decline in agriculture; Goldfield has seasonal-summer spikes in population, and may see an increase in population if more gold mines open in the area; Silver Peak has a fairly static population, and although it does see some tourism, the town requires improvements in infrastructure in order to retain tourists' dollars. As such, local citizens' concerns, as reflected in the socioeconomic strategy workshops, will be analyzed during development of the Battle Mountain District Office RMP.

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CHAPTER 8

LIST OF PREPARERS

An interdisciplinary team of resource specialists from the BLM BMDO and contractors Environmental Management and Planning Solutions, Inc. (EMPSi) and Martin Economics prepared this socioeconomic baseline report.

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James Bode	Research and author
<i>Contractor – Martin Economics</i>	
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CHAPTER 9

REFERENCES

Bacigalupi, T. 2010. Ecosystem Services: their Value and Place in Land Use Planning. Wild Connections. Wildland Connections. Florissant, CO.

(BLM) US Department of the Interior, Bureau of Land Management. 1986. Shoshone-Eureka Planning Area Resource Management Plan.

_____. 1997. Tonopah Planning Area Resource Management Plan.

_____. 2005. Handbook H-1601-1—Land Use Planning Handbook. BLM, Washington, DC. March 11, 2005. 161 pp.

_____. 2006a. Oil and Gas Leasing within the Western Portion of the Shoshone-Eureka Planning Area. Environmental Assessment. Department of the Interior, BLM, Battle Mountain District Office. Battle Mountain, NV.

_____. 2006b. Estimated Recreational Use of BLM-Administered Public Lands for Recreation Activities under Various Fee Authorizations, Fiscal Year 2006. Internet Web Site: http://www.blm.gov/public_land_statistics/pls06/pls4-2_06.pdf. Accessed on November 3, 2011

_____. 2008. Oil and Gas Leasing within the Western Portion of the Shoshone-Eureka Planning Area. Environmental Assessment. Department of the Interior, BLM, Battle Mountain District Office. Battle Mountain, NV.

_____. 2011a. GIS database on file with BLM's eGIS server. Department of the Interior, BLM, Battle Mountain District Office. Battle Mountain, NV.

_____. 2011b. December 2011 Competitive Oil and Gas Lease Sale for the Battle Mountain District, Tonopah Field Office, Nevada. Environmental Assessment DOI-BLM-NV-B020-2011-0081-EA. Date: July 15, 2011. Available online at: http://www.blm.gov/pgdata/etc/medialib/blm/nv/field_offices/battle_mountain_field/blm_information/nepa/december_2011_competitive.Par.1730.File.dat/Dec_2011_OG_Lease_Sale_EA_Final.pdf. Accessed November 3, 2011.

_____. 2011c. The BLM, a Sound Investment for America. BLM/WO-GI/011/033+1800. Published February 2011. Available online: http://www.blm.gov/pgdata/etc/medialib/blm/wo/Planning_and_Renewable_Resources/planning_images/planning_image_folder.Par.46392.File.dat/InvestingInAmerica.pdf.

_____. 2011d. BLM and Forest Service Announce 2010 Grazing Fee. Internet Web site: http://www.blm.gov/ca/st/en/info/newsroom/2010/january/WO0915_2010Grazing_Fees.html. Last updated January 29, 2010. Accessed on March 10, 2011.

- _____. 2011e. Recreation Management Information System (RMIS), a BLM recreation database. Data from Fiscal Years 2005-2011. BLM, Battle Mountain District Office, Battle Mountain, NV. Unpublished data. Retrieved May 2011.
- _____. 2011f. Fiscal Year 2010 Receipts Data. BLM, Battle Mountain District Office, Battle Mountain, NV. Unpublished data. May 2011.
- _____. 2011g. Source Data as incorporated into the Draft Analysis of the Management Situation, Battle Mountain District Office, NV, 2009. Unpublished data. Accessed April 2011.
- _____. 2011h. BLM Battle Mountain District Office RMP Planning Fact Sheets: Mineral Resources; Renewable Energy. January 2011. Available at: http://www.blm.gov/nv/st/en/fo/battle_mountain_field/blm_information/rmp.html. Accessed April 6, 2011.
- (BLS) US Department of Labor, Bureau of Labor Statistics. 2011. Labor Force Data by County, 1990, 1995, 2000, 2005-2010 Annual Averages. Internet Web Site: <ftp://ftp.bls.gov/pub/special.requests/la/>. Accessed March 15, 2011.
- Boshell, Cynthia. Public Land Policy as a Cultural Empowerment Tool: The Federal Land Policy and Management Act of 1976 (FLPMA), with special emphasis on the California Traditional Gathering Policy. Internet Web Site: http://users.humboldt.edu/boshell/PDF/boshell_FLPMA.pdf. Accessed September 8, 2011.
- Brean, Henry. 2010. Las Vegas Review-Journal. Esmeralda County has few people, fewer jobs, but don't talk about consolidation. Internet Web Site: <http://www.lvrj.com/news/esmeralda-county-has-few-people--fewer-jobs--but-don-t-talk-about-consolidation-95716319.html>. Accessed November 2, 2011.
- Disaster Center. 2011. Nevada Law Enforcement Agency Uniform Crime Reports 1980 to 2005 for Esmeralda, Eureka, Lander, and Nye Counties. Internet Web Site: <http://www.disastercenter.com/nevada/crime/index.html>. Accessed November 2, 2011.
- Esmeralda County. 2010. Master Plan, Esmeralda County, Nevada. Draft Initiated by Esmeralda County Land Use Advisory Committee on 23 January 2010. Available at: http://www.accessesmeralda.com/Master_Plan.pdf.
- _____. 2011. Esmeralda County, Nevada Web Site: <http://www.accessesmeralda.com/>. Accessed May 16, 2011.
- Eureka County. 2003. Eureka County, Nevada Economic Development Program: E-Brochure. Web Site: <http://www.eurekacounty.com/brochure/brochure02.pdf>. Accessed May 17, 2011.
- _____. 2011a. Eureka County, Nevada Web Site: <http://www.co.eureka.nv.us/>. Accessed May 12, 2011.
- _____. 2011b. Eureka County Profile. Web Site: <http://www.eurekacounty.com/profile/profile02.pdf>. Accessed May 12, 2011.
- Fausold, C.J. and R.J. Lilieholm. 1996. The economic value of open space. *Land Lines* 8(5):1-4. September 1996.

- Haefele, M., P. Morton, and N. Culver. 2007. *Natural Dividends: Wildland Protection and the Changing Economy of the Rocky Mountain West*. Washington, D.C. The Wilderness Society.
- Headwaters Economics. 2011. Economic Profile System (EPS) Socioeconomic Profiles produced for Esmeralda, Eureka, Lander, and Nye Counties and 4 county aggregate. Internet Web site: <http://www.headwaterseconomics.org/eps/>. Data for Economic Profile System accessed on February 17, 2011.
- Lander County. 2001. Lander County, Nevada: Socioeconomic Impact Analysis of the Proposed Repository at Yucca Mountain. Accessed May 2, 2011. Available at: http://www.landercountynwop.com/documents/impact_report.pdf
- _____. 2011. Lander County, Nevada Web Site: <http://landercountynv.org/>. Accessed May 13, 2011.
- (NREL) National Renewable Energy Laboratory. 2011. Tonopah project status update. Available at: http://www.nrel.gov/csp/solarpaces/project_detail.cfm/projectID=60?print. Accessed November 3, 2011.
- National Mining Association. 2011. Historical Gold Prices – 1833 to Present. Internet Web Site: http://www.nma.org/pdf/gold/his_gold_prices.pdf. Accessed September 8, 2011.
- Nevada Commission of Mineral Resources. 2011. Division of Minerals. Oil Production in Nevada by Producing Fields 1954-2000. Available at: <http://minerals.state.nv.us/forms/ogg/OilProdinNVbyProducingField1954-2009.pdf>
- Nevada Energy. 2011. Nevada Energy, Renewable Energy, Geothermal Projects. 2011 NV Energy, Inc. Web Site: <http://www.nvenergy.com/renewablesenvironment/renewables/geothermal.cfm>. Accessed September 9, 2011.
- Nevada State Demographer's Office. 2011. Nevada County Population Projections, 2010 to 2030. October 1, 2011. Internet Web Site: <http://nvdemography.org/wp-content/uploads/2011/09/2011-Projections-Email-attachment-090911.pdf>. Accessed November 2, 2011.
- Nye County. 1994. Nye County Comprehensive Plan: April 5, 1994. Nye County Board of Commissioners. Internet Web Site: <http://www.nyecounty.net/DocumentView.aspx?DID=10894>. Accessed May 4, 2011.
- _____. 2003. Pahrump Regional Planning District: Master Plan Update: November 19, 2003. Internet Web Site: <http://www.nyecounty.net/DocumentView.aspx?DID=637>. Accessed May 2, 2011.
- _____. 2011. Nye County, Nevada Web Site: <http://www.nyecounty.net/>. Accessed May 3, 2011.
- (ONRR) Office of Natural Resources Revenue. 2011. Total Reported Royalty Revenues for Accounting Year 2010. County or Coastal Political Subdivision Disbursements – Federal Onshore Geothermal Revenue by County for Fiscal Year 2010. Internet Web Site: <http://www.onrr.gov/ONRRWebStats/ExportReport.aspx?report=StateOffshoreRegions&state=NV&name=Nevada&yeartype=FY&year=2010&datatype=AY>. Accessed May 4, 2011.
- Outdoor Industry Foundation. 2007. *State-Level Economic Contributions of Active Outdoor Recreation – Technical Report on Methods and Findings*. April 13, 2007. Prepared by Southwick Associates,

- Inc., for the Outdoor Industry Foundation. Available at: <http://www.outdoorindustry.org/pdf/ResearchRecreationEconomyStateTechnicalReport.pdf>. Accessed April 11, 2011.
- Tonopah Solar Energy. 2009. Crescent Dunes Solar Energy Project N-86292: Plan of Development, Submitted to BLM Tonopah Field Office. Updated May 15, 2009. Available online at: http://www.tonopahsolar.com/pdfs/Tonopah_Crescent_Dunes_POD_2009_11_23.pdf. Accessed November 3, 2011.
- US Census Bureau. 1995. Nevada, Population of Counties by Decennial Census: 1900 to 1990. Internet Website: <http://www.census.gov/population/cencounts/nv190090.txt>. Accessed May 4, 2011.
- _____. 2000. 2000 Census Summary Data. Internet Website: <http://www.census.gov/main/www/cen2000.html>. Accessed May 3, 2011.
- _____. 2009. American Community Survey Data 2005-2009. Internet Web Site: <http://www.census.gov/acs/www/>. Accessed April 5, 2011.
- _____. 2010. 2010 Census Summary Data. Internet Website: <http://2010.census.gov/2010census/data/>. Accessed May 3, 2011.
- US Department of Agriculture. 2009. National Agricultural Statistics Service, Census of Agriculture, Washington, D.C., Table 8.
- _____. 2011. 17 State Grazing Fees per Animal Unit. Internet Web Site: http://www.nass.usda.gov/Charts_and_Maps/Grazing_Fees/gf_am.asp. Last updated January 2011. Accessed March 15, 2011.
- US Forest Service (US Department of Agriculture, Forest Service). 2008. National Visitor Use Monitoring Results, National Summary Report. Last updated October 2008.
- (BEA) US Department of Commerce, Bureau of Economic Analysis, 2009. Regional Economic Information System Data from table CA91. Updated December 2010. Internet Web site: <http://www.bea.gov/regional/reis/>. Accessed March 11, 2011.
- _____. 2010. US Department of Commerce, Bureau of Economic Analysis, 2010. Regional Economic Information System Data from table CA04. Updated December 2010. Internet Web Site: <http://www.bea.gov/regional/reis/>. Accessed March 11, 2011.
- _____. 2010b. US Department of Commerce, Bureau of Economic Analysis, 2010. Regional Economic Information System Data from table CA45. Updated December 2010. Internet Web Site: <http://www.bea.gov/regional/reis/>. Accessed March 11, 2011.
- US Department of the Interior. 2011. Payment in Lieu of Taxes (PILT), County Payments and Acres Data for Fiscal Year 2010. Internet Web Site: <http://www.nbc.gov/pilt/pilt/search.cfm#search>. Accessed February 22, 2011.
- Winter, JR. and J.K. Whittaker. The Relationship Between Private Ranchland Prices and Public-Land Grazing Permits. *Land Economics*, 1981, 57:3, 414-21. Source: <http://www.allbusiness.com/government/government-bodies-offices-us-federal-government/12369135-1.html#ixzzIcaTDLhXU>

Appendix A

Study Area Demographic and Economic Data

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1 **APPENDIX A**
 2 **STUDY AREA DEMOGRAPHIC AND ECONOMIC**
 3 **DATA**

Table A-1
Study Area Population Density (2000–2010)

Location	Population 2000	Land Area 2000 (sq. miles)	Persons per square mile, 2000	Population 2010	Land Area 2010* (sq. miles)	Population Density 2010*
Esmeralda County	971	3,588.5	0.3	783	3,588.5	0.2
Eureka County	1,651	4,175.7	0.4	1,987	4,175.7	0.5
Lander County	5,794	5,493.6	1.1	5,775	5,493.6	1.1
Nye County	32,485	18,146.7	1.8	43,946	18,146.7	2.4
<i>Study Area Total</i>	40,901	31404.5	1.3	52,491	31404.5	1.7
State	1,998,257	109,826.0	18.2	2,700,551	109,826.0	24.6

Source: US Census Bureau 2000; US Census Bureau 2010

*2010 Land Area assumed to be the same as 2000; Population Density for 2010 uses 2000 land areas.

5

Table A-2
Study Area Population Totals (1980–2010)

Location	1980	1990	1980–1990 Percent Change	2000	1990–2000 Percent Change	2010	2000–2010 Percent Change	1980–2010 Percent Change
Esmeralda County	777	1,344	+72.97%	971	-27.75%	783	-19.36%	+0.77%
Eureka County	1,198	1,547	+29.13%	1,651	+6.72%	1,987	+20.35%	+65.86%
Lander County	4,076	6,266	+53.73%	5,794	-7.53%	5,775	-0.33%	+41.68%
Nye County	9,048	17,781	+96.52%	32,485	+82.70%	43,946	+35.28%	+385.70%
<i>Study Area Total</i>	15,099	26,938	+78.41%	40,901	+51.83%	52,491	+28.34%	+247.65%
State	800,493	1,201,833	+50.14%	1,998,257	+66.27%	2,700,551	+35.15%	+187.22%

Source: US Census Bureau 1995; US Census Bureau 2000; US Census Bureau 2010

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Table A-3
Study Area Population Projections (2010–2030)

County	2010	2015	2020	2025	2030
Esmeralda	1,145	1,194	1,180	1,173	1,177
Eureka	1,609	1,803	1,919	2,035	2,108
Lander	5,992	7,032	6,638	6,472	6,344
Nye	45,459	49,328	51,163	53,017	55,432
<i>Study Area Total</i>	54,205	59,357	60,900	62,697	65,061

Source: Nevada State Demographers Office 2011

Note: Population estimates and population projections vary between sources. Population projections by the Nevada State Demographer's Office for Nevada uses the Regional Economics Models, Inc. (REMI) model. The model includes each of Nevada's 17 counties as individual regions and is based on 23 economic sectors. It relates the economic and demographic characteristics of the counties to each other as well as to the nation as a whole.

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Table A-4
Study Area Age of Population (2008)

Location	19 and Under	20-34	35-44	45-64	65-84	85+	Median Age
Esmeralda County	114	90	68	195	178	32	51.6
Eureka County	396	298	186	509	212	27	42.1
Lander County	1555	843	575	1613	455	45	38.3
Nye County	9777	8420	4962	11081	9161	974	43.2
Study Area Total	11842	9651	5791	13398	10006	1078	43.8
State	725483	542927	381683	653357	264787	31,930	35.9

Source: Headwaters Economics 2011

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Table A-5
Study Area Educational Attainment for Population 25 Years and Older (2005-2009)

Location	Less than 9 th Grade	9 th to 12 th Grade; No Diploma	High School Graduate or Equivalent	Some College, No Degree	Associate Degree	Bachelor Degree	Graduate or Professional Degree
Esmeralda County	6.0%	9.2%	37.1%	23.2%	5.9%	11.3%	7.3%
Eureka County	2.9%	8.7%	35.3%	25.4%	10.1%	14.2%	3.4%
Lander County	15.1%	15.9%	35.7%	20.0%	3.1%	8.6%	1.6%
Nye County	6.5%	13.4%	40.0%	24.6%	6.5%	6.5%	2.4%
State	6.5%	9.8%	29.9%	25.1%	7.3%	14.3%	7.2%

Source: US Census Bureau 2009

American Community Survey estimates are based on data collected over a 5-year time period. The estimates represent the average characteristics of population and housing between January 2005 and December 2009 and DO NOT represent a single point in time.

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Table A-6
Study Area Language Spoken at Home (2005-2009)

Location	English Only (%)	Language Other Than English (%)	Speak English less than "very well" (%)	Spanish Speaking (%)	Speak English less than "very well" (%)	Other Indo-European Language (%)	Speak English less than "very well" (%)	Asian and Pacific Island Languages (%)	Speak English less than "very well" (%)
Esmeralda County	87.3	12.7	8.8	10.0	7.7	2.7	1.1	0.0	0.0
Eureka County	97.0	3.0	1.2	1.9	1.2	0.2	0.0	0.9	0.0
Lander County	73.1	26.9	9.1	23.5	9.0	0.5	0.0	0.4	0.0
Nye County	87.7	12.3	4.8	9.0	4.1	1.5	0.1	1.2	0.5
State	72.5	27.5	12.9	19.5	9.9	2.5	0.7	4.6	1.9

Source: US Census Bureau 2009

American Community Survey estimates are based on data collected over a 5-year time period. The estimates represent the average characteristics of population and housing between January 2005 and December 2009 and DO NOT represent a single point in time.

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Table A-7
Study Area Place of Birth (2005-2009)

Location	Born in US (%)	Born in Nevada (%)	Born in Other State (%)	Born Outside US (% Native or Naturalized Citizen)	Born outside US (% not US Citizen)
Esmeralda County	86.2	11.0	75.3	0.0	13.8
Eureka County	97.6	37.2	60.4	0.5	1.9
Lander County	88.3	30.9	57.4	0.4	11.3
Nye County	90.7	19.3	71.4	1.0	8.3
State	79.8	23.2	56.6	1.5	18.7

Source: US Census Bureau 2009

American Community Survey estimates are based on data collected over a 5-year time period. The estimates represent the average characteristics of population and housing between January 2005 and December 2009 and DO NOT represent a single point in time.

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Table A-8
Study Area Household Characteristics
(2000 to 2005-2009 Comparison)

		Esmeralda	Eureka	Lander	Nye
Average Household Size (persons)	2009*	1.90	2.54	2.66	3.05
	2000	2.12	2.47	2.73	2.42
Total Housing Units	2009*	860	1,002	2,287	16,563
	2000	833	1,025	2,780	15,934
Housing Units % Change 2000–2009*		3.2%	-2.2%	-17.7%	3.9%
Occupied Housing Units	2009*	448	545	1,834	13,933
	2000	455	666	2,093	13,309
	2009*	412	457	453	2,630
Vacant Housing Units	% Vacant 2009*	47.9%	45.6%	19.8%	15.9%
	2000	378	359	687	2,625
	% Vacant 2000	45.4%	35.0%	24.7%	16.5%

Source: US Census Bureau 2000; US Census Bureau 2009

*Data for 2009 represent 2005–2009 estimates

*American Community Survey estimates are based on data collected over a 5-year time period. The estimates represent the average characteristics of population and housing between January 2005 and December 2009 and DO NOT represent a single point in time.

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Table A-9
Study Area Income Distribution
(2000 to 2005-2009 Comparison)

Income		Esmeralda	Eureka	Lander	Nye	State of Nevada
Median Household Income	2009*	\$44,118	\$61,472	\$54,008	\$42,192	\$55,585
	2000	\$33,203	\$41,417	\$40,067	\$36,024	\$44,581
Per Capita Income	2009*	\$30,763	\$29,080	\$23,233	\$21,283	\$27,395
	2000	\$18,971	\$18,629	\$16,998	\$17,962	\$21,989
Persons Below	2009*	6.9%	4.8%	16.0%	16.2%	11.1%

Poverty Level	2000	15.3%	8.9%	8.6%	10.7%	10.5%
Families Below	2009*	0.0%	4.6%	17.1%	10.6%	8.0%
Poverty Level	2000	7.5%	12.6%	12.5%	7.3%	7.5%

Source: US Census Bureau 2000; US Census Bureau 2009

Data from 2000 census in 1999 dollars, and not adjusted for inflation

*Data for 2009 represents 2005–2009 estimates in 2009 inflation adjusted dollars

*American Community Survey estimates are based on data collected over a 5-year time period.

The estimates represent the average characteristics of population and housing between January 2005 and December 2009 and DO NOT represent a single point in time.

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Table A-10
Study Area Labor and Non-labor Income (2008)

County	Personal Income Total (Thousands of 2010 \$s)	Labor income (net earnings)		Non-labor income (including dividends, interest, rent, personal transfer receipts)	
		Thousands of \$	Percent of Personal Income Total	Thousands of \$	Percent of Personal Income Total
Esmeralda	34,264	22,672	66	11,159	33
Eureka	65,869	49,982	76	15,055	23
Lander	217,111	164,130	76	50,239	23
Nye	1,480,255	801,211	54	660,351	45
Study Area Total	1,797,499	1,037,995	58	736,804	41
Nevada	107,079,263	69,397,386	65	37,681,877	35

Source: Headwaters Economics 2011

Non-labor income and Labor earnings may not add to total personal income because of adjustments made by the Bureau of Economic Analysis to account for contributions for social security, cross-county commuting, and other factors.

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Table A-11
Study Area Proprietors' Income (2008)

Location	Earnings by Place of Work (\$1000)	Wage and Salary Disbursements (\$1000)	Supplements to Wages and Salary Disbursements (\$1000)	Proprietors' income (\$1000)	
				Non-Farm	Farm
Esmeralda County	16,605	10,000	2,630	925	3,050
Eureka County	429,346	60.2%	15.8%	5.6%	18.4%
		80.7%	17.1%	.4%	1.8%
Lander County	207,237	150,398	35,310	9,029	12,500
		72.6%	17.0%	4.4%	6.0%
Nye County	707,442	527,005	114,461	54,573	11,403
		74.5%	16.2%	7.7%	1.6%
Nevada	77,769,231	57,501,417	12,248,857	7,947,577	71,380
		73.9%	15.8%	10.2%	0.1%

Source: BEA 2010. (BEA Table CA04)

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Table A-12
Study Area Income Inflow and Outflow (2008)

Location	Outflow of Earnings (\$1000)	Inflow of Earnings (\$1000)
Esmeralda County	\$2,873	\$10,340
Eureka County	\$338,393	\$2,753
Lander County	\$62,042	\$38,147
Nye County	\$115,554	\$288,972

Source: BEA 2009 (BEA Table CA91)

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Table A-13
Study Area Employment Characteristics (2005-2009)

Industry	County Employment Totals			
	Esmeralda	Eureka	Lander	Nye
Agriculture, forestry, fishing and hunting, mining	103	282	640	1,130
	25.8%	41.2%	29.3%	7.4%
Construction	49	73	224	2,224
	12.3%	10.7%	10.3%	14.6%
Manufacturing	19	23	94	542
	4.8%	3.4%	4.3%	3.6%
Wholesale trade	5	22	77	171
	1.3%	3.2%	3.5%	1.1%
Retail trade	27	10	322	1,584
	6.8%	1.5%	14.8%	10.4%
Transportation and warehousing, utilities	22	28	178	897
	5.5%	4.1%	8.2%	5.9%
Information	10	11	0	252
	2.5%	1.6%	0	1.7%
Finance and insurance and real estate and rental leasing	11	11	26	685
	2.8%	1.6%	1.2%	4.5%
Professional, scientific, and management, administrative	18	13	101	919
	4.5%	1.9%	4.6%	6.0%
Education, health care, social assistance	49	111	188	2,072
	12.3%	16.2%	8.6%	13.6%
Arts, entertainment, recreation, accommodation and food services	5	29	186	3,458
	1.3%	4.2%	8.5%	22.7%
Other services except public administration	15	5	33	470
	3.8%	.7%	1.5%	3.1%
Public administration	66	67	112	802
	16.5%	9.8%	5.1%	5.3%
Total Employment	399	685	2181	15,206

Source: US Census Bureau 2009

Note that employment estimates may vary from the official labor force data released by the Bureau of Labor Statistics because of differences in survey design and data collection.

American Community Survey estimates are based on data collected over a 5-year time period. The estimates represent the average characteristics of population and housing between January 2005 and December 2009 and DO NOT represent a single point in time.

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Table A-14
Study Area Employment - Mining (2008)

Industry	County Employment Totals			
	Esmeralda	Eureka	Lander	Nye
Total Mining	9	899	415	759
	5.9%	91.6%	29.7%	9.4%
Oil and Gas Extraction	0	0	0	0
	0%	0%	0%	0%
Coal Mining	0	0	0	0
	0%	0%	0%	0%
Metal Ore Mining	<i>1</i>	<i>913</i>	<i>430</i>	<i>711</i>
	<i>.7%</i>	<i>93.1%</i>	<i>30.8%</i>	<i>8.8%</i>
Non-metallic Minerals Mining	8	2	8	61
	5.2%	.2%	.6%	.8%
Mining Related	0	0	0	0
	0%	0%	0%	0%

Source: Headwaters Economics 2011.

Includes estimates for data that was not disclosed in primary sources

This table does not include employment data for government, agriculture, railroads, or the self-employed because these are not reported by County Business Patterns. Estimates for data that were not disclosed are shown in *italics*.

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Table A-15
Average Annual Pay (2001, 2009)

County/State	2001	2009
Esmeralda County	\$31,886	\$35,152
Eureka County	\$57,183	\$80,245
Lander County	\$36,988	\$56,486
Nye County	\$33,531	\$43,312
Nevada	\$33,121	\$42,743

Source: BLS 2011

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Table A-16
Study Area Unemployment Levels by County (1990-2010)

Year	Esmeralda	Eureka	Lander	Nye
1990	6.2%	5.9%	6.9%	3.7%
1995	7.8%	8.9%	9.4%	4.5%
2000	8.6%	3.3%	5.8%	6.8%
2005	5.0%	3.6%	3.9%	6.0%
2006	4.5%	4.0%	4.1%	5.9%
2007	3.2%	4.4%	3.4%	6.9%
2008	5.0%	5.1%	4.3%	9.7%
2009	7.5%	7.1%	6.3%	14.4%
2010	8.3%	9.0%	7.4%	16.6%

Source: BLS 2011

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Table A-17
Study Area Agricultural Data (2008)

Data	Esmeralda	Eureka	Lander	Nye	Total Study Area	US
Number of farms*	19	86	84	173	362	2,204,792
Acreage in farms*	24,943	783,440	339,091	90,868	1,238,342	922,095,840
Average farm size (acres)*	1,313	9,110	4,037	525	14,985	418
Total cash receipts and other income (1,000s of 2010\$)	33,927	62,399	33,477	na	140,002	401,760,803
Total value of agricultural products sold	32,900	61,816	30,708	10,199	135,623	369,308,366
<i>Livestock and products</i>	8,781	56,556	13,646	930	79,913	182,158,626
<i>Crops</i>	24,120	5,259	17,061	9,269	55,710	187,149,740
Other Income (government payments etc.)	1,027	583	2,769	na	4,379	32,452,437
Total production expenses	24,354	43,233	19,018	7,249	93,853	326,977,904
Ratio: Total Cash Receipts & Other Income/Total Production Expenses	1.39	1.44	1.76	na	1.49	1.23

Source: Headwater Economics 2011, BEA 2010b, *US Department of Agriculture 2009.

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Table A-18
Number of Farms by Type, 2007

Farm Products	Esmeralda	Eureka	Lander	Nye	County Region
All Farms*	19	86	84	173	362
Vegetable & Melon Farming	1	0	1	0	2
Fruit & Nut Tree Farming	0	0	0	15	15
Greenhouse, Nursery, etc.	0	0	0	6	6
Other Crop Farming	13	49	31	29	122
Beef Cattle Ranch. & Farm.	3	27	28	55	113
Cattle Feedlots	1	1	0	0	2
Dairy Cattle & Milk Prod.	0	0	0	2	2
Hog & Pig Farming	0	0	0	4	4
Poultry & Egg Production	0	0	0	10	10
Sheep & Goat Farming	0	3	9	12	24
Animal Aquaculture & Other Animal Prod.	1	6	15	40	62

Source: Headwater Economics 2011, *US Department of Agriculture 2009.

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Table A-19
Study Area Population by Race/Ethnicity (2010)

Population	Esmeralda	Eureka	Lander	Nye	Study Area Total	Nevada
Hispanic or Latino ethnicity of any race	120 15.3%	238 12.0%	1,219 21.1%	5,967 13.6%	7,544 14.4%	716,501 26.5%
Not Hispanic or Latino, by Race						
White alone	605 77.3%	1,662 83.6%	4,259 73.7%	34,663 78.9%	41,189 78.5%	1,984,050 73.5%
Black or African American alone	0 0.0%	2 0.1%	17 0.3%	836 1.9%	855 1.6%	208,058 7.7%
American Indian or Alaskan Native alone	33 4.2%	42 2.1%	197 3.4%	592 1.3%	864 1.6%	23,536 .09%
Asian alone	3 0.4%	18 0.9%	20 0.3%	547 1.2%	588 1.1%	191,047 7.1%
Native Hawaiian and Other Pacific Islander alone	0 0.0%	0 0.0%	1 0.0%	179 0.4%	180 .03%	15,456 .06%

Source: US Census Bureau 2010

Note: The sum of the five race groups may add to more than the total population because individuals may report more than one race.

Appendix B

Economic Workshop Records

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APPENDIX B

ECONOMIC WORKSHOP RECORDS

ECONOMIC STRATEGY WORKSHOP ATTENDEES

TONOPAH WORKSHOP NOTES

TONOPAH COMMUNITY POTENTIAL EVALUATION

BATTLE MOUNTAIN WORKSHOP NOTES

BATTLE MOUNTAIN COMMUNITY POTENTIAL EVALUATION

Table B-1
Socioeconomic Strategy Workshop Attendees

Last Name	First Name	Affiliation
Battle Mountain, NV, June 14, 2011		
Canfield	Skip	Nevada State Land Use Planning Agency
Cuellar	Michelle	Goldcorp (Marigold Mine)
Davis	Rod	University of Nevada, Reno
Little	Gina	Lander County (Planning Department)
Martin	John	Economic Workshop Facilitator (Martin Economics)
Mason	Dave	Lander County (Board of County Commissioners)
Peppard	Ginger	Goldcorp (Marigold Mine)
Peterson	Shar	Newmont Mining Corporation; Lander County (Lander County Economic Development Authority)
Pickett	Nancy	Lander County (Lander County Economic Development Authority)
Smith	Jerry	Lander County (Sustainable Development Committee)
Spence	Jason	BLM (Mt. Lewis Field Office)
Spiegel	Jessica	Barrick Gold Corporation
Thies	Jennifer	Economic Workshop Facilitator (EMPSi)
Tibbitts	Jake	Eureka County (Natural Resources Manager)
Turner	Karen	BLM (Mt. Lewis Field Office)
Whitman	Frank	Lander County (Public Land Use Advisory Committee)
Wichman	Lorinda	Nye County (Board of County Commissioners)
Williams, Jr.	Ray H.	Lander County (Board of County Commissioners)
Worthington	Chris	BLM (Mt. Lewis Field Office)
Tonopah, NV, June 16, 2011		
Beeman	Cheryl	Nye County (Planning Department)
Boland	Nancy	Esmeralda County (Board of County Commissioners)
Hartley	John	BLM (Tonopah Field Office)
Martin	John	Economic Workshop Facilitator (Martin Economics)
Pappalardo	Dominic	Esmeralda County (Board of County Commissioners)
Sweetman	David	Esmeralda County (Land Use Advisory Committee)
Thies	Jennifer	Economic Workshop Facilitator (EMPSi)
Worthington	Chris	BLM (Mt. Lewis Field Office)

**Table B-2
Summary of Regional Potential Evaluations (Battle Mountain Meeting)**

Item	Mount Lewis Field Office	Tonopah Field Office	Opportunities	Constraints
Agriculture	4.9	4.6	4	3.5
Forest Products	2.1	2.8	2.5	3.3
Mining – Hard Rock/Minerals	4.9	4.8	4.7	4.5
Mining – Other	4.2	3.6	4.2	4.5
Sand/Gravel	3.4	3.4	3.2	3
Construction	2.9	3.3	3.2	4
Small Manufacturing	3.2	3	3	3
Energy – Oil and Gas	2.5	2.8	3	3
Energy – Renewable (Wind, Solar, Geothermal)	4.4	3.5	4.8	3
Employment Development	4.5	4	4.6	3.5
Business Retention/Expansion	4.8	4.5	4.3	3
Tourism	3.4	3.5	4.4	3.3
Destination Tourism	3	3.3	3.5	3
Cultural Tourism	3.3	3.8	3.5	2.7
Pass-through Visitor Services	3.7	4	3.6	1.5
Recreation	4.2	4.5	4	2
Hunting/Fishing	4.5	4	3.4	3
Environmental Restoration	3.9	3.3	4.5	2.3
Attracting Retirees	2.4	2.3	2.8	3.3
Attract/Retain Government Offices	3.1	3	3.3	2
Health Care	3.6	3.5	3	3.8
Education	3.9	3.3	4.25	3.7
Water	4.8	5	3	1

Rating System: In the above table, please rate each item from 1 to 5. Rate each item in terms of the overall value that you place on it. A rating of 1 is least value; 5 is most value.

Opportunities represent the potential to develop a resource or industry (Item) and **Constraints** represent the level of difficulty that is associated with the development of that resource or industry (Item).

Table B-3
Summary of Regional Potential Evaluations (Tonopah Meeting)

Item	Current and Future Value	Opportunities	Constraints
Agriculture	4.5	1.4	4.4
Forest Products	1.5	2.2	4
Mining – Hard Rock/Minerals	4.5	4.8	3.3
Mining – Other	4	4.3	3
Sand/Gravel	3.8	3.3	2.3
Construction	1.5	3.5	3.3
Small Manufacturing	1.8	2.5	3.5
Energy – Oil and Gas	1.8	2.3	3.5
Energy – Renewable (Wind, Solar, Geothermal)	3.5	5	3
Employment Development	2.3	3.5	3.8
Business Retention/Expansion	3.3	3.3	4.3
Tourism	2.5	3.3	2.8
Destination Tourism	2.5	3.8	3
Cultural Tourism	2.8	3.3	3
Pass-through Visitor Services	2	4	3.3
Recreation	3.8	4.8	2.5
Hunting/Fishing	3.3	3.3	3
Environmental Restoration	2.5	3	4.5
Attracting Retirees	3.5	4.3	3.3
Attract/Retain Government Offices	4	4	4
Health Care	1.5	3.3	3.5
Education	2.5	2.8	3.8
Water	4.5	1.4	4.4

Rating System: In the above table, please rate each item from 1 to 5. Rate each item in terms of the overall value that you place on it. A rating of 1 is least value; 5 is most value.

Opportunities represent the potential to develop a resource or industry (Item) and **Constraints** represent the level of difficulty that is associated with the development of that resource or industry (Item).

**BATTLE MOUNTAIN DISTRICT OFFICE
RESOURCE MANAGEMENT PLAN
AND EIS
Socioeconomic Workshop Summary
Tuesday, June 14, 2011
8:00 a.m. – 12:00 noon**

Participants:

Jessica Spiegel, Barrick Goldstrick	jspiegel@barrick.com	775-397-0767
Lorinda Wichman, Nye County	lawichman@gmail.com	775-761-1626
Jerry Smith, LCSDC	smithslodge@yahoo.com	775-635-9607
Dave Mason, Lander County Commissioner	masond1939@sbeglobal.net	775-635-2885
Gina Little, Lander County Planning Dept.	glittle@landercountynv.org	775-635-2860
Karen Turner, NEPA Admin. Assist.	kturner@blm.gov	775-635-4093
Jason Spence, BLM, MLFO	jspence@blm.gov	775-635-4194
Frank Whitman, Lander	fbwnv@nvols.net	775-965-1477
Jake Tibbitts, Eureka County	natresmgr@eurekanv.org	775-237-6010
Ginger Peppard, Gold Corp/Marigold Mining	ginger.peppard@goldcorp.com	775-635-7317 x138
Michelle Cuellar, Marigold Mine	michelle.cuellar@goldcorp.com	775-635-2317 x607
Skip Canfield, State of Nevada	scanfield@lands.nv.gov	775-684-2723
Ray A. Williams, Jr., Lander County Comm.	rwilliams@landercountynv.org	775-964-2619
Shar Peterson, Newmont/LEDA	shar.peterson@newmont.com	775-635-6640
Rod Davis, UNR	davisr@unce.unr.edu	775-635-5565
Nancy Pickett, LEDA	nepickett@yahoo.com	775-635-2252
Chris Worthington, RMP Coord.	cworthington@blm.gov	775-635-4144
Jennifer Thies, EMPSi	jennifer.thies@empssi.com	775-323-1433
John V Martin, Martin Economics		208-284-4425

Introductions were made and Chris mentioned the scoping report is almost completed. There has been very good participation throughout the district. When the scoping comments and all the baseline reports are completed they will be posted on the BLM's website at:

<http://www.blm.gov/nv/st/en/fo/battlemountainfield/blm.information/rmp.com>

John Martin from Boise, ID was introduced as the subcontractor for the BLM through EMPSi. He stated we still need more input from the communities and counties in utilizing different types of resources and putting them to the best use in managing lands and fostering economic development. Today John was targeting the northern part of the district to identify economic and social issues, condition and trends, and relationships between communities and BLM lands.

John presented a power point with data that represented the growth and decline in a variety of statistics covering Esmeralda, Eureka, Lander, and Nye Counties from 2008 through 2010. There was a consensus of the participants that the data needed to be reviewed for correctness. John will have the data updated and it was also suggested that the data be separated between the northern and southern parts of Eureka County. This may give a more accurate percentage of total employment and other statistics since most of the employment numbers in Eureka County are from the Elko District.

The basic county information would be found in the affected environment section of the RMP. The baseline studies/reports when completed will be placed on the project website. After the draft information is compiled it will be sent to local government agencies for their comments before the data becomes public.

Chris stated the MOU's for the cooperating agencies are being prepared and ready to be sent out.

The workshop participants were divided into two working groups to discuss their opinions and using a rating system of 1 to 5 to determine the overall value that each individual places on items such as Agriculture, Forest Products, Mining-Hard Rock/Minerals, Mining-Other, Sand/Gravel, Construction, Small Manufacturing, Energy-Oil and Gas, Renewable Energy (Wind, Solar, Geothermal), Employment Development, Business Retention/Expansion, Tourism, Destination/Cultural Tourism, Pass-through Visitor Services, Recreation, Hunting/Fishing, Environmental Restoration, Attracting Retirees, Attract/Retain Government Offices, Health Care, Education and how these items would affect Mount Lewis Field Office and Tonopah Field Office. The ratings are based on the overall value, as well as the constraints and potential opportunities.

Then the group as a whole came up with these bullet points as an overall consensus.

- There were conflicting ideas on the need and diversity of the local economy to help boost the economy while maintaining “mom and pop” stores and the same way of life.
- Need to decide if it is retail or industry you need to develop and the long term factors.
- Retirees can be considered an industry that needs constant reviewing.
- Government offices provide stability.
- Would like to see less reliance on PILT budgets. Would like to have the BLM be flexible in its permitting process so when the life of the industry is complete there would be language in the permitting/leases written to explore other secondary uses instead of straight to reclamation. Be flexible and change with the times.
- Is there a way BLM could streamline the NEPA process? RMP is planning level not for implementation level. Consider adding to the RMP land availability “land swap” and/or “checkerboard” land identified for disposal.

The meeting was then adjourned and the next Socioeconomic workshop will be in Tonopah, NV, Thursday, June 16, 2011.

Battle Mountain District, Resource Management Plan, Socio-Economic Workshop Summary, Tonopah, Nevada, June 16, 2011

Attendees: C. Worthington (CW), BLM (RMP Project Manager), Jennifer Thies (JT), EMPSI (Contractor), John Martin (JM), Presenter (contractor), John Hartley, BLM PEC, Tonopah Field Office, Dominic Pappalardo (DP), Esmeralda County Commissioner, Nancy Boland (NB) Esmeralda County Commissioner, David Sweetman (DS), Esmeralda County, Chairman of Esmeralda County Land Use Advisory Committee (ECLUAC), Cheryl Beeman (CB), Nye County Notes by: John Hartley

Session started at 1:15 PM:

Introductions and Logistics by Facilitators (Thies and Martin)

Introductory Remarks on Status of RMP (Worthington).

- Finished scoping meetings with the last one in Dyer, Nevada.
- Draft scoping report should be finished next week.
- A final scoping report will be published and posted to the Internet shortly after final editing.
- Working on socio-economic study, ethnography study, minerals study, and a wild and scenic river study.
- Information from today's workshop will provide input into the socio-economic study.

Main Presentation with Viewgraphs by John Martin:

- Introductory overview of socio-economics
- Will incorporate basic information on culture, social fabric, employment, costs of goods, and general economic data.
- Reports are not County specific.
- There will be variability in portions of counties that are impacted by socio-economics.
- Viewgraph of BMDO and discussion points
 - 10.5 million acres of BLM-administered lands
 - BLM has a major land management position in Nevada
- Viewgraph of population trends
 - Nye has a big increase due to Pahrump's closeness to Las Vegas.
- Viewgraph of projected population growth
 - Question (DP): Why are population projections for Esmeralda County so low out to year 2030? Response (JM): These estimates are based on past trends.
 - (DS) Retirement is a big part of population increase in Fish Lake Valley (FLV). We get lots of snow-birders in FLV and in Goldfield.
 - There is a population of full timers (approx. 225 four years ago in Goldfield) and then there is a 20-30 % increase in summer months. This is true for both

- Goldfield and FLV. However, the FLV increase is mostly weekenders from California.
- (NB, NP, DS) provided an overview of the three districts of Esmeralda County, their differences and their similarities:
 - FLV has weekend population spikes--DS
 - Goldfield has seasonal-summer spikes in population--DP
 - Silver Peak is fairly static but does get some tourism. Some infrastructure is needed in Silver Peak to keep more tourist dollars in the community.--NB
 - FLV is seeing a decline in agriculture. Technology is moving from wheel line to pivot for watering fields. This is probably a result of declines to ground water table.—DS
 - Goldfield may see a population uptick if one or two gold mines open soon in the area.—DP
 - View graph of Distribution of Ethnic Populations
 - Latino population has dropped in FLV with a decline in agricultural work.—DS
 - Viewgraph of Key Points Based on Trends
 - Question (DP): Will BLM (RMP) distill the socio-economic data down to the BMD level? Answer (JM): Yes as best we can.
 - Question (DP): When is the RMP due? Answer (CW): Spring-May 2014. The State Director signs off (approves).
 - Viewgraph of Unemployment Statistics
 - JM: Generally Nevada has done better overall during the last couple years of employment downturn. The Counties have followed this more or less stable trend with the exception of Pahrump which has seen a steep rise in unemployment due to its relationship to Las Vegas.
 - DS: FLV gets power from Southern California Edison—Cooperative. What happens to utility corridors tied to Pahrump? There are two electric utility entities that impact (Esmeralda County—FLV) Valley Electric Association and NV Energy. The concern is over transmission lines and who will service FLV and the resulting costs of energy.
 - Viewgraph of Employment by Industry—No comments
 - Viewgraph of Key Points (Employment)—Mining and Agriculture are two largest components of employment.
 - Viewgraph of Income Levels—Labor vs Non-labor--Counties appreciate locating government offices in the local communities as they provide employment and good wage earnings.
 - Viewgraph of Poverty Levels—DS notes that poverty level in Esmeralda County is down due to the decline in lower wage earners associated with agricultural component.
 - Viewgraph of Key Points—no comments
 - Viewgraph of Natural Resources—Farm business income was down in 2008 in Esmeralda County.
 - Viewgraph of Natural Resources, Agriculture

- DS: FLV agricultural production is 10% premium alfalfa. There are some important and special minerals taken up by FLV alfalfa that make it very desirable. Most of it goes to California.
- Grimway Carrots used to come into FLV to rotate crops with carrots. Now it is alfalfa every 5 years
- Now about 10-12 pivots per year are devoted to corn production (feed). About 10 % of the corn production is “sweet” corn for human consumption.
- Viewgraph of Natural Resources, Mining
 - The employment statistics for mining in Nye County is a couple years old.
 - Small mining operations do not show up in statistics
- Viewgraph of BLM contributions to Mineral Production (2008)
 - Question (CB): Are boundaries of District changing for this RMP? Answer (CW): No, but this version of the RMP will cover both field offices (Mount Lewis and Tonopah).
- Viewgraph of Geothermal-Lease revenues (2008).
 - A percentage of lease revenues are sent back to states. Last year, the counties did not receive a percentage from the State of Nevada.
- Viewgraph of Land Uses in BMDO—Livestock Grazing
 - Currently, BLM average grazing fee is \$1.35 per AUM
 - Some of this funding distributed back to grazing districts
 - The funds are supposed to be spent on grazing improvements
- Viewgraph of recreation resources
 - A visitor day use is considered for any portion of a day.
 - The Reno/Las Vegas Race generated revenues that were split three ways for Carson City, Southern Nevada, and Battle Mountain Districts.
 - BMDO received \$864.41 for the race for its share.
- Viewgraph of receipts
 - We have one decorative rock mine
 - We collect fees for wood cutting, fire wood, fencing, and Joshua trees
- Viewgraph of Rights-of-way receipts
 - Are collected on an annual basis for linear features such as pipelines and transmission lines.
- Viewgraph of salable minerals
 - Has declined over time due to a fall in housing construction.
- Viewgraph of Payments In Lieu of Taxes (PILT)—Last slide
 - Formula for distribution is based on population and land area
 - Nationally, the distribution is 210 million dollars
 - Esmeralda gets \$.26 per acre, Clark County gets a lot more.

Break from 2:25 PM until 2:40 PM.

Discussion Facilitated by Martin and Thies using worksheet (Ranking Exercise)

- Discussion and Instruction for worksheet
- Open discussion about rankings

- DS and other participants feel that water should be added to the ranking list.
- BLM is not a producer, we are government regulators or managers.-- NB
- Wind monitoring does not generate much employment as they are remotely monitored.--NB
- Government offices provide intrinsic value in a community.—NB
- Water in Clayton and Fish Lake Valley is over-allocated.--DS
- Drawdown of water table may be causing juniper encroachment.—NB
- Mining is important to local economy. --NB
 - Takes years to get permits
 - Too much bureaucracy and eco-terrorism
 - Lots of silica in Esmeralda County
- Construction is increasing in Nye County due to solar facility and housing demand.--CB
- Discussion of constraints on development
 - FLV-Constraint is water
 - Goldfield-Constraint is population and housing
 - Silver Peak-Constraint is land and water
- Small manufacturing, non-agricultural based may have advantages as it would have low constraints.—DS
- Need to consider low education levels in Esmeralda County
- No land, no water, no people!
- Energy—Oil and gas is considered to have low to high constraints
- Energy—Renewable is considered to have huge potential
 - Consider value of exploration
 - There are considerable conflicts with land use and water.
- Employment Development
 - Create more opportunities
 - Great Basin Tech is a great asset
 - Round Mountain gold provides training opportunities.
 - Education level and housing are big constraints.
- Develop Tourism
 - Potential is high but constraints are lack of hotel space and locals have a negative attitude toward tourists.
 - One opportunity is to set up a pack station.
 - Visitor services—FLV only has one saloon and a convenience store
 - Tonopah gets all the business
- Recreation is high value.
 - Hunting and fishing
 - Hiking
 - Constrained by limited service and community support
 - NB has been trying to get an Recreation and Public Purposes permit (from BLM) on a small lake (Silver Lake). There is a small dam and less than 20 acre-feet flow into ponded area from a mine at a higher elevation. She wants to stock it with fish for recreation.

- Environmental Restoration
 - Abandoned mines
 - Rehabilitation of natural seeps and springs
 - Clean up of noxious weeds
- Attracting retirees
 - Build a better retirement base in Goldfield
 - FLV has a 30-40 % retirement base
 - Constraints are medical and health care
 - Recreation, especially birding, is attractive for retirees.
 - Need more land for cemeteries--DS
- Attract and retain government services
 - NB would like to see a BLM office in Silver Peak.
 - All participants would like to have more government facilities in their communities.
- Health Care
 - This is a major constraint to attracting development.
 - Some participants rated this high for potential.
 - Beatty is struggling to develop a clinic.
 - Doctors often rotate from other communities rather than basing in the local community. Thus the doctors have no investment in the local community.
 - There is future potential for expansion for medical facilities if development picks up.
 - NB—Nye County Regional used to have assisted living in Tonopah but shut it down. They are looking at reviving it again.
- Education
 - Great Basin College, Extension office, and Sothern Nevada Junior college are all great educational assets in Tonopah.
 - Esmeralda has 3 grade schools. All high school students are bussed to Tonopah. This creates a very long bus ride for many students especially in FLV.
 - Online Teaching is increasing the opportunities for education
 - A constraint is that the high Hispanic population is not supportive of education.
- Water Value
 - Out of 7 water basins in Esmeralda County, four are over-allocated.
 - 3000 acre-feet are available in Columbus Marsh. However, there are some questions or concerns about water quality.

Break at 4:17 PM.

4:33 PM: Return from Break and go over questionnaire. Note: Several participants had filled out questionnaires and provided them to the facilitators.

Discussion of Cooperating or Coordinating Agency status ensued after the break.

- Nye County has requested Cooperating Agency status.
- NDOW and the USAF-Nellis have signed on as Cooperating Agencies.
- NB and DP have a discussion about whether Esmeralda County should be a Cooperating or coordinating agency. NB states that the County Commission earlier in the year or last year voted against Cooperating Status. DP wants to check on that with the Commission and possibly reconsider.

Open discussion based on questionnaire.

- Assets—There are no assets because the Federal Land ownership is so high.
- Counties and regions differ due to different constraints—Silver Peak and Goldfield are trying to attract population growth. FLV has a stable population growth and does not want new growth or development.
- Water tables are declining in almost all parts of Esmeralda County. Decline of approximately 2 ft. per year in FLV.
- Agriculture is also declining due to higher costs to pump ground water and also increases in cost of transportation.
- There is a trend to develop renewables.
- NB lists some of her listed constraints and concerns as they apply to Esmeralda County and her district (District 2).
 - Lack of Long-term employment
 - Shortage of workers
 - Depletion of resources—visual resources, water, and air quality
 - No staff to respond to projects on public lands
 - High cost of utilities
- Renewable energy could contribute more to economy but protections are needed.
- Esmeralda County would like more renewable projects in the county but would like to see them located where they believe to be the best areas for the County.
- Interested in seeing clustering of renewable projects in areas near transmission.
- NB has issues with the speed that past programmatic EISs for solar and geothermal were done. She did not feel that the time was adequate to do a thorough job. She felt that there was too much influence and pressure from Washington.
- The renewable companies are viewing development on a regional basis and not considering how the Counties may see the projects. There does not seem to be any concern about how these renewable projects may impact the counties. Renewable energy has no benefit to Esmeralda County yet may have negative impacts i.e. costs, stress on tax base.
- People like to live in Esmeralda County because:
 - Easy access
 - Peaceful, quiet
 - Local government is non-intrusive
 - Access to hunting
 - Family history
 - Strong sense of community

- What is the County's vision for success?
 - DS—Renewable energy is important but it should benefit the County and not impact local population.
 - Water is a big concern
 - Locate energy development projects along larger transmission lines, corridors.
 - Encourage dry cooling systems for renewable projects
 - Well water in Esmeralda County is not good for cleaning solar panels. Calcium carbonate ruins the PV cells or mirrors.
 - Access to all public lands should be unrestricted.
 - Counties should be reimbursed for costs of environmental damage.
 - NB believes that we need to widen our Cumulative Effects Study Areas (CESA) in our EAs to consider a broader area of cumulative effects.
 - Yucca Mountain rail line—U. S. Government can't make up its mind.--NB
- What do you like about BLM?
 - Keep historical roads open.
 - Local people should be considered on road access.
- How does your community benefit from BLM lands?
 - Tourism and mining
 - Money from mining and lease sales
 - No disposal of lands without some input from the County.
- What BLM regulations would you like to see us continue?
 - Withdraw all WSAs
 - No wildland designations
 - Control populations of wild horses
 - If public lands are transferred, make sure water rights are considered.
 - Expand county grazing
 - Recreation and mining should be designed to co-exist
 - Make sure off-road races are approved by local government
 - Esmeralda County Land Use Plan is available on Esmeralda's web site
 - Communication with the County should continue and improve.

Questions 12-14 were skipped as we were running out of time and most felt that they had been covered adequately earlier in the discussions.

Additional Comments or Suggestions:

- BLM should set up training for its newly hired staff in local culture, attitudes, and economy—NB

Closure of workshop at 5:45 PM.