

WHITE PINE COUNTY LAND USE PLAN

BY:

**WHITE PINE COUNTY
COMMUNITY AND ECONOMIC DEVELOPMENT OFFICE**

FUNDED IN PART BY:

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

JANUARY, 2009

WHITE PINE COUNTY LAND USE PLAN

***Adopted as a Component of the
White Pine County
Comprehensive Master Plan***

***By the Regional Planning Commission and
the White Pine County, Board of
County Commissioners
DECEMBER, 2008***

***The White Pine County Land Use Plan was funded in
part with a grant from the HUD Community Development
Block Grant Program***

Laurie L. Carson, Commissioner
Brent Eldridge, Commissioner
Gary Lane, Commissioner
RaLeene Makley, Commissioner
David Pound, Commissioner
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White Pine County Board of County Commissioners

RESOLUTION 2008- 35 ADOPTING THE 2008 WHITE PINE COUNTY LAND USE PLAN ELEMENT TO THE WHITE PINE COUNTY MASTER PLAN

WHEREAS, N.R.S. 278.150 to 278.210, inclusive, requires the Regional Planning Commission to prepare, conduct hearings on, and adopt a Comprehensive plan for the physical development and orderly management of the growth of the County' and

WHEREAS, the Regional Planning Commission, on the 3rd day of December 2008 after conducting two years of public meetings and hearings has now completed its deliberations on the Land Use Element; and

WHEREAS, the Regional Planning Commission believes that the White Pine County Land Use Plan as contained in document and map form is property drafted to represent the long term interests of the residents of White Pine County; and

WHEREAS, the Regional Planning Commission finds, pursuant to N.R.S. 278-020, that the White Pine County Land Use Plan promotes the health, safety, and general welfare of the community; and

WHEREAS, the maps, findings, and policies contained within the Land Use Plan element are severable and if any portion thereof is found to be invalid by a court of competent jurisdiction, then the Commission finds that the remaining elements and policies are intended to survive and remain in effect; and

WHEREAS, on December 3, 2008, the Regional Planning Commission voted to adopt the White Pine County Land Use Plan as an element to the County's master plan by an affirmative majority of its members; and

WHEREAS, the White Pine County Commission held a public hearing on December 10, 2008, and finds pursuant to N.R.S. 278-020, that the White Pine County 2008 Land Use Plan represents the long term interests of the residents of White Pine County and general welfare of the community; and voted to adopt the White Pine County Land Use Plan as an element to the County's master plan by an affirmative majority of its members;

REGIONAL PLANNING COMMISSION
White Pine County and the City of Ely

*RESOLUTION 2008-
ADOPTING THE 2008 WHITE PINE COUNTY
LAND USE PLAN ELEMENT TO THE
WHITE PINE COUNTY MASTER PLAN*

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WHEREAS, the Regional Planning Commission believes that the White Pine County Land Use Plan as contained in document and map form is property drafted to represent the long term interests of the residents of White Pine County; and

WHEREAS, on December 3, 2008, the Regional Planning Commission voted to adopt the White Pine County Land Use Plan as an element to the County's master plan by an affirmative majority of its members; and

WHEREAS, the Regional Planning Commission finds, pursuant to N.R.S. 278-020, that the White Pine County Land Use Plan promotes the health, safety, and general welfare of the community; and

WHEREAS, the maps, findings, and policies contained within the Land Use Plan element are severable and if any portion thereof is found to be invalid by a court of competent jurisdiction, then the Commission finds that the remaining elements and policies are intended to survive and remain in effect;

NOW, THEREFORE, BE IT RESOLVED, that the White Pine County Regional Planning Commission does hereby find that the White Pine County 2008 Land Use Plan Revision in conformance with N.R.S. 278-150 to N.R.S. 278.210, inclusive, and the same shall be, and hereby is, adopted.

Adopted this _____ day of December 2008.

VOTE:

AYES:

Jed A. Peeler
Joseph A. Dango
Michelle B. Hanley

NAYES

ABSENT

Carol O. McKernia 12-3-08
Chairman, Regional Planning Commission Date

ATTEST:

Clerk of Said Board, Date

WHITE PINE COUNTY 2008 LAND USE PLAN

- Chapter 1: INTRODUCTION
- Chapter 2: PLAN AREA
- Chapter 3: LAND USES, HISTORIC AND CURRENT ISSUES
- Chapter 4: POPULATION, HOUSING
- Chapter 5: ECONOMIC TRENDS
- Chapter 6: PUBLIC LANDS
- Chapter 7: ENVIRONMENTAL CONSIDERATIONS
- Chapter 8: PUBLIC FACILITIES AND SERVICES
- Chapter 9: LAND USE DESIGNATIONS
- Chapter 10: LAND USE MAPS
- Chapter 11: LAND USE GOALS AND RECOMMENDATIONS

ATTACHMENTS

1. 2005 OPEN SPACE PLAN
2. 2006 C.E.D.S., CHAPTER 1, ANALYSIS
3. 2006 WATER RESOURCES PLAN, BASIN-BY-BASIN
ANALYSIS OF DEVELOPMENT POTENTIAL
4. 2008 PUBLIC LAND USE POLICY
5. 2008 ELY DISTRICT BUREAU OF LAND MANAGEMENT
RESOURCE MANAGEMENT PLAN, MAPS,
LANDS FOR DISPOSAL
6. 2008 FINAL ENVIRONMENTAL IMPACT STATEMENT
WHITE PINE ENERGY STATION, SOCIO-ECONOMIC
IMPACTS
7. COMPARISON OF WHITE PINE COUNTY LAND USE
PLAN RECOMMENDATIONS

EXHIBITS:

- 1) WHITE PINE COUNTY, HISTORICAL POPULATION TRENDS
- 2) POPULATION DISTRIBUTION
- 3) POPULATION CHARACTERISTICS
- 4) CITY OF ELY POPULATION PROJECTIONS
- 5) WHITE PINE COUNTY POPULATION PROJECTIONS
- 6) 2008 HOUSING UNITS REPORT
- 7) WHITE PINE COUNTY HOUSING GAP ANALYSIS
- 8) WHITE PINE COUNTY HOUSING FACT SHEET
- 9) WHITE PINE COUNTY HISTORICAL EMPLOYMENT TRENDS
- 10) WHITE PINE COUNTY MINING EMPLOYMENT
- 11) WHITE PINE COUNTY EMPLOYMENT BY SECTOR
- 12) WHITE PINE COUNTY NUMBER OF FIRMS DOING BUSINESS
- 13) LAND OWNERSHIP, WHITE PINE COUNTY
- 14) SCHOOL CAPACITIES AND ENROLLMENT
- 15) LAND USE MAPS

**WHITE PINE COUNTY
2008 DEMOGRAPHIC PROFILE**

Population:

2008	9,947
2007	9,590
2006	9,542
2005	9,275
2004	8,966
2003	8,842
2002	8,863
2001	8,783
2000	9,181 (U.S. Census)

Estimates, 2001-2008, Nevada State Demographer

School Enrollment:

2008-09	1,398
2007-08	1,229
2006-07	1,399
2005-06	1,446
2004-05	1,450
2003-04	1,389

White Pine County School District

Workforce:

Total Labor Force:	4,802
Total Employed	4,577
Unemployed	225
Unemployment Rate	4.5%

May, 2008, Nevada State Department of Employment Security

Income:

	<u>White Pine</u>	<u>Nevada</u>
Average Weekly Wage, 2008	\$ 837	\$ 737
Median Household Income, 2008	\$55,400	\$60,300

HUD, Nevada State Employment Security Department

WHITE PINE COUNTY 2007 DEMOGRAPHIC PROFILE

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Housing Units:

2008	4,426
2007	4,418
2006	4,381
2005	4,310
2004	4,256
2000	4,200

White Pine County Assessor, 2008 Annual Report of Housing Units

Housing Costs (Single Family Home, Ely)

2008	\$165,000	Mean Housing Price, Range Median Housing Price
2007	\$178,235	Mean Housing Price, Range, \$60,000 to \$499,000 201,333 Median Housing Price
2006	\$133,675	Mean Housing Price, Range, \$23,625 to \$243,000 \$130,000 Median Housing Price
2005	\$82,200	Mean Housing Price, Range, \$25,000 to \$238,000 \$75,000 Median Housing Price

Review of White Pine County Assessor's Property Sales Data

Tax Revenue:

Assessed Valuation		Taxable Sales	
2007-2008	\$280,000,000	2007-2008	\$198,000,000
2006-2007	\$230,740,743	2006-2007	\$192,877,042
2005-2006	\$132,852,000	2005-2006	\$175,159,655
2004-2005	\$120,300,000	2004-2005	\$127,928,232
2003-2004	\$126,300,000	2003-2004	\$ 81,263,598

White Pine County Finance Department, Nevada Department of Taxation

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 1
INTRODUCTION

The purpose of the 2008 White Pine County Land Use Plan is to provide guidance in land use decisions and development for elected officials, appointed boards and officials, public land management agencies, private developers, and the public. The County's first Comprehensive Master Plan and Land Use element was adopted in 1970. The plan was updated in 1998. In the past ten years, some of the projects anticipated in 1998 have been completed while others have not occurred, trends in land use predicted in the 1998 plan have occurred, and new issues have emerged.

Critical issues identified through the 2008 Land Use Plan process include the availability of workforce housing; development of an urban interface area with residential growth extending north and south of Ely and surrounding the outlying communities of the County; parceling and residential development in mountainous areas that present challenges to protect environmental quality, preserve access to public land, and deliver public services; concern about the impact of exportation of water to southern Nevada and the purchase of ranch properties for uses other than agriculture; and preparation for potential changes in the area's economy through the potential energy development projects as well as the current worldwide economic crisis.

Shortly after the adoption of the 1998 Land Use Plan, BHP closed the Robinson Copper mine and laid off 433 employees. The mine closure resulted in a loss of 25 percent in total workforce, a 24 percent in annual wages, loss of 300 households, 24 percent loss in school enrollment, a 40 percent drop in assessed valuation, and a 37 percent drop in taxable sales. Between 1998 and 2004 property values dropped, and much of the existing housing stock was filled by southern Nevada and California residents lured by the area's outdoor recreation and cool summer climates, buying property at a bargain to serve as summer and retirement homes. In 2004, Quadra Mining Company of Canada purchased the Robinson mine holdings and reopened the mine. As the Robinson mine reached full employment of almost 500 workers, housing was in short supply. Prices increased sharply, and the County continues to face a shortage of workforce housing. In the past two years, copper production has yielded the first substantial net proceeds of mines tax the county has had since Kennecott closed the mine thirty years ago. In addition to the Robinson Mine, mining activity in the County includes the planned expansion of the Bald Mountain Gold Mine, US Gold's exploration project near Cherry Creek, the proposed reopening of the Taylor Silver Mine south of Ely, and several exploration projects for gas and oil. Initially, the economic crisis in late summer, 2008 did not impact White Pine County to the extent felt throughout the country because the market for the copper has been China and India. However, as the economic crisis spread throughout the world, copper prices have fallen creating renewed concern about the County's dependence on mining.

In the past ten years, new patterns in residential growth have emerged. Throughout the County's history, residential development occurred in established communities and the population in the outlying areas of the County was generally limited to the few people living at mines or ranches. New residents to the County as well as long time residents upgrading their housing options began to seek larger acreage outside of the existing communities. By 2005, the County's Open Space Plan recognized that the new development created an urban interface area stretching from Mattier Creek in north Steptoe Valley to south of Ely along Ward Mountain and west into Smith Valley as well as east into Duck Creek Basin. Since that time, the creation of new parcels and new residential growth has extended to the Lund/Preston area, Sacramento Pass near Baker, and Willard Creek in South Spring Valley. New housing development adds to the County's assessed valuation. At the same time, the growth of the urban interface results in conflict between traditional uses of Open Range areas with property owners desiring a residential environment and the County continues to struggle to provide public services including road maintenance, fire protection, and emergency medical services to residents in the outlying areas. Proposed parceling along Steptoe Creek raised awareness of the difficult balance between encouraging development of private property and protecting natural resources that support wildlife and outdoor recreation on the surrounding public lands.

Seventeen years after Las Vegas Valley Water District filed applications for all unappropriated ground water in Spring and Snake Valleys in White Pine County, the State Engineer scheduled the first water hearings. After discussions with Southern Nevada Water Authority (SNWA) failed to yield an agreement, White Pine County continued its protests of the Spring Valley applications. In 2007, the State Engineer issued a decision to grant SNWA up to 60,000 acre-feet of water from Spring Valley in White Pine and Lincoln Counties. The Spring Valley hearings were followed by hearings on Delamar, Dry Lake, and Cave Valleys in 2008. Although none of those applications were located in White Pine County, the potential impact on the portion of Cave Valley located in the County and possible impact on adjacent White River Valley prompted the County to maintain its participation in the hearings. The State Engineer's decision on Delamar, Dry Lake, and Cave Valleys leaves minimal resources available for development in those areas and the County is a participant in the current effort to appeal that ruling. The hearing on the applications in Snake Valley has been scheduled for fall, 2009. Even with the extensive monitoring programs required by the State Engineer and through the stipulated agreement with the Department of Interior agencies, the County remains extremely concerned about the environmental impact of depleting groundwater resources in both Spring and Snake Valleys. The recently released USGS Basin and Range Carbonate Aquifer System study (BARCAS) which suggests that much more water flows east from Steptoe Valley into Spring and Snake Valleys than previously thought raises increased concerns that the SNWA Groundwater Development Project may also negatively impact Steptoe Valley and the water resources that support the communities of Ely and McGill. A second concern related to the SNWA effort to secure water rights through the 1989 applications is their purchase of over 70 percent of the private ranch property in Spring Valley with the intent to export the ground water

resources from the ranches and retain the groundwater resources to support environmental quality in the valley. An economic analysis of Spring Valley activity shows that previous to the purchases, the ranches in Spring Valley supported approximately 25 percent of the County's economic output from agricultural production. The Spring Valley purchases coupled with the potential for future purchases of the remaining ranches in Spring Valley, possible purchases of ranch property and water rights in Cave and Snake Valleys, and the purchases of ranches in Steptoe Valley by Sierra Pacific Power Company to support potential power plant development raise a serious concern about the future of ranching and agriculture in the County.

The proposal for the White Pine Power Project coal fired electrical power generating plant which was officially closed in 1997 was reinstated with initial efforts in 2001 by PG & E National Energy Group and Duke Energy of North America. In the wake of the Enron financial issues, neither project was able to finance its development phase. However, in late 2003, new efforts to site coal fired electrical plants in White Pine County were initiated first with the White Pine Energy Station proposed by LS Power, White Pine Energy Associates followed by the Ely Energy Station proposed by NVEnergy (Nevada Power and Sierra Pacific Power). Both are progressing with their development phases including the Environmental Impact Statements for the land and rights-of-way through B.L.M., the air quality permits, and Public Utilities Commission permitting processes. If permitted and financed, each of the proposed coal fired power plants would require a five year construction period with peak employment of 1,500 and average annual employment of 600 followed by a forty-year operations phase with direct employment of 150 and indirect and induced employment raising that total to 250 new jobs. Each of the proposed plants will triple the County's annual tax revenues during construction and more than double the County's annual tax revenue during operation. The development of the coal-fired power plants has been an economic development goal for White Pine County for thirty years. The water resources committed to the plants were permitted to White Pine County for power generation in the early 1980's. The plants offer long-term stability and economic activity that will reduce the area's dependence on the boom/bust cycle of the mining industry. They offer employment opportunities at wage rates above the state's industrial average and that provide potential for career development and advancement meeting the goal of providing jobs to keep young people from leaving the area. The tax revenues generated by the plants would make White Pine County a tax exporting county for the first time since the Kennecott closure of the mine and smelter in 1978 and 1983 and can give local government and the school district the level of revenues needed to provide county residents with adequate public facilities and services. The coal-fired power plants will also result in the construction of the Southwest Intertie Transmission to link Twin Falls, Idaho with Las Vegas and provide a primary north-south transmission system to support smaller renewable energy projects throughout eastern Nevada. White Pine County demonstrates suitable wind energy for power generation in Spring Valley as well as along the ridgelines in the eastern portion of the County. The county has potential for solar power development with the western portion of the county showing somewhat stronger potential for solar energy. The County is currently working with the Spring Valley Wind Project, a proposed 150-megawatt wind farm to be located in north Spring Valley and the Bureau of Land Management reports

that it has six other applications for rights-of-way for anemometers to measure wind energy in other areas of the County. The County has also had inquiries from solar and biomass projects that would use the transmission line. The coal-fired plants also provide the promise of renovation of the Nevada Northern Railroad and reinstatement of rail freight service. The 140-mile short line railroad was constructed in 1906 to connect the copper mine at Ruth with the Union Pacific line near Wells. The line was used from 1906 to 1983 to haul copper ore from Ruth to McGill for smelting and then north to urban areas for refining. Los Angeles Department of Water and Power purchased the track from Kennecott in 1986 for use by the White Pine Power Project and arranged the donation of the historic rail yards, rolling stock and 28 miles of track to the City of Ely for a museum and tourist train ride. The line sat dormant from 1983 until limited freight service was reinstated to haul copper concentrate for BHP during the late 1990's. Use of the track stopped when BHP closed the mine in mid-1999. At that time the City of Ely began negotiations and grant development to purchase the railroad to prevent it from being dismantled and sold for scrap. The purchase of the track was completed in 2007. At the same time, Senator Harry Reid included the conveyance of the land under the track from BLM to the City of Ely as part of the Transportation Bill to facilitate the purchase and renovation of the track for use by the power projects while Senator John Ensign included \$2 million in funding for renovation of the track. Renovation of the track to Class III status is estimated at \$100,000,000 and is not possible for the community to complete the renovation through federal grant programs. Both power companies have entered into a Joint Development Agreement with the City of Ely for the permitting, track renovation, and operation of the railroad. The renovation of the track by the power projects will also provide the community with rail freight service that will open the door for additional industrial development and diversification of the area's economy. While the majority of the county's population is supportive of the power plants and optimistic about the benefits they will bring, there are groups who are concerned about potential impact to air quality, water resources, and rural lifestyle. The County Commission has gone on record supporting clean coal and renewable energy development as a means to reduce reliance on older, dirtier coal plants and bridge the period of time required to fully develop renewable energy options for viable, economically feasible energy production.

In 2006, Congress passed the White Pine County Conservation, Recreation, and Development Act (White Pine County Public Lands Bill) which designated that up to 45,000 acres of public land administered by the Bureau of Land Management would be made available for disposal. The bill requires that land put up for sale must be identified in the BLM's Resource Management Plan. The Ely District's Resource Management Plan was completed and the Record of Decision was signed in October 2008. The Plan identifies 30,000 acres of BLM land for disposal. The White Pine Bill designated approximately 12,000 of the 30,000 for the Ely Shoshone Tribal Expansion, expansion of the County's airport and industrial park, expansion of the Steptoe Valley Wildlife Management Area, and expansion of Cave Lake State Park and Ward Charcoal Ovens State Park, leaving 18,000 acres identified for potential disposal. Additional acreage to utilize the 45,000-acre designation will need to be identified and included in the Resource Management Plan by amendment. The potential land disposals will be coordinated between the BLM and the County Commission. One of the critical factors in updating

the Land Use Plan is to provide guidance for the Commission and BLM in identifying appropriate areas and land uses for disposal.

The 2008 White Pine County Land Use Plan Revision was undertaken in early 2007 as a cooperative venture between the White Pine County Economic Diversification Council, the Regional Planning Commission, and the County Commission. One of the difficulties in addressing land use issues in the county is that the land use and zoning maps are out of date. The zoning maps have not been updated since 1980 and it is extremely difficult to get an accurate picture of the County's current land use without adequate zoning maps. The County Commission supported a grant application to secure funding for the mapping portion of the project, which was funded through the state's Community Development Block Grant Program in July 2007 with the administration of the grant program for the mapping assigned to the Economic Diversification Program. The Land Use Plan process was conducted by the Economic Diversification Program staff. The Economic Diversification Program was asked to take responsibility for the Regional Planning Commission office and Building and Planning Department program in late 2007 increasing the day-to-day partnership of the two activities. The Land Use Plan Revision has been coordinated with other recent planning documents for the County including the 2000 McGill Highway Area Master Plan, 2005 Open Space Plan, the 2006 Water Resources Plan and the 2008 revision of the Public Land Use Policy. During 2007 and 2008, the program staff worked with each of the town advisory boards and town councils in the outlying areas, the Regional Planning Commission, and County Commission, and conducted two series of public workshops to determine community needs and concerns. The Land Use Plan Revision Plan Area encompasses all of White Pine County with the exception of the incorporated area of the City of Ely. Although the plan does not address land use needs within the City of Ely, the staff also worked with representatives of the City to consider annexation areas to meet needs for growth for the City and establishment of a sphere of influence around the city limits where City and County officials need to work cooperatively for consistent development. The critical concerns identified during the public review process focused on two areas: 1) the need to address zoning definitions and designations for Open Space, Ranch Agricultural and Ranch Estates to meet the needs of traditional open range use as well as increasing residential development in the outlying areas and 2) the need to address zoning designations and regulations for increasing residential development in the outlying areas and in particular the mountainous areas where there are concerns about balancing environmental quality, outdoor recreation, and private development. North Steptoe Valley has been identified as the primary industrial, commercial, and municipal center for the County with primary transportation and transmission capacity concentrated in the area. The 2008 Land Use Plan differs from previous land use plans for the County in that it considers development potential in the urban interface area and each of the primary basins identified in the 2006 Water Resources Plan (Steptoe, Spring, Snake, Butte, and White River Valleys) rather than concentrating on the established communities with little discussion of potential development in the balance of the county.

The proposed goals and recommendations were presented at a final public workshop on December 2 and public hearings before the Regional Planning Commission on December

3, 2008 and the County Commission on December 10, 2008. The approved plan is provided as a guide for development that will be reviewed and if needed amended on an annual basis. The project also provides GIS based zoning maps that can be updated on an on-going basis as zone changes are requested and approved. The project provides the County with capacity to make the Land Use Plan and zoning and land use maps available in digital form and online for the convenience of the public. The completed plan will be used as guidance in land use decisions, an annual report of progress in meeting Land Use Plan goals will be provided by the Regional Planning Commission, and the plan will be reviewed and revised on an annual basis.

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 2
PLAN AREA

The White Pine County 2008 Land Use Plan Revision includes all of the areas in White Pine County excluding the corporate boundaries of the City of Ely. The City of Ely was excluded as a primary portion of the plan for two reasons: 1) as an in-house effort taken on as part of on-going staff duties it was felt that including the specific zoning and land use issues within the City would be too time consuming to provide substantial public review and analysis and 2) the grant funding the mapping portion of the project was available to the areas in White Pine County because they were income eligible for the grant funding but the City of Ely was not. Even though the City of Ely was not considered as a primary focus of the planning activity, the staff worked with the City to determine growth needs and identify areas for potential expansion and annexation.

The seven primary planning areas are:

- The urban interface area encompassing North Steptoe Valley from Mattier Creek south through the Ward Charcoal Ovens, west into Smith and Butte Valleys, and east into the Duck Creek Basin
- McGill and the surrounding area
- Ruth and the surrounding area
- Lund, Preston, White River and Railroad Valleys
- Baker, Spring, Pleasant, Tippitt, and Snake Valleys
- Western White Pine County: Newark, Butte, Long, and Jakes Valleys
- Boundary Areas, valleys that are primarily located in other Counties but have a small portion in White Pine County: Huntington, Ruby, Antelope, Deep Creek, Hamlin, Lake, Cave, and Little Smokey Valleys

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 3
LAND USES AND ISSUES

Land use issues which served as a guide for the development of the 2008 revision were derived from a review of the 1970 and 1998 Land Use Plan issues and accomplishments. New issues that have emerged during the past ten years were identified through review of the County's annual Comprehensive Economic Development Strategy and through the discussions during the public workshops and public meetings during the plan process.

The 1970 Land Use Plan was based on the idea that the Highway 6/50/93 Bypass would encircle Ely and would become the urban boundary of the community. It did not anticipate residential or commercial growth beyond that boundary. The areas now experiencing urban interface growth were identified as open range, agriculture and Federal Reserve. The communities of McGill, Baker, Lund and Preston were expected to maintain status quo and a need for high density housing for mine employees was identified for Ruth. Emphasis was placed on urban infill to accommodate growth and preservation of agricultural uses throughout the County.

County projects identified in the 1970 plan included:

- Ski resort on Bald Mountain (now within the Great Basin National Park)
- Extension of I-70 from Utah through Ely to Reno
- Construction of Keystone Reservoir
- Addition of land for residential development and parks in McGill and Ruth
- Road improvements including realignment of the Ruby Marsh Road and improvement of the Cherry Creek/Robinson Summit Connection Road
- Ely based projects impacting county development included creation of a Georgetown Ranch recreation project, relocation of the high school and junior high schools, creation of connector roads between Ely and the Bypass, and creation of a new cemetery on the Pioche Highway on the eastern boundary of the city.

The 1998 Plan noted that the closure of the Kennecott mine, smelter, and railroad; construction of the Ely State Prison; development of the Industrial Park on the McGill Highway, Designation of the Great Basin National Park; Las Vegas Valley Water District filings on water resources in White Pine County; Development of the Cave Lake State Park and Illipah Reservoir; and Completion of the Sunnyside Cutoff were not anticipated in the 1970 plan. In addition, oil exploration and drilling in the mid-1980's; gold, and silver mining activity that expanded and then closed in the 1980's; initial planning for the MX Missile System which was dropped in 1981; and development work on the White Pine Power Project, permitting water rights in North Steptoe Valley to White Pine County for power generation, and purchase of the Nevada Northern Railroad by Los Angeles Department of Water and Power all impacted economic trends, speculation, and development in the County, were not anticipated in the 1970 plan, and were not noted in the 1998 plan.

The 1998 Land Use Plan identified the following issues and community goals: expansion of the airport; development of the industrial park; purchase and development of the 3-C Ranch/Comins Lake area for a Wildlife Management Area; development of Ward Charcoal Ovens as a state park; development in rural areas including along the bypass, along the Pioche Highway (Great Basin Boulevard), Newark Valley (Cold Creek Trailer Park), Duck Creek, Indian Creek and the area south of Ely as well as the need for an urban boundary; potential flood hazards in the Smith Valley area; development of the Georgetown Ranch area for recreation and expansion of the golf course; legal issues and public services to the Pleasant Valley community; and constraints due to the designation of Wilderness Study Areas. All of the communities expressed concerns about preservation and viability of agriculture. The White Pine Power Project was officially closed in 1997 and the 1998 Plan does not include potential for future power project development. The Las Vegas Valley Water District filings were not mentioned as a specific land use issue but were incorporated in the concerns about viability of agriculture and the goals to promote water-consuming activities in the outlying areas of the County.

Of the 1998 Land Use Issues:

- The BLM has recently conveyed 1,500 acres to the county for airport expansion and the County is working with FAA grants to upgrade and expand runway and airport facilities
- All but 2.5 acres of the developed portion of the Industrial Park have been sold, the Nevada Department of Transportation has just deeded the 6.7-acre roadside rest area to the County for expansion of the Park, and the BLM has conveyed the first 40 acres of the 200-acre expansion area for the Park in late 2008. During the past year, the remaining unpaved street in the park was paved through a state Economic Development Fund grant and the County is completing an Industrial Park Expansion plan to consider options on development of the 200-acre expansion.
- Comins Lake and the 3-C Ranch were purchased by the State and the Steptoe Valley Wildlife Management Area was created encompassing Comins Lake, wetlands areas for water fowl, and big game habitat
- Ward Charcoal Ovens has been developed as a State Park; parceling and development in the urban interface has progressed well beyond the 1998 level and the urban boundary continues to expand
- The County was accepted into the federal FEMA Flood Insurance Program making county residents in the Smith Valley and Lackawanna areas eligible for flood insurance
- The golf course was expanded to 18 holes but the remaining components of the Georgetown Ranch project have not been developed
- The 2006 White Pine County Public Lands Bill designated over 500,000 acres as wilderness releasing the remaining 68,000 acres of Wilderness Study Areas from the wilderness restrictions.

Since the 1998 plan was completed, the Robinson Mine closed and reopened marketing the copper concentrate to China and India. The mine is at full operation employing almost 500 workers and generating net proceeds of mines revenue for the County. Recent economic declines worldwide have resulted in questions about the immediate future for copper prices and the potential impact on White Pine County's economy. The hearings are progressing on the Southern Nevada Water Authority applications for the Groudwater Development Project and SNWA has purchased seven ranches for over 70 percent of the private ranch property in Spring Valley and announced its plans to export the ground water from the ranches to southern Nevada. There is continuing concern about the potential negative impact to the environment and viability of agriculture given the loss of water resources and purchase of ranches for water resources. The County is working with three energy development projects, transmission systems, and potential renovation of the railroad. If permitted and financed the projects promise to generate jobs, supplement business and industrial activity, and tax revenues that will reduce the area's dependence on the boom/bust cycle of the mining industry.

Land Use Planning Issues:

Land use issues identified in the 2008 process include on some of the continuing concerns identified in the previous plans but focus much more heavily on the need to develop land use designations and regulations for development in the outlying areas of the County:

- Balance of traditional agricultural uses and emerging residential patterns in the O-5 (open range), R-A (ranch agricultural) and R-E 43 (ranch estates) zoning designations.
- Develop new zoning designations and regulations to balance environmental quality, outdoor recreation on public land, and private development in mountainous areas
- Identify North Steptoe Valley as the industrial, commercial, and municipal hub of the County due to the concentration of services, transportation routes, and transmission capacity.
- Recognize the development potential throughout the County and provide adequate and realistic guidelines to promote and allow development in outlying areas of the County
- Address specific needs for zone changes within the communities of McGill, Ruth, Lund, Preston, Cherry Creek, and Baker
- Address need for expansion of boundaries in McGill, Lund, Ruth, and Preston
- Identify areas that are included in the BLM's lands for disposal that should not be sold for private development because they present concerns for wildlife corridors, water quality, and viewshed.

See Attachments

2005 Open Space Plan Map and Recommendations

2006 Water Resources Plan, Basin-by-Basin Analysis

2008 Public Land Use Policy

Comparison of White Pine County Land Use Plan Recommendations

Exhibits:

The 2000 Census provides the most recent detailed analysis of the County's population characteristics. The County's population in 1990 and 2000 reflects not only the influx of new residents to work at the mine, but the addition of 1,200 prison inmates. The Census shows that the percentage of male and female residents remains roughly the same as the 1990 Census at 43.8 percent female and 56.2 percent male. The division of male and female population was almost equal until the 1990 census. With the construction and operation of the state's maximum-security prison and the Ely Conservation Camp, minimum-security prison, a total of 1200 inmates, the male population is slightly higher in overall percentage. The racial and ethnic breakdown shows that the County's population is cent Caucasian, 4.1 percent Black; 3.3 percent Native American; .6 percent Asian; 3.1 percent Other; and 2.1 percent two or more races and 11 percent of the total population is Hispanic. The mean age has increased from 33.8 in 1990 to 37.7 in 2000 and reflects trends statewide (33.3 to 35) and nationally (32.9 to 35.3). According to the 2000 Census the median household income in White Pine County was \$36,688 and the median family income was \$40,138 (This difference reflects the large number of institutional residents including the White Pine Care Center and prison inmates who are recorded as households are not included in the data for families by the Census). The 2000 Census reports that the per capita income is \$18,309 and 11 percent of the population are at or below the poverty level. Nevada Department of Employment Security reports that in 2008, the average weekly wage for White Pine County was \$837 compared to \$737 for the state of Nevada, the Median Household Income was \$55,000 compared to \$51,509 statewide. The county's wage and income levels were approximately 85 percent of the statewide levels until the last two years. According to the University of Nevada Center for Economic Development, even with the prison and mining activity bringing in newcomers, White Pine County has the second highest percent of native Nevadans in the state. The statewide average for Native Nevadans is 21.8 percent, Clark County is 15 percent, and White Pine County is 40.1 percent second only to Lincoln County with 41.2 percent. The Nevada State Demographer's estimates show that there has been a slight decline in the percentage of the population living in the City of Ely and an increase in the population living in the County reflecting the increase in residential development in the urban interface area.

Population Projections:

The Nevada State Demographer's population projections are based on a regression analysis that bases estimates of future population on historic population trends and may not always account for changes in the area's basic economic activity. The emergence of energy development projects as an industrial cluster, the increase in retirees moving into the area, new mining projects, and motel expansions have not been factored into the 2008 projections. Based on the projections released for 2008, the County's current population is 9,947 (a 3.7 percent increase from 2007). The County's population is expected to increase to 10,291 in 2009 for a 3.5 percent increase followed by increases of 1 to 1.6 percent each year until 2014 for a total population of 10,995. At that point the State Demographer estimates that the rate of growth will slow to rates between 0 and .4 percent each year until 2028 when the population will reach 11,370. In using the population projections to estimate needs for housing and public services, it should be noted that the

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 4
POPULATION AND HOUSING

Historical Population Trends:

Since the 1800's White Pine County's population trends have reflected the boom and bust cycle of the mining industry. As early as 1868 the population was 10,000 in Hamilton alone. Throughout the nineteenth century, gold and silver camps flourished and then became ghost towns overnight. From 1900 to 1910, the opening of the copper mines caused a 280 percent increase in the County's population. The population reached a peak of 12,377 in 1940. In the 1950's the major copper holdings were consolidated under the ownership of the Kennecott Copper Company. The mergers resulted in substantial mine layoffs and the population fell to 9,424. By 1970 it had risen to 10,150. The mine closure in 1978 and the lay offs at the smelter were responsible for a drop in population to 8,167 (21 percent). Following the 1980 census, Kennecott closed the smelter and railroad and population estimates showed continued decline to 7,640 by 1985. The 1990 Census showed that the population rose to 9,000 again due to increases in the gold mining industry. Between 1970 and 1980, the net out-migration was a 28 percent loss and from 1986 to 1996 the County experienced a 22 percent growth rate. At the same time, the state experienced a growth rate of 53 percent between 1970 and 1980 and a 39 percent growth rate between 1980 and 1990. Between 1970 and 1980, the County's urban population declined while the rural population increased. The population of McGill, which housed the Kennecott smelter, declined by 34 percent, and the population of Ruth, which housed the workforce for the Kennecott mine, declined by 38 percent. The population of Ely decreased by 21 percent and the population of the rural areas increased by 30 percent during the same period. The fluctuation in population distribution was attributed to long time county residents return to ranches and self-employment following the Kennecott closures. As gold mining activity increased, Magma Copper began operations to mine copper at the Robinson mine, and the mine reached full operation under BHP's ownership, the County's population increased to 11,150 in 1999.

In the early 1900's the County was a true melting pot. Most newcomers were immigrants. French and Spanish Basques worked on the ranches. Slavic, Greek, Italian, Japanese, and Chinese immigrants worked at the smelter and mine and on the railroad. Language barriers separated neighborhoods and many Mc Gill residents still remember growing up in Greek Town or Slav Town. The rich cultural heritage from the turn of the century has had an important role in forming the character of the community

Current Population and Population Characteristics:

The County's population during the past ten years fluctuated due to the BHP closure of the mine and the reopening under Quadra Mining Company's ownership. The mine closed in mid-1999, the County's population dropped to 9,181 by 2000. The population continued to fall to 8,537 in 2002. Quadra Mining Company purchased the Robinson Mine in 2004 and reinstated mining activity. The population began a period of steady increases from 8,966 in 2004 to 9,947 in 2008.

total population figures include the 1,200 inmates at Ely State Prison and Ely Conservation Camp.

Because the State Demographer's projections do not include the potential for growth through new mining activity, the possibility that the Robinson Mine life may be as short as seven years or as long as thirty years rather than the original estimate of fifteen years, current and projected business developments, and the energy development projects, additional projections have been estimated to include the potential increases and decreases due to these factors. The estimates have been developed Countywide and for the City of Ely to determine needed housing units within the City and the need for additional acreage through annexation. These projections show a low and high estimate based on potential loss and gain of economic activity over the next twenty years that range from a low of 4,876 households countywide and a high of 6,891. This is expected to result in a projected number of households in the City of Ely from a low of 1,788 to a high of 2,644.

Housing:

The 2008 County Assessor's report of housing units shows that the County has 4,426 housing units of which 3,203 are single family homes, 298 are multi-family housing units, and 925 are mobile homes. The distribution of housing units shows that there are 2,179 housing units in Ely and East Ely, 705 housing units in McGill, 219 in Ruth, 84 in Lund and 24 in Preston, 37 in Cherry Creek, 36 in Baker, 174 in outlying areas, and 1,085 in the urban interface areas.

There has been a net increase of 8 housing units from 2007 to 2008 with an increase of 226 housing units since 2000. A comparison of the distribution of housing units in 1999 and 2008 shows that the distribution of housing units has remained constant over the past ten years.

The 1998 Land Use Plan predicted a need for 4,908 housing units by 2010. The County is 549 housing units short of that number at the end of 2008. In addition, the two primary areas of shortage, Multi-family, a shortage of 70 housing units, and Manufactured Housing, a shortage of 479 housing units, are the most affordable forms of housing available to the area's workforce.

The 2008 Workforce Housing Gap Analysis shows that there is a vacancy rate of .04 percent or 178 housing units. However, the Housing Gap Analysis shows that 58 percent of the County's housing stock was constructed prior to 1970 and that based on the analysis of age of housing units, kitchen facilities, and plumbing, the analysis estimates that 628 existing housing units are substandard and will need to be replaced within the next ten years. The Housing Gap Analysis also estimates that based on existing population, substandard housing units, and job vacancies, the community has a need for 780 housing units.

In evaluating potential growth or loss in population depending on economic activity in the next twenty years, there is a need for between 897 and 1,500 housing units

countywide and between 595 and 895 housing units in the City of Ely in the next twenty years. The estimate is based on the draft and final Environmental Impact Statements for the two power plants and their plans to construct 100 percent of the housing units needed during construction of the respective project sites. Both plants propose worker villages on or near the construction sites for the majority of the construction workforce with approximately 200 temporary housing units needed in the Ely area for families to locate closer to services. A total of 800 potential building lots have been identified within the Ely Municipal Utilities system. The system currently has 2,200 water and 2,000 sewer residential customers both inside and out side of the corporate boundaries and it has minimal capacity for additional households. Estimating .5 acres per housing unit for the lot, streets, and public services, if the City of Ely annexed the existing housing units on its municipal utilities system and all of the available housing lots were developed, the City would need an additional fifty acres for growth of residential development in the next twenty years. Using the population projections estimating the potential of two power projects, one wind energy project, and additional development, there is a need for between 897 and 1,500 additional housing units County-wide over the next twenty years. Using an average of 1 acre per housing unit in the County, outside the City limits, the County needs 302 to 605 acres for residential development in the next twenty years. According to the County Assessor, there are 522 vacant building lots outside the City limits and in the Urban Interface Area. The average price of a three-bedroom home increased from \$82,000 in 2005 to \$178,235 in 2007 (a 217 percent increase). Home sales for the first half of 2008 show that prices overall have declined to an average of \$165,000, (approximately an 8 percent decline).

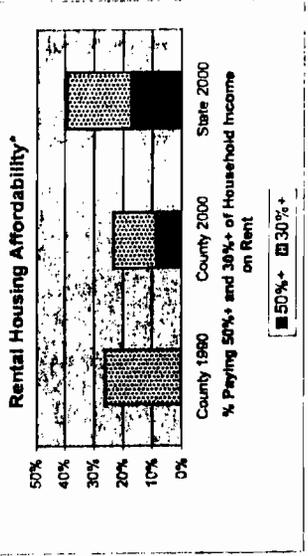
See Exhibits:

- 1) White Pine County, Historical Population Trends
- 2) Population Distribution
- 3) Population Characteristics
- 4) City of Ely Population Projections;
- 5) White Pine County Population Projections
- 6) 2008 Housing Units Report
- 7) White Pine County Housing Gap Analysis
- 8) White Pine County Housing Fact Sheet

White Pine County Data Sheet

Rental Housing Affordability

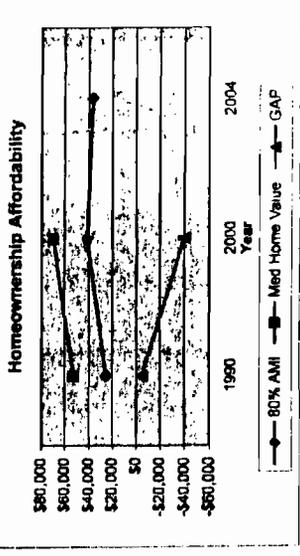
	1990	2000	% Chg	State
Total Renters	857	738	-13.9%	292,813
Median Gross Rent	\$387	\$452	16.8%	\$699
% of Household Income	21.2%	19.6%	-7.5%	26.5%
# Paying 30%+ Household Income on Rent	223	172	-22.9%	114,455
% Paying 30%+ Household Income on Rent	26.0%	23.3%	-10.4%	39.1%
# Paying 50%+ Household Income on Rent	n/a	63	n/a	49,693
% Paying 50%+ Household Income on Rent	n/a	8.5%	n/a	17.0%
# Households with Income 50% or less of HUD AMI	318	308	-3.1%	92,989
% Households with Inc. 50% or less of HUD AMI	36.3%	40.9%	12.7%	31.7%
# Paying >30% Household Income on Rent	182	148	-18.6%	70,509
% Paying >30% Household Income on Rent	57.2%	48.1%	-15.9%	75.8%



* 50%+ data not available in 1990.

Homeownership Affordability

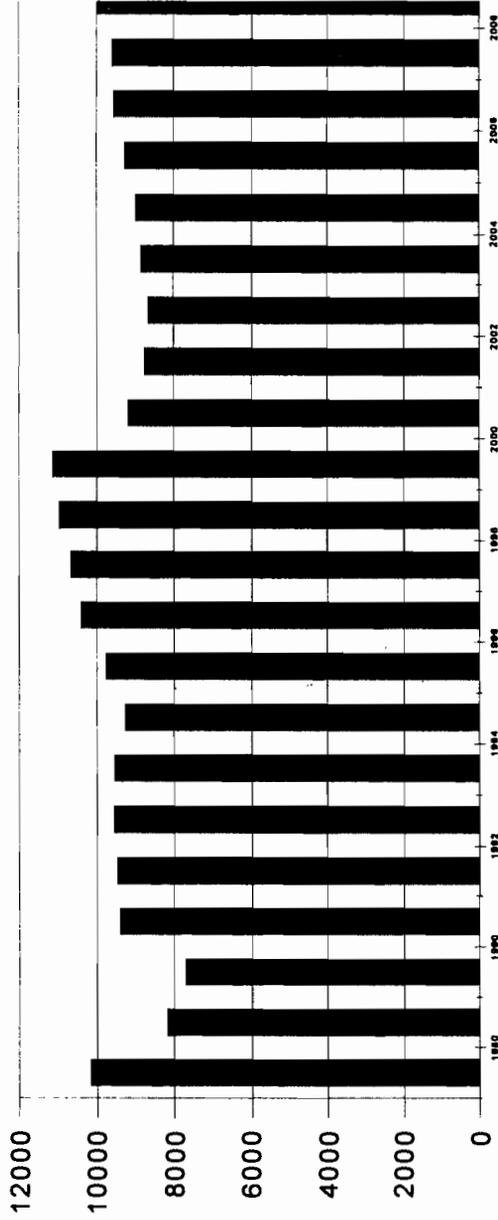
	1990	2000	% Chg	State
Median Value for Specified Owners—Occupied Units*	\$53,000	\$70,000	32.1%	n/a
Median Value for Mobile Homes*	n/a	\$42,500	n/a	n/a
Affordability Gap				
HUD Area Median Income (AMI)	\$31,900	\$52,000	64.6%	\$45,400
80% AMI	\$25,280	\$41,600	64.6%	\$38,320
Interest Rate**	10.01%	8.04%	-19.7%	5.83%
Capitalized House Price Maximum***	\$57,829	\$110,166	90.5%	n/a
Median Home Value*	\$53,000	\$70,000	32.1%	n/a
GAP****	-\$4,829	-\$40,166	-731.8%	n/a
% Owner HHolds With Any Housing Problems****	15.9%	17.4%	9.4%	30.4%



* 2004 data = Median MLS Sales Price—3rd Quarter, Northern NV Assoc. of Realtors and Elko County Assoc. of Realtors
 ** Mortgage Bankers Association. Average annual interest rates on 30-year fixed-rate mortgages. 2004 = Jan-Aug average.
 *** Assumes 28% of income (80% AMI) available annually for shelter, less taxes and insurance.
 **** Difference between Capitalized House Price Maximum and Median Home Value.
 ***** Cost burden greater than 30% of income and/or overcrowding and/or without complete kitchen or plumbing facilities.
 Source: U.S. Census, HUD State of the Cities Database, Northern NV Assoc. of Realtors and Elko Co. Assoc. of Realtors

POPULATION 1970 - 2008

White Pine County Population - 1970 - 2008



1970.....	10,150
1980.....	8,167
1985.....	7,710
1990.....	9,410
1991.....	9,480
1992.....	9,570
1993.....	9,540
1994.....	9,280
1995.....	9,770
1996.....	10,400
1997.....	10,640
1998.....	10,960
1999.....	11,150
2000.....	9,181
2001.....	8,537
2002.....	8,674
2003.....	8,842
2004.....	8,966
2005.....	9,275
2006.....	9,542
2007.....	9,590
2008.....	9,947

TRENDS IN POPULATION DISTRIBUTION IN THE COUNTY

	1940	1950	1960	1970	1980	1990	2000	2005	2006	2007	2008
City of Ely	4,140	3,558	5,814	6,168	4,882	5,000	5,118	4,166	4,325	4,294	4,425
McGill	N/A	2,297	2,195	2,164	1,419	1,712	1,384	1,109	1,145	1,051	1,145
Ruth	N/A	1,244	N/A	731	456	391	469	394	405	374	400
County Balance	12,377	9,424	9,808	11,050	8,167	9,264	9,181	9,275	9,542	9,590	9,947

**WHITE PINE COUNTY, NEVADA
POPULATION CHARACTERISTICS**

General Characteristics	Number	Percent	U.S.
Total population	9,181		
Male	5,164	56.2	49.1%
Female	4,019	43.8	50.9%
Median Age (years)	37.7	(X)	35.3
Under 5 years	550	6.0	6.8%
18 years and over	6,961	75.8	74.3%
65 years and over	1,239	13.5	12.4%
One race	8,988	97.9	97.6%
White	7,928	86.4	75.1%
Black or African American	380	4.1	12.3%
American Indian and Alaska Native	302	3.3	0.9%
Asian	72	0.8	3.6%
Native Hawaiian and Other Pacific Islander	22	0.2	0.1%
Some other race	284	3.1	5.5%
Two or more races	193	2.1	2.4%
Hispanic or Latino (of any race)	1,008	11.0	12.5%
Household population	7,940	86.5	97.2%
Group quarters population	1,241	13.5	2.8%
Average household size	2.42	(X)	2.59
Average family size	3.01	(X)	3.14
Total Housing Units	4,439		
Occupied housing units	3,282	73.9	91.0%
Owner-occupied housing units	2,515	76.6	66.2%
Renter-occupies housing units	767	23.4	33.8%
Vacant housing units	1,157	26.1	9.0%
Social Characteristics	Number	Percent	U.S.
Population 25 years and over	6,184		
High school graduate or higher	5,072	82.0	80.4%
Bachelor's degree or higher	731	11.8	24.4%
Civilian veterans (civilian population 18 years & over)	1,349	19.4	12.7%
Disability status (population 5 years and over)	1,697	22.9	19.3%
Foreign born	269	2.9	11.1%
Male, Now married, except separated (population 15 years and over)	2,576	60.9	56.7%
Female, Now married, except separated (population 15 years and over)	1,737	55.6	52.1%
Speak a language other than English at home (population 5 years and over)	840	9.7	17.9%
Economic Characteristics – show more	Number	Percent	U.S.
In labor force (population 16 years and older)	3,593	49.6	63.9%
Mean travel time to work in minutes (workers 16 years and older)	18.3	(X)	25.5
Median household income (dollars)	36,688	(X)	41,994
Median family income in 1999 (dollars)	44,136	(X)	50,046
Per capita income in 1999 (dollars)	18,309	(X)	21,587
Families below poverty level	221	10.3	9.2%
Individuals below poverty level	866	11.0	12.4%
Housing Characteristics – show more	Number	Percent	U.S.
Single-family owner-occupied homes	1,871		
Median value (dollars)	70,000	(X)	119,600
Median of selected monthly owner costs	(X)	(X)	
With a mortgage (dollars)	772	(X)	1,088
Not mortgaged (dollars)	241	(X)	295

(X) Not applicable

Source: U.S. Census Bureau, Summary (SF 1) and Summary File 3 SF3

City of Ely, Population Projections

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Less Indirect Jobs Due to Mine	929	988	1,015	1,041	1,065	1,087	1,107	1,106	1,108	1,111
Less Mine Employment	1,309	1,368	1,395	1,421	1,445	1,467	1,487	1,486	1,488	1,491
State Projections	1689	1743	1775	1,801	1,825	1,847	1,867	1,866	1,868	1,871
Potential Projects										
Taylor Mine	0	0	88	88	88	88	88	88	88	88
Spring Valley Wind	0	0	10	10	10	12	12	12	15	15
Holiday Inn/Rest.	0	0	70	70	70	70	70	70	70	70
Eureka Mine	0	0	100	100	75	75	75	50	50	25
SNWA	0	0	0	50	50	25	15	10	5	3
General Development	2	5	5	10	15	20	25	30	35	45
Total	1,691	1,753	2,048	2,129	2,133	2,137	2,127	2,126	2,131	2,139
Mine Life, 7 year mine life	0	0	0	0	0	0	0	0	1,751	1,759
Power Projects										
WPES I	1,691	1,753	2,198	2,279	2,283	2,237	2,177	2,316	2,321	2,329
WPES I, II	1,691	1,753	2,198	2,279	2,283	2,237	2,177	2,436	2,441	2,449
WPES I, EEC	1,691	1,753	2,198	2,279	2,483	2,437	2,377	2,416	2,371	2,495
WPES I, II, EEC	1,691	1,753	2,198	2,279	2,483	2,437	2,377	2,536	2,491	2,615
EEC	1,691	1,753	2,198	2,279	2,333	2,337	2,327	2,226	2,181	2,305
Mine Life 7 year mine life									1,801	1,925

City of Ely, Population Projections

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Base Population	1,114	1,023	1,122	1,127	1,893	1,900	1,908	1,913	1,918	1,925	1,931
Specific Projects	1,494	1,403	1,403	1,507							
Taylor Mine					88	88	88	88	88	88	88
Spring Valley Wind					20	20	20	20	20	20	20
Holiday Inn/Rest.					70	70	70	70	70	70	70
Eureka Mine	88	88	88	88	25	25	25	25	25	25	25
SNWA	15	18	18	18	5	5	5	5	5	5	5
General Development	70	70	70	70	80	85	85	85	85	85	85
Total	25	25	25	25							
	5	5	5	5	2,155	2,193	2,206	2,211	2,216	2,223	2,224
	45	62	77	80							
Mine Life, 7 Years	1,742	1,766	1,785	1,788	1,766	1,813	1,826	1,831	1,826	2,843	1,844
WPES I	2,312	2,336	2,355	2,358	2,345	2,383	2,396	2,401	2,406	2,413	2,414
WPES I, II	2,402	2,456	2,475	2,478	2,465	2,503	2,516	2,521	2,526	2,533	2,534
WPES I, EEC	2,448	2,502	2,521	2,524	2,511	2,549	2,562	2,567	2,572	2,579	2,580
WPES I, II EEC	2,568	2,622	2,641	2,644	2,631	2,669	2,682	2,687	2,682	2,699	2,700
EEC	2,258	2,312	2,331	2,334	2,321	2,359	2,372	2,548	2,312	2,389	2,390
Mine Life, 7 Years	2,146	1,932	1,951	1,954	1,941	1,979	1,992	2,021	1,932	2,009	2,010

WHITE PINE COUNTY POPULATION PROJECTIONS

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Base Population	9947	10,991	10,953	10,605	10,795	10,874	10,995	10,990	10,999	10,019
Households	3,979	4,116	4,181	4,242	4,298	4,374	4,398	4,396	4,399	4,407
General Development	3	6	304	385	388	330	305	295	308	310
Total	3,981	4,122	4,485	4,627	4,689	4,679	4,703	4,691	4,707	4,717
Mine life 7 years no power projects									4,207	4,217
WPES, I	0	0	5,085	5,227	5,889	6,179	5,203	4,941	4,957	4,967
WPES I, II	0	0	5,085	5,227	5,889	6,179	5,203	5,191	5,207	5,317
WPES I, EEC	0	0	5,085	5,227	6,489	6,779	6,403	6,441	5,457	5,192
WPES I, II, EEC	0	0	5,085	5,227	6,489	6,779	6,403	6,691	5,707	5,542
EEC	0	0	5,085	5,227	5,289	5,279	5,903	6,191	5,207	5,017
Mine Life 7 years	0	0	0	0	0	0	0	0	4,707	4,517

WHITE PINE COUNTY POPULATION PROJECTIONS

Year	2022	2023	2024	2025	2026	2027	2028
Base Population	11,148	11,188	11,234	11,265	11,297	11,333	11,370
Households	4,459	4,475	4,493	4,506	4,518	4,533	4,548
General Development	323	323	328	328	328	328	328
Total	4,782	4,798	4,821	4,834	4,846	4,861	4,876
Mine life 7 years, no power projects	4,282	4,298	4,321	4,334	4,346	4,361	4,376
WPES I	5,032	5,048	5,071	5,084	5,096	5,111	5,126
WPES I, II	5,092	5,108	5,131	5,144	5,156	5,171	5,186
WPES I, EEC	5,332	5,348	5,371	5,384	5,396	5,411	5,246
WPES I, II EEC	5,392	5,408	5,431	5,444	5,456	5,471	5,486
EEC	5,082	5,098	5,121	5,134	5,146	5,161	5,176
Mine Life 7 Years	4,532	4,548	4,571	4,584	4,596	4,611	4,626

HOUSING UNIT COUNTS FOR		July 1, 2008		WHITE PINE			
FINAL CERTIFICATION FOR 2008 ESTIMATES		County		Mobile Home Housing Unit			
Tax District Number (as recorded in file)	Name of Tax District, City, or Town	Name of City or Town within the Tax Dist. (if any)	Multi-Family Housing Units	Single Family Attached Housing Units	Personal Property		
Assessor's name(s)	City, or Town	Units	Single Family Detached Housing Units	Attached Housing Units	Rural Property		
1.0	ELY	ELY	1064	34	102	91	34
1.5	EAST ELY	EAST ELY	667	28	172	61	38
2.0	MCGILL	MCGILL	542	2	18	41	4
3.0	LUND	LUND	62	0	0	15	6
4.0	RUTH	RUTH	171	2	4	29	13
5.0	GENERAL COUNTY	GENERAL COUNTY	492	0	4	182	197
5.1	GENERAL COUNTY	CHERRY CREEK	21	0	0	14	2
5.2	GENERAL COUNTY	PEARCE SUB.	13	0	0	6	1
5.3	GENERAL COUNTY	GLEASON CREEK	2	0	0	2	0
5.4	GENERAL COUNTY	RANCHES	117	0	0	48	7
5.5	GENERAL COUNTY	BAKER	12	0	0	24	1
5.6	GENERAL COUNTY	CROSS TIMBER	62	0	0	81	6
5.7	GENERAL COUNTY	SALE OF HERCULES	16	0	0	6	0
5.8	GENERAL COUNTY	PRESTON	9	0	0	12	3
5.9	GENERAL COUNTY	MINES	1	0	0	0	0
TOTAL OF ALL TAX DISTRICT			3149	63	298	612	313
* If you prefer reporting units as combined sums of Multi-family please report the total under the SFA column							
ROBERT L. BISHOP		9/18/2008		Please return to:			
Prepared by:		Date:		Nevada State Demographer's Office			
ROBERT L. BISHOP		9/18/2008		College of Business Administration			
Assessor:		Date:		University of Nevada Reno/RM8032			
				Reno, NV 89657-0100			
				Phone: (775) 784-4363			
				Fax: (775) 784-4337			
By signing the above, I certify that the information provided herein is in accordance with the NV Statutes and Regulation of the NV Tax Commission.							

**White Pine County
Workforce Housing**

Table 17. Factors Used in Housing Gap Analysis for White Pine County

Category	Values
Employment Vacancy	200
Population per Employee	2.36
Group Quarters Estimate	1,241
Average Persons per Household	2.42
Household per Housing Unit – NV	0.908
Vacancy Rate	0.04
Uninhabited Units	628

**2007 Mortgage Qualifying Income Estimates
White Pine County, Nevada**

Single Family

Manufactured

Number of Units Built 1970 & After Sold in 2007
Sales Ranges
\$225,000
Median Sales Price
\$70,000

38	15
\$76,000 - \$499,000	\$12,000 -
\$227,000	

Monthly Payments Based on a 30-Year Loan at a 9.0% Interest Rate & 10% Downpayment \$1,224.88
\$377.72

Annual Mortgage Payments \$14,699
\$4,533

Annual Mortgage Insurance Payment \$1,021.50
\$315.00

Property Tax Rate 3.66 3.66
Median Assessed Value of Units Built 1970 & After \$42,288

\$21,203
Property Tax Per Year \$ 1,548 \$776
(Property Tax = Assessed Value/100 x

Tax Rate)
Assumed Costs for Power, Water, Sewer, Trash, & Heat Per Year(\$200/Month) \$2,400
\$2,400

Source of cost for water, sewer, & trash: Desert Mountain Realty, Inc Cost for power and heat is
\$150.00 per month)

Home Insurance \$499 \$ 154

(Home insurance is estimated to be 0.22% of the unit's
market value)

Total Owner's Costs (Yearly) \$20,167 \$8,176
(Total Owner Costs = Mortgage + MIP + Taxes +

Utilities + Insurance)
Owner's Costs as a % of HH Income (HUD) 28.0% 28.0%
(Owner costs include house payments, real estate taxes, fire insurance, flood insurance, power, water, heat and
home association fees)

Estimated Qualifying Income \$72,028
\$29,208

White Pine County Data Sheet

Housing Statistics	1990		2000		% Chg	
	Total	%	Total	%	90-00	%
Housing Units	3,982	n/a	4,439	n/a	11.5%	
Occupied Units	3,296	82.8%	3,282	73.9%	-0.4%	
Vacant Units	686	17.2%	1,157	26.1%	68.7%	
Owner Occupied Units	2,392	72.6%	2,515	76.6%	5.1%	
Renter Occupied Units	904	27.4%	767	23.4%	-15.2%	
Units in Structure						
1. detached units	2,719	68.3%	3,131	70.5%	15.2%	
2. attached units	33	0.8%	87	2.0%	163.6%	
3 or 4 units	84	2.1%	48	1.1%	-42.9%	
5 to 9 units	200	5.0%	185	4.2%	-7.5%	
10 to 19 units	36	0.9%	5*	1.3%	58.3%	
20 to 49 units	3	0.1%	27	0.6%	800.0%	
50 or more units	0	0.0%	10	0.2%	n/a	
Mobile home	862	21.6%	808	18.2%	-6.3%	
Boat, RV, van, etc	45	1.1%	28	0.6%	-37.8%	

Year Structure Built	1999 or earlier		1990 - 1999**		1970 - 1999**		1990 - March 2000		Median Year Built	
	Total	%	Total	%	Total	%	Total	%	Total	%
Units Lacking Complete Plumbing	1,204	32.5%	1,063	23.9%	1,340	33.7%	1,501	33.6%	1,348	33.9%
* Data particularly susceptible to response errors and non-reporting.										
**1990 Census includes homes built through March 1992.										
Source: U.S. Census										

Building Permits	1997		1998		1999		2000		2001	
	Total	%	Total	%	Total	%	Total	%	Total	%
Single Family	20	20	16	6	10	0	0	0	0	0
Multiple Family	0	0	0	0	0	0	0	0	0	0
Single Family	8	12	19							
Multiple Family	0	0	0	0	0	0	0	0	0	0
*Through October 2004										
Source: HUD State of the Cities Data Systems - Building Permit Database										

Subsidized Rental Housing Funding Source	As of July 2004		W/ Assail	W/ Assail
	# Dev by Funding	# Units by Funding		
HUD	0	0	0	n/a
NHD	1	35	0	0.0%
USDA-RD	4	125	125	97.7%
Multiple Sources	0	0	0	n/a
TOTAL	5	164	125	76.2%
Average Units/Development		33		

Project Type	As of January 2005		Rural NV Total	County % of Rural NV
	# Dev by Project	# Units by Project		
Elderly	1	24	24	1.6%
Family	4	140	101	100.0%
Disabled	0	0	0	72.1%
TOTAL	5	164	125	76.2%

Housing Choice Voucher Assistance	As of January 2005		Rural NV Total	County % of Rural NV
	County Total	County Total		
Elderly	4	222	222	1.6%
Disabled	8	421	421	1.9%
Elderly/Disabled	4	73	73	5.5%
Family/Individual	5	203	203	0.7%
TOTAL	21	1,419	1,419	1.5%

County Subsidized Housing Share	County Total		Rural NV Total	County % of Rural NV
	Total	%		
Total Subsidized Rental Units*	185		4,931	3.8%
Renter Occupied Units	767		30,711	2.5%
% Sub. Units of All Rental Units	24.1%		16.1%	

* Subsidized rental units plus vouchers (possibility of some double counting as vouchers can be used within subsidized housing developments)

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 5
ECONOMY

Throughout its history, White Pine County has depended on a natural resource based economy and its prosperity has been tied directly to the fortunes of the mining industry. In its early years, the County's population and economic stability were subject to the boom and bust cycles that followed the gold and silver strikes in the area. With the construction of the railroad the pattern changed in the early 1900's. Copper mining and smelting dominated economic activity in the County from 1906 to 1978 when Kennecott closed the copper mine and smelter. The loss of the mine and smelter forced White Pine County leaders to consider other options for economic diversification to provide jobs, revenue and stability. The initial efforts focused on attracting new industry, encouraging development of a new coal fired power plant, siting a proposed medium security state prison near Ely, and promoting tourism opportunities. In the next three decades, much of the economic development activity undertaken in the County stemmed from those initial efforts. The state legislature selected Jean, Nevada for the site of the new medium security prison. But, in the mid-1980's the state selected White Pine County as the site for the new maximum-security prison. The prison employs almost 400 and provides economic stability that helps to weather the fluctuations in the mining industry. The White Pine Power Project was pursued by the Los Angeles Department of Water and Power for almost twenty years before they decided not to construct the facility. But, the initial efforts provided the water rights permitted to the County for power generation and the purchase of the railroad by L.A.D.W.P. helped to prevent the loss of the rail line to scrap during the years of inactivity. The community's participation in the development of the air quality permit, water rights, and Environmental Impact Statement provided a basis for community understanding and support as the County participates in the development phases of the proposed White Pine Energy Station and Ely Energy Center. Efforts to increase tourism led to the designation of Great Basin National Park and the establishment of the East Ely Historical Railroad Museum and Tourist Train Ride. The Industrial Park established in the early 1980's now has fifteen tenants, all but 2.5 acres of the developed portion are sold, and the county has secured additional land from the BLM and NDoT for acreage to expand the park. The County's economy remains largely dependent on mining activity with the Robinson Copper mine at full operation and employment. The Mine generated \$3.3 million in net proceeds of mines revenues for the County in 2007-08 and supports the local business community. Copper mining activity is supplemented by expansion in the gold mining industry, potential reopening of the Taylor silver mine, gas and oil exploration, and a large molybdenum mine proposed for the Eureka area. The County's economic history, workforce issues, and economic trends are detailed in the 2006 Comprehensive Economic Development Strategy (attached).

Current Economic Activity:

Current economic activity is reflected in employment data for the County. The County's total employment is 4,802 with 225 unemployed for an unemployment rate of 4.5

percent. This rate has remained relatively constant since 1999. One reason the County did not have a high unemployment rate immediately following BHP's closure of the mine is net out-migration. In rural Nevada, when the mines close, the unemployed miners leave the area for mining jobs somewhere else.

The County's labor force distribution shows that public employment is the largest single employment sector with 1,440 jobs in federal, state, and local government and the school district. Approximately 900 of the jobs are federal and state employment and are relatively independent of the changes in the local economy. Mining and Natural Resources is the second largest employment sector with 790 employees followed by Leisure and Hospitality with 480 employees and Trade, Transportation, and Utilities with 550 employees. Manufacturing remains the smallest employment sector with 30 employees. A comparison of the distribution of employment by sector from 2007 and 2008 shows slight increases in mining while public employment remained constant and there were slight decreases in Trade, Transportation, and Utilities, Hospitality and Leisure, and Manufacturing employment. As of early 2008, area employers reported approximately 200 job vacancies including jobs that will be available through projects under construction. Area manufacturers including R. Scher & Associates, aluminum two-story exhibit stages and custom ATV accessories; Western States Enterprises, trailers for satellite equipment; General Dental, denture base materials and products for nail salons, and Juniper Pellet, pellets for wood stoves, report difficulty finding and keeping skilled employees and report that they have difficulty competing with the mine wage rates. With the current economic situation, private employers have curtailed hiring and state budget cuts have resulted in loss of positions in state installations in White Pine County. Although the current job vacancies have declined due to these measures, the need for additional employees continues to exist and when financial conditions improve there will continue to be a workforce shortage.

A comparison of White Pine County's employment distribution with the state of Nevada and the United States shows that White Pine County trails Nevada and the nation in manufacturing employment and business and professional services. The County trails Nevada in Leisure and Hospitality and Construction employment and is closer to the national levels in both sectors. It is well above the state and nation in both Mining and Public Employment.

The 2000 Summary of Agriculture by the Cooperative Extension Service shows that the County supported 115 farms and ranches for 250,000 acres of which 34,000 acres were cultivated for crops and 30,000 acres were irrigated. Cattle farming was the County's largest contributor of agricultural sales at \$4 million or 54 percent of the County's agricultural sales in 2000. Alfalfa hay was the second highest value agricultural commodity accounted for over \$5 million in sales and 35 percent of the County's total agricultural sales. An analysis of the County's agricultural industry shows that it is responsible for direct employment of 180 workers and total economic output of over \$15 million.

Other indicators of economic activity include total number of firms doing business in the County, taxable sales, and assessed valuation. In 2008, there are 241 firms doing business in the County (covered employment) compared with 240 in 2007. The distribution of the firms by number of employees has remained fairly constant with a slight increase in the number of firms employing 10 to 19. Taxable sales were \$198 million for the 2007-08 fiscal year compared to \$193 million in the previous year. Assessed valuation in the county increased from \$231 million in 2006-07 to \$280 million in 2007-08.

Economic Projections:

Economic projections for the next twenty years include the potential direct and indirect employment and revenue if one or both of the coal fired electrical power plants is constructed and goes into operation, development of the Spring Valley Wind project and potential for development of additional renewable energy projects. Anticipated employment and tax revenues from the two coal fired electrical power plants is included as Attachment 6. In mining, projections include maintaining the current level of production at the Robinson mine for the next seven years. Additional mining activity anticipated includes the expansion of the Bald Mountain gold mine, reopening of the Taylor silver mine, employment opportunities with the molybdenum mine proposed for Eureka County, production from any of the oil and gas or gold exploration currently planned or underway. In the Leisure and Hospitality industry, projections include completion and operation of the Holiday Inn and restaurant project that is under construction. Construction has been halted due to financial issues, but it is anticipated that the project will eventually be completed and operated either by the current owner or by someone who purchases the project. It also includes the expansion of the Border Inn near Baker completed in the summer of 2008. General development anticipates expansion and increasing employment opportunities with existing manufacturing, services, and commercial entities.

Based on current and potential economic activity, the community could have an increase of up to 998 new primary sector jobs within the next twenty years that may either be in addition to or to replace jobs lost depending on the level of mining activity. The economic projections have been used to determine potential population increases and housing needs for the full range of possible job losses and increases.

See Attachment 6:
2008 Final Environmental Impact Statement, White Pine Energy Station,
Socioeconomic Impacts

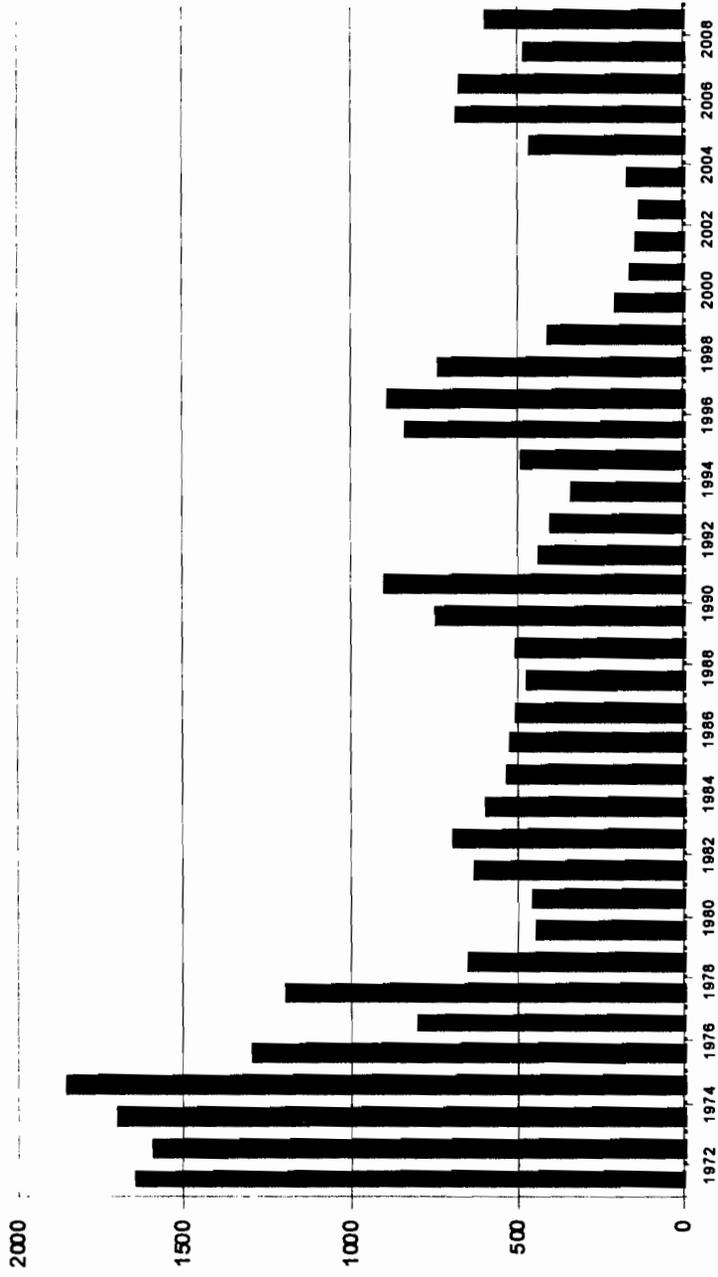
See Exhibits:

- 9) White Pine County Historical Employment Trends
- 10) White Pine County Mining Employment
- 11) White Pine County Employment by Sector
- 12) White Pine County Number of Firms Doing Business

**WHITE PINE COUNTY
LABOR FORCE TRENDS**

YEAR	TOTAL WORKFORCE	NUMBER UNEMPLOYED	UNEMPLOYMENT RATE
1972	4200	250	6.00%
1973	4050	210	5.30%
1974	4260	200	4.70%
1975	4220	430	10.70%
1976	4200	950	22.60%
1977	3860	300	7.80%
1978	3550	420	12.00%
1979	3110	330	10.70%
1980	3410	210	6.10%
1981	4320	200	6.80%
1982	4530	630	13.80%
1983	4370	790	18.00%
1984	3930	680	17.30%
1985	3712	546	13.30%
1986	3910	360	8.40%
1987	4197	232	5.40%
1988	3980	260	4.70%
1989	4070	270	5.30%
1990	4580	290	6.20%
1991	4579	363	7.90%
1992	4140	400	9.60%
1993	3510	430	12.60%
1994	3320	420	12.80%
1995	3780	260	7.30%
1996	4230	240	5.70%
1997	3803	200	5.10%
1998	3810	290	7.70%
1999	3220	120	3.70%
2000	2850	110	3.90%
2001	3540	170	4.70%
2002	3720	160	4.40%
2003	3590	160	3.40%
2004	3790	160	4.20%
2005	3970	180	4.50%
2006	4491	171	3.80%
2007	4806	190	4.00%
2008			

Mining Employment



**WHITE PINE COUNTY EMPLOYMENT BY SECTOR
2007**

	White Pine		Nevada	United States
	Number	Percent		
Mining	790	21%	1%	1.60%
Construction	110	3%	11%	5.10%
Manufacturing	20	0.50%	4%	9.40%
Trade / Transp./ Utilities	550	14%	18%	18%
Information	40	1%	1%	2.00%
Finance	110	3%	12%	5.60%
Professional/Business	120	3%	12%	13%
Education/Health 13.50%	140	3.50%	7%	
Leisure/Hospitality	408	12.00%	27%	9.00%
Other Services	70	2%	2%	4.30%
Government	1,440	37%	12%	14.1%
Total	3,880	100%	100%	90.9%

*Based on non-agricultural jobs

**FIRMS DOING BUSINESS IN WHITE PINE COUNTY
(BY NUMBER OF EMPLOYEES)**

Size of Firm	Number of Employees	Worksite	Percent
0 - 4	238	144	61%
5 - 9	302	44	15%
10 - 19	469	35	7%
20 - 49	364	11	3%
50 - 99	260	4	2%
100 - 249	303	2	1%
250 - 499	0	0	0
500 - 999	524	1	0
1000+	0	0	0
	2460	241	100%

EXHIBIT 12

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 6
PUBLIC LANDS

Almost 92 percent of White Pine County's land base is administered by public agencies and public land policies are important in defining land use in the County. During the ten years since the adoption of the 1998 Land Use Plan there have been four important issues related to public land use: 1) the passage of the White Pine County Public Lands Bill, 2) the adoption of the Ely District Bureau of Land Management Resource Management Plan in 2008, 3) the adoption of the 2008 White Pine County Public Land Use Policy, and 4) the decisions of the State Engineer regarding applications for water in Spring and Cave Valleys for the Groundwater Development Project as well as the purchase of several Spring Valley ranches by Southern Nevada Water Authority (a Clark County municipal entity).

The White Pine County Public Lands Bill altered the division of land among federal, state, tribal, and local governments in the County; it designated 545,000 acres in thirteen new wilderness areas and released the remaining 68,000 acres of Wilderness Study Areas from wilderness restrictions; and designated public land for disposal. The passage of the bill provided White Pine County access to the Parks, Trails, and Natural Areas portion of the SNPLMA grant program and achieved some of the goals outlined in the 1998 plan. The Bill contained provisions to shift administrative jurisdiction from the Forest Service to the B.L.M. for the newly designated Highlands Wilderness Area (117,000 acres) surrounding the Great Basin National Park. In addition it shifted administration 645 acres near Ruby Lake National Wildlife Refuge from the BLM to the U.S. Fish and Wildlife Service. The bill designated 3,500 acres for the Ely Shoshone Tribe in three parcels south of Ely, two at the base of the east side of Ward Mountain, one on the west side of Ward Mountain, and one north of McGill. The Ely Shoshone Tribe is developing its land use plan for the expansion area and has agreed to work with the County in developing compatible land use proposals. Bureau of Land Management land was designated for expansion of state facilities including a 6,200-acre expansion of the Steptoe Valley Wildlife Management Area administered by Nevada Department of Wildlife, 650 acres for expansion of the Ward Charcoal Ovens State Park, and additional acreage to be determined for expansion of Cave Lake State Park. The bill designates 1,700 acres to be conveyed to White Pine County, 1,500 acres for expansion of the airport and 200 acres for expansion of the Industrial Park. The transfer of land for the airport expansion and the first 40 acres of the Industrial Park expansion have been completed. Finally, the bill designated that up to 45,000 acres of B.L.M. would be made available for disposal to private ownership. The bill requires that the lands for disposal be identified in the Resource Management Plan and the BLM will work with the County Commission to identify the lands for disposal, scheduling, and use designations. The Land Disposal Maps from the Resource Management Plan are attached. In addition to the

White Pine Public Lands Bill, the purchase of 76,900 acres of private ranch property in Spring Valley by the Southern Nevada Water Authority, a municipal entity, changed the percentage of public and private land ownership in the County.

In October 2008, the Bureau of Land Management signed the Record of Decision on the Ely District's Resource Management Plan (R.M.P.). The R.M.P. impacts White Pine County economic activity and development because it outlines goals for administration of B.L.M. lands in White Pine and Lincoln Counties for the next twenty years. The R.M.P. specifies management goals for livestock grazing, oil and gas exploration and leasing, mineral exploration and extraction, recreation, and rights-of-way and land transactions for transmission systems and energy development projects. It includes the 30,000 acres of land identified for disposal that will provide the initial guide for lands to be disposed of under the White Pine County Public Lands Bill. Of the 30,000 acres, approximately 12,000 have now been identified for public and tribal land uses through the White Pine Public Lands Bill leaving 18,000 acres for disposal for private development. As the County and B.L.M. identify lands for disposal under the provisions of the Public Lands Bill, any additional land for disposal will have to be identified and added to the R.M.P. as amendments. White Pine County was a cooperating agency in the development of the R.M.P. and provided review and comment on the provisions in the plan throughout the process. The map showing the BLM lands identified for potential disposal through the R.M.P. is included as Attachment 5.

The White Pine County Public Land Users Advisory Committee worked with the assistance of the State Land Use Planning Agency to review the 1998 Public Land Use Policy and update it. The 2008 Public Land Use Policy acts as a guide for the County Commission in working with public land issues. The White Pine County Public Land Use Policy is incorporated into and made a part of this land use plan by reference. The White Pine County Public Land Use Policy included as Attachment 4.

In 2006 the State Engineer began the hearing process for the applications for groundwater filed by Las Vegas Valley Water District in 1989. The first hearings impacting White Pine County were held in September of 2006 for the applications in Spring Valley. The State Engineer's decision in 2007 provided for a five year monitoring program, pumping a minimum of 35,000 and a maximum of 40,000 acre feet from Spring Valley for a period of ten years, and then re-evaluation and potential for approval of an additional 20,000 acre feet of water for a total of 60,000 acre feet from Spring Valley in White Pine and Lincoln Counties. At the same time, Southern Nevada Water Authority began to purchase ranches and water rights in Spring Valley and as of 2008, owns seven ranches, 6,000 acre feet of ground water, 34,000 acre feet of surface water rights, and 24,000 acre feet of supplemental water rights in Spring Valley for over 70 percent of what was private ranch property. The State Engineer completed the hearings on the Delamar, Dry Lake, and Cave Valley applications in 2008. The applications in Cave Valley have potential impact on the White Pine County portion of Cave Valley and White River Valley. The hearings on the Snake Valley applications are scheduled for fall, 2009. If SNWA continues to negotiate and purchase ranches in Spring, Cave, and Snake Valleys the implications for White Pine County Land Use are twofold: the administration of the

ranches for use of water resources rather than agricultural production may impact White Pine County's economy. As a municipal entity, SNWA is tax exempt and the ranch purchases were made without payment of real property transfer tax or property tax. The ranches are being operated without payment of sales tax, general services tax (vehicle registration) and motor fuel tax. The County has negotiated an agreement with SNWA to make a Payment in Lieu of Taxes for the County's portion of the real property transfer tax, and property tax from the time they purchased the ranches and a payment of \$10,000 in lieu of the sales and other taxes not paid on the operation of the ranches.

With the provisions of the White Pine County Public Lands Bill, the distribution of public land changed slightly and the new percentages of federal, state, tribal, local government, and private land ownership are shown in Exhibit 13.

WHITE PINE COUNTY LAND OWNERSHIP
INCLUDING TRANSFERS MADE POSSIBLE THROUGH
THE WHITE PINE COUNTY CONSERVATION, RECREATION, AND
DEVELOPMENT
ACT OF 2006

Land Ownership	Acres	Percent
Federal Land Ownership		
Bureau of Land Management	4,421,105	77.50%
US Forest Service	723,800	12.70%
US Fish and Wildlife Service	9,285	0.20%
Other Federal	84,300	1.50%
Total Federal	5,238,490	91.50%
 State Ownership	 15,136	 0.30%
 Tribal Ownership	 3,600	 0.10%
 Southern Nevada Water Authority	 76,900	 1.35%
 Local Government and Private Ownership	 361,974	 6.35%
TOTAL	5,699,200	100.00%

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 7
ENVIRONMENTAL ISSUES

The Physical Geography, Climate, Geographic Features, Environmental Issues and Overview are detailed in the 2006 Comprehensive Economic Development Strategy, which is included in this plan as Attachment 2. Geographic features, environmental constraints, and administrative control over natural resources including water and public land impact potential development and use of public and private land throughout the county.

Specific issues emerging since the completion of the 2006 C.E.D.S. document include:

- 1) The Environmental Impact Study process for the Groundwater Development Project to export water from White Pine County to Southern Nevada and the State Engineer's hearing and decision process on Spring Valley; Dry Lake, Delamar, and Cave Valleys; and Snake Valley
- 2) The expansion project and mine-dewatering processes at the Robinson Copper Mine.
- 3) Potential private land development in Duck Creek Basin and on Success Loop along Steptoe Creek which is under the jurisdiction of both the Army Corps of Engineers and the Nevada Division of Environmental Protection
- 4) Increasing concern over development occurring in heavily wooded areas on Ward Mountain, the Schell Creek Range, Sacramento Pass, and Duck Creek Basin and the implications for fire protection
- 5) Continued interest in listing the sage grouse as an endangered species
- 6) Purchase of ranch property for purposes other than agriculture which may impact natural resources
- 7) Increasing concern over the need for dust control

The Groundwater Development Project Environmental Impact Statement is progressing and release of the draft is anticipated by mid-2009. The County is a cooperating agency in the process and has had to contract with a hydrologist to review and prepare comment for the technical aspects of the administrative draft. In both the Spring Valley and Cave Valley hearings, the Department of Interior agencies have opted for a stipulated agreement in return for withdrawing their protests. The stipulated agreements provide for cooperation between the federal agencies and SNWA to monitor water levels and protect federal resources from negative impacts. The County's limited resources and staffing make it difficult for the County to actively review all of the data available regarding water resources in the areas targeted for the Groundwater Development Project to determine potential impacts to the environment and private land owners.

Quadra Mining Company has begun a project to expand mining operations, which requires dewatering the Ruth Pit and has applied for 5,000 acre feet of consumptive water rights. The mine is working closely with the City of Ely to monitor any impacts on the water quality for Murry Springs and it is working with the State Engineer's office and

Water Advisory Committee to report on progress and discuss potential use of the water removed from the pit.

Potential development of private land on Success Loop along Steptoe Creek and in Duck Creek Basin has raised substantial concerns about drainage, road improvements, fire protection and suppression, impact to wildlife, and access to outdoor recreation opportunities on public land in the vicinity. Continuing development in pinyon juniper habitat has added to the concerns about additional fire risk to the surrounding area. The discussions on specific parcels resulted in conditions on approval of the parcel maps that require a written agreement to realign the Success Loop road to avoid damage to Steptoe Creek, covenants regarding fencing to protect wildlife migration routes, and provision for public access through the areas to be developed. The issues raised during these discussions resulted in three recommendations for the Land Use Plan: 1) that the County adopt the Wildland Urban Interface Fire Code; 2) that disposals of public land for private development include reservations of rights of way for public access, wildlife corridors, and livestock corridors; and 3) that the County consider revising zoning designations to provide guidance for development in mountainous areas.

The County participated in the development of a White Pine County Sage Grouse Conservation Plan to identify critical habitat and work toward management goals to support sage grouse populations. Sage Grouse are prevalent in several areas of White Pine County and projects proposed for public lands are already complying with stringent inventory, monitoring, and management requirements regarding development in sage grouse habitat. The potential listing of sage grouse as an endangered species would place additional limitations on land use and development in White Pine County.

Ranching has existed in White Pine County since the mid-1800's. Use of water resources, both surface water and pumping of ground water for irrigation have been conducted to sustain the environmental quality for continued agricultural production. In the past two years, ranches have been purchased in both Steptoe Valley for water resources for the Ely Energy Center and Spring Valley as part of the Groundwater Development Project. There are concerns that ranching practices that are not motivated for the best, sustained agricultural production from the land but rather to demonstrate beneficial use and future use of water resources for purposes other than agriculture may upset the delicate balance that has sustained agriculture and the environment. One of the most immediate impacts that have been observed is increased dust. Dust control in Steptoe Valley and potential issues with visibility and air quality due to increased dust in Spring Valley have prompted the recommendation that the County adopt an ordinance regarding highly erodible land and dust control.

Environmental conditions and concerns are a critical aspect of development and land use throughout the County. Projects proposed for public lands including energy development projects, mining exploration and production, and transmission lines must undergo rigorous study and review processes through Environmental Assessments and Environmental Impact Statements. The County takes an active role in these processes as a cooperating agency so that it is in a position to participate in the development of the

plans as well as commenting on them once they are released to the public. The Ely District Resource Management Plan provides detailed analysis of the lands under B.L.M. administration. The County is working with the Forest Service in the development and implementation of its planning processes. The County continues to work cooperatively with federal and state agencies through processes like the Coordinated Resource Management process and Tri-County to ensure the balance between sustained development and maintaining environmental quality.

Judicial Facilities: The County houses two district courts and one justice court with justices of the peace in Lund and Baker. All three courtrooms are located in the County Courthouse.

Animal Control: The City of Ely provides animal control at its facility located just outside the City limits near the sewer treatment facility. It is staffed by one officer. The current animal control facility is inadequate for the number of animals it houses and to maintain adequate health and safety standards. The City has identified a critical need to replace the facility.

Emergency Medical Facilities: The communities of Lund, Baker, McGill, Ruth, and Ely maintain ambulances; ambulance sheds and active volunteer Emergency Medical Services. The County provides two full-time Emergency Medical Technicians to assist with emergency calls, coordinate and provide training, manage inventories of supplies, and maintain the ambulances for the services throughout the County.

Fire Protection: In the spring, 2008, the County contracted for a study of the financial feasibility of various approaches to fire protection. With the completion of the study, the Commission concluded that it would be more cost effective to develop its own fire district than to remain under the provisions of the district formed through the Nevada Division of Forestry. The County negotiated with the Division of Forestry on the transition and the division of equipment. The White Pine County Fire District was formed, a Fire Chief was hired, and through grants and County funds the County is purchasing equipment needed to upgrade and replace equipment returned to the Division of Forestry. The County maintains seven volunteer fire departments: McGill, Ruth, Lund, Baker, Cherry Creek, Cold Creek (Bald Mountain Mine area), and Lackawanna (McGill Highway area). Equipment, inventory, and training for the seven are coordinated by the Fire Chief. The County maintains a cooperative agreement with the City of Ely for fire protection at the airport and in a five-mile radius around the City of Ely. The County has just entered into a cooperative agreement with the Bureau of Land Management Interagency Fire Program for wildland fire suppression.

County Road Department: The County Road Department maintains 105 miles of paved and 2,127 miles of unpaved roads. The County crews provide snow removal in the winter and continually work to upgrade the roads system as weather and budgets permit. The most critical issue for the Road Department is funding which comes from distribution of motor fuels tax. Under the current state formula, the county's road tax revenue is fixed while the cost of materials and fuel has increased sharply. In addition, the trend toward diesel trucks (diesel fuel is not subject to the motor fuels tax) and reduced travel due to higher gas prices has reduced the number of gallons of gas sold have both reduced funds available for road maintenance.

County Administrative Services: The County Assessor, Recorder, Clerk, and Treasurer (which are elected offices) and the County Finance Department provide the basic services of property assessment, tax collection, the court system, elections, maintaining the public

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 8
PUBLIC FACILITIES AND SERVICES

Public facilities and services are essential to meet the public health and safety needs of County residents and improve their quality of life. Public facilities and services supported by County government include law enforcement and judicial services; fire protection; emergency medical services; streets and roads; public health and social services; building, planning, and development; library services; the County airport; and parks and recreation. The County provides tax assessment, collection, financial management, and maintaining the official record of public and private transactions. Other public sector facilities and services that meet the needs of County residents include education provided through White Pine County School District, Great Basin College, and the University of Nevada Cooperative Extension Service; William Bee Ririe Hospital and Clinic provide medical services; and cemetery services and animal control are provided by the City of Ely and coordinated through an inter-local agreement with the County. County residents rely on the Nevada Department of Transportation to maintain state and federal highways, Nevada Highway Patrol for law enforcement and public safety on state and federal highways; Nevada State Parks and the Department of Wildlife for administration of outdoor recreation opportunities in the County; and Nevada Departments of Employment and Training and Health and Human Resources for employment, training, and social services. Federal land management agencies provide additional services for those using the public lands and federal and state grant programs assist the County in providing facilities, equipment, and services to meet public needs. The primary focus of the Public Facilities and Services section of the Land Use Plan is the public facilities and services provided by County government. The purpose of the description of public facilities and services in the Land Use Plan is two-fold: 1) To ensure that the services provided are consistent with the goals and recommendations of the Land Use Plan and 2) to ensure that adequate land is available for expansion of facilities required by growth and development of the community.

A detailed description of the Public Facilities and Services is provided in the 2006 Comprehensive Economic Development Strategy, attached. The following discussion updates the information from the 2006 Plan and provides an overview of public facilities and services issues identified.

Law Enforcement: Current staffing includes 15 officers, 5 dispatchers, 5 jailers, 1 detective, 2 administrative personnel, 1 secretary, 1 Task Force officer, and the Sheriff. Jail facilities have a maximum capacity of 40 beds and a holding cell for incoming and outgoing prisoners prior to admission and release. The average daily inmate occupancy in 2008 is 26. In addition to patrol and jail services, the Sheriff's office provides the coroner's office and dispatching for all County emergency services.

record, and accounting for the use of public funds. The administrative services are provided at the Courthouse and Courthouse Annex.

County Government: The County's governing body is a five member Commission elected by the voters of White Pine County. The Commission meets twice per month for the transaction of public business and the County Commissioners provide liaison and membership on the full range of County Advisory Boards and representation on state and regional boards.

Public Health: The State of Nevada Department of Health provides one public health nurse and the County provides the clerical staff, office space, and operating budget. The public health nurse provides immunizations, women's health care, well baby services, and educational services for County residents. The Public Health office is located in the Courthouse Annex.

Social Services: The County's Social Services Department provides emergency shelter and assistance with food, rent and utility deposits for low income households, and administers the long term and indigent medical care programs. Other social services entities in the County include the Nevada State Division of Child and Family Services, White Pine Rehabilitation and Training Center which provides services to the County's developmentally disabled, and the Little People's Headstart program providing early childhood education and family services to low income households and families with special needs pre-school children.

Senior Services: The County's senior population is 12.4 percent of the total population. The County also maintains one Senior Center with daily operations through grants from the state's Division on Aging and County funding. The program offers a noon meal five days a week in the facility and delivered to home bound seniors throughout Ely, Ruth, and McGill. It also provides program activities, transportation, and social services to the County's senior population. The RSVP program provides daily contact and services to elderly shut-ins. The Senior Center located in Ely adjacent to the Courthouse Complex has been expanded to provide additional kitchen and program areas. The building is being renovated to improve ADA access. The Center serves approximately 40 meals per day at the Center and 52 per day for homebound seniors. Since 1998, satellite centers in McGill and Baker have been closed for daily operation due to low participation numbers and difficulty maintaining staff.

White Pine County Library: The County maintains the Library to serve the residents of Ely and the outlying areas of the County. The Library is located within the Courthouse Complex and provides free access to computers and the Internet. The conference room houses Library Story Hour as well as acting as the primary meeting room for the community, and the facility works closely with the White Pine County School District to provide programs for school aged children. In recent years, budget cuts have forced the County to reduce the Library's evening and weekend hours of operation limiting its use by some segments of the population.

Parks and Recreation Facilities: The County maintains the County Fairgrounds, 18-hole golf course, Little League field, the Ruth Community Park, the Community Park, Ball Park, and Circle-Avenue K Parks in McGill; and Steptoe Park and the Courthouse Park in Ely. The communities of Lund and Baker use their school ground facilities as park areas. The communities of Preston and Cherry Creek have no public park areas. The McGill Community Park houses the county's only public swimming pool, a warm springs fed pond that is open for swimming from May to September. The pool provides swimming lessons and recreational swimming. The parks in Ruth and McGill were owned and maintained by Kennecott while it was in operation and donated to the County after the company closed the mine and smelter. The County has maintained the parks but has not had the revenue to upgrade them, meet safety concerns, and provide ADA access. In 2006, the County became eligible for SNPLMA funding through the White Pine County Public Lands Bill and has been successful in securing grants from Rounds 8 and 9 to upgrade the County parks in the system and build a new park in Preston.

Public Utilities: The McGill-Ruth Water and Sewer General Improvement District operates two systems to serve the residents of McGill and Ruth. Both systems began as private systems and were acquired by the County in 1984. The General Improvement District was formed and through several million dollars in grants and loans the District and County have gradually upgraded the water and sewer systems in both communities. The McGill evaporation pond for the sewer system is located southwest of the town and treats approximately 160,000 gallons per day with a capacity of 180,000. The Ruth sewer system is based on a series of evaporation ponds and treats approximately 40,000 gallons per day. Two primary projects completed since the 1998 Land Use Plan were the replacement of the sewer collection system in both communities, a project of over \$6 million, and expansion of the Ruth sewer ponds, a project of almost \$2 million. The current system serves 618 customers in McGill and 246 customers in Ruth. The McGill system has capacity an additional 500 homes. Ruth has minimal capacity in its water system and frequently faces water shortages in the summer. It will have capacity for 123 homes on its sewer system once the expansion of the sewer ponds is completed. The most critical issue for the District is to provide adequate back up water resources for Ruth. The District is currently working with Quadra Mining Company to provide an additional well through the mine's resources.

The Baker General Improvement District was formed in the early 1990's and provides services to 70 residences and businesses with water and sewer in central Baker and 13 residences with water only in south Baker. The Baker GID Board has worked for several years to develop funding and a cooperative venture with the National Park to provide water for the Lehman Creek subdivision into the system. The subdivision has 17 residences with capacity for 32 home sites.

The community of Cherry Creek is served by a privately owned water system and residents rely on individual septic systems.

The communities of Lund and Preston and the residences in the outlying areas of the County operate on private wells and septic systems. There has been concern over the

increasing concentration of wells and septic systems in Lund and the County anticipates a long-term need to convert to a central water system for that community. There is currently a requirement that septic systems in the North Steptoe Valley area cannot be placed on lots less than 2.5 acres instead of the 1-acre minimum set by the state due to the potential for contamination of wells in the area.

Solid Waste: The City of Ely, Municipal Utilities Board manages the County's regional landfill facility. It is located on the southwestern boundary of Ely and is permitted as a Class I facility with a Class III segment for construction waste. Solid waste is collected and transported from outlying areas through a franchise agreement with a local disposal service and residents are permitted access to the landfill on a fee basis. Based on the most recent analysis, the landfill has approximately 37.4 years of useful life. The life of the landfill is based on use, regulation, and management decisions and the remaining useful life can fluctuate based on a change in any one or all of the three factors. Under the agreement with the City, the County will be responsible for providing landfill services when the useful life of the existing facility has been depleted. The County provides law enforcement and the City works with the federal agencies on a Green Up program to minimize illegal dumping on federal lands.

Power: Mt. Wheeler Power provides electricity for White Pine County residents. It maintains 5,414 connections in White Pine County. The entire system uses a total of 74,000 kilowatts of power under all user demand contracts with Deseret Power Resources and the company maintains 8 substations: Gonder (McGill, Ruth, and East Ely areas) Williams (Lund, Preston, Railroad Valley, Sunnyside (Nye County), Baker (Spring Valley, Snake Valley, and areas in West Utah), Griggs (Steptoe to McGill) Murry (South Ely, South Steptoe, Murry Canyon), Gianoli (Ely), Mahachek (Newark), and Ely Prison. It is constructing a new substation on Campton Street to serve increasing load from Ely residents. The County has no natural gas service. It has two propane and two fuel oil distributors providing services to County residents.

Communications Services: Telephone Services are provided by AT & T. There are approximately 5,288 access lines in use in White Pine County. The University system, prison, School District, and TSA services at the airport are served by proprietary T1 lines for their interactive video systems. A T & T makes DSL available in portions of the County. Internet services are provided A T & T and by local service providers including Mt. Wheeler Power. Mt. Wheeler Power has the capacity to provide dial up, wireless, and DSL Internet services within the Ely, McGill, and Ruth areas. Cellular phone service is available, although coverage is poor in many parts of the County. Two of the areas of concern are the lack of adequate cell phone service in many portions of the County and weaknesses and incompatibility in the communications systems for emergency services.

Motor Freight and Parcel Service: Motor freight service is provided by Michael Clark Freight Service. Freight is routed to Salt Lake City hubs before being transported to Las Vegas and Reno. Small Parcel Service is provided by the U.S. Postal Service, UPS, and FedEx. No overnight small parcel service is available out of White Pine County and all deliveries take at least two days.

Airport and Air Service: The White Pine County Municipal Airport is located at Yelland Field approximately 5 miles north of Ely on US Highway 93. The airport maintains two runways. The main runway is asphalt paved, approximately 6,000 feet in length and 150 feet in width and is lighted. An unlit 5,000-foot secondary taxiway runs parallel to the main runway. The main runway, secondary runway, and apron are paved and designed for a 100,000-pound dual wheel aircraft (737 jet). In recent years the County has been working with FAA grants to upgrade the airport facilities and in 2008, the Bureau of Land Management transferred 1,500 acres of public land to the County for expansion of the airport. Great Lakes Airlines provides daily round trip commercial flights to Moab and Denver through a secured terminal facility equipped and staffed through TSA. The airlines are working with McCarren Airport to secure counter space so that it can provide flight services to Las Vegas. The airport houses a fixed base operator, Ely Jet Center and serves the general aviation needs of the area. The County leases airport space and facilities for the Bureau of Land Management's wildland fire aviation program including its helitack crew. The airport provides tie downs and space for gliders and houses several special glider events throughout the summer. White Pine County and Yelland Field attract worldwide attention from glider pilots due to the area's excellent conditions for setting world flight records.

Rail Services: The Nevada Northern Railroad freight service has been inactive since BHP's closure of the Robinson mine in 1999. The 140 mile track from the mine at Ruth through Ely and McGill and north to its connection to the Union Pacific line at Shafter (near Wells) was built in 1906, operated by Kennecott until 1983, placed under embargo in 1983, purchased by Los Angeles Department of Water and Power in 1986 to haul coal for the proposed White Pine Power Project, leased to Northern Nevada Railroad company in 1995 and later to BHP in 1996 to haul copper concentrate, and the lease was terminated in mid-1999 when BHP closed the mine. At that time, the City of Ely began its efforts to acquire the track to prevent it from being dismantled and sold for scrap. Through federal grants, Congressional mandates, and loans from the companies proposing coal fired power plants, the City acquired both the track from Los Angeles Department of Water and Power for \$1.5 million and the land under the track from the Bureau of Land Management. The City is using grants from the Economic Development Administration and the state's Economic Development Fund to upgrade highway crossings and begin the renovation of the track on the southern portion of the railroad. White Pine Energy Associates and NVEnergy have entered into joint development agreements with the City of Ely for permitting and carrying out the \$100,000,000 renovation of the track to

Class III standards from Shafter to the southernmost coal plant site. Once renovated, the railroad will haul coal for the power plants and provide the opportunity to reinstate rail freight service in White Pine County. Primary customers include the Robinson mine which is currently shipping copper concentrate via truck to Wendover, Utah, and then by rail to the west coast where it is shipped to China and India for processing and use in their electrification programs; the oil industry in Railroad Valley; and freight services for local businesses. The availability of rail freight service opens the door to industrial

development and diversification opportunities that the County has never had because of location and transportation costs.

Public Transit: Public Transit services are provided in the Ely, Ruth, and McGill areas by Ely Buss service. Services are provided to the general public with discounts for senior citizens and the disabled. Dial-a-Ride Services are provided in the Ely, Ruth, and McGill area, Monday through Friday, from 7:30 a.m. to 5:00 p.m. with reduced fares for senior citizens.

Highway System: The County's primary transportation routes are US Highway 6 that runs south from Ely through Tonopah and on to Bishop, California; US Highway 50 which crosses the state east to west from Carson City through Fallon and Ely and into Utah where it converts to Interstate 70 at Cove Fort and then east across the country through Denver and to Baltimore, Maryland; and US Highway 93 which runs north and south from Twin Falls, Idaho where it intersects with Interstate 84 south through Wells, Ely, and then to Las Vegas. The County's closest access to the Interstate Highway System is 130 miles away at the intersection of US 93 and Interstate 80 at Wells, Nevada. State Route 318 starting at Lund which provides a route to Las Vegas that is 50 miles shorter than US Highway 93 and only crosses one mountain pass. It has become the more heavily traveled route to the south. Nevada Department of Transportation currently maintains the US Highways in White Pine County as well as State Routes 318, 487, 488, 490, 892, 893, 894, and 895. Average Daily Traffic Counts show that the federal and state highway systems in White Pine County are operating well below capacity. The Department of Transportation maintains an office in Ely and continues to upgrade federal and state highways, as funds are available.

Bicycle and Pedestrian Traffic: There are many paths and trails in White Pine County open to bicycle traffic. Two main routes through White Pine County include US Highways 50 and 93 and they are frequently used by groups on cross-country treks. A mountain bike trail has been established in the Sacramento Pass area near Baker. And, mountain bike use of backcountry areas in the County has been increasing in recent years. The majority of sidewalks for pedestrian traffic are located in Ely. A pedestrian walkway has been proposed for the Circle-Avenue K park area in McGill. One area of specific concern has been the need for a safe bicycle and walking trail between Ely and McGill.

Bicycle and pedestrian traffic would be enhanced through: reduction of barriers and obstacles on paths and routes, paths and routes should be as level as possible, easy access to public buildings and facilities and connection to other transportation system elements, and provision of amenities along routes and paths (i.e. lighting, benches, signage, etc.)

Off Highway Vehicles (OHV): Off Highway Vehicles are used throughout the County for work related activity including agriculture and access to back country areas as well as for recreation. During the planning process, every community identified the need to provide OHV use areas to minimize dust and noise from OHV use in residential areas. Both BLM and U.S. Forest Service have been developing and implementing

Transportation Management Plans to restrict OHV use to designated roads and trails and reduce environmental damage caused by open country use.

Health Care: Health care needs of White Pine County residents are served by eight physicians: five family practitioners, one general surgeon, one pediatrician, and one internist. The local physicians are supplemented with twelve visiting physicians in a variety of specialties. The community has one optometrist and two dentists. Two private non-profit corporations provide health care assistance: the Nevada Home Health program provides in-home nursing care and the Helping Hands Hospice provides assistance and support for individuals who are terminally ill and their families.

The William Bee Ririe Hospital located in Ely is a 40-bed short stay facility. The Hospital provides primary care, obstetrical services, surgical services, some pediatric, cardiovascular, orthopedic, chemotherapy, and physical and respiratory therapy. The hospital has two operating rooms, three intensive care rooms, two security rooms for inmate health care, and seven obstetrical beds. Patients needing additional specialized care are referred to larger hospitals in Salt Lake, Las Vegas, and Reno. The hospital has nurse practitioner and physicians' assistant programs in place. Emergency room services are available twenty-four hours a day and life flight is available to major hospitals for specialized care with one hour flight times to Salt Lake City and one and half hour flight times to Reno and Las Vegas. The William Bee Ririe Clinic provides diagnosis, treatment, and follow-up care. The utilization rate at William Bee Ririe is 16 percent. The White Pine Care Center is a 97 bed skilled nursing facility located in Ely adjacent to the hospital. The Care Center's occupancy rate is 50 percent.

The Ely Mental Health Center is part of the state's Rural Clinics program and serves White Pine, Lincoln, and Eureka Counties. Services include individual and family counseling, psychiatric evaluation, family and group therapy, substance abuse counseling in conjunction with other mental health diagnoses, limited on-call emergency counseling services, and visitations by a consulting psychiatrist.

The primary health care issues facing White Pine County are the high turnover of medical professionals making recruitment and retention of physicians and allied medical professionals including laboratory technicians and nurses a constant effort and 2) the economic difficulty of maintaining adequate long term care options for County residents.

Education: White Pine County School District's enrollment for 2008-09 is 1,398. The enrollment has declined steadily since the 2005-06 school year in spite of the increase in population. The district operates elementary schools in Ely, McGill, Lund, and Baker; middle schools and high schools in Lund and Ely, and a high school program for Ely State Prison. Enrollment by school is listed in Exhibit 14. The District employs 302 with 119 certified personnel. The program includes academic course work, physical education, music, art, vocational training, and extra-curricular activities. The school district has been able to meet Adequate Yearly Progress standards under the No Child Left Behind requirements and White Pine County schools have been recognized as Exemplary and High Achieving Schools under that program. Maintenance, renovation,

and new school construction are constant needs within the District. Three of the District's facilities have been used for over fifty years. The David E. Norman Elementary School in Ely was constructed in 1909, the Middle School was built in 1913, and the McGill Grade School was built in 1962. All three face critical needs with ADA compliance, asbestos removal, lead based paint, major repairs, and renovation to meet safety standards and allow efficient and up-to-date operation. The District constructed a new elementary school in Baker in 1993 a new high school in Ely in 1995, and a new middle school/high school complex in Lund in 2006. Plans to construct a school in Pleasant Valley were cancelled with the area experienced a significant drop in population. The School District is completing a \$3 million project to provide athletic fields for the White Pine High School. A recent study shows that renovation of the Middle School would not be cost effective and the District needs to look at replacement of that facility. Adult education programs offered by White Pine School District include daytime and evening programs to finish GED programs, access to the alternative high school, computer based alternative education and enrichment programs, and the Mountain High GED program at Ely State Prison. Early Childhood Education is provided through the Magic Carpet Cooperative preschool in Ely, which can accommodate fifty 3- and 4-year olds, McGill Pre-school, which can serve twenty children, and Little People's Headstart, which can serve fifty-three children from low-income households. The Ely Branch campus of Great Basin College is the center of higher education in eastern central Nevada. Started in the 1970's as an evening program offered in local school facilities, the college came into its own with the construction of the vocational center built in part through an EDA grant. The campus is a source of great community pride because its construction was made possible through local contributions of over \$1 million at a time when the area's economy was at a low ebb. It has become a focal point for educational programs in White Pine County serving over 500 students. The Ely Branch Campus is a member of the Nevada System of Higher Education (NSHE) and is fully accredited by the Northwest Commission on Colleges and Universities. The branch campus offers personal enrichment programs, job training, vocational certificates, Associate of Arts, Science, General Studies, and Applied Science Degrees. Baccalaureate degrees include Bachelor of Arts in Elementary and Secondary Education and programs large portions of training for Registered Nursing and Social Work Curriculum. Key to Great Basin College's ability to offer expanded curriculum programs is the availability of compressed video systems that link all of the campuses within the Great Basin College to the University System. The Ely Campus employs two full time professors and over thirty adjunct instructors, 80 percent of them have advanced degrees. In addition to the college programs offered, the Ely Campus offers adult basic education and has a cooperative agreement to provide advanced course for White Pine High School students with a wide variety of dual credit courses available. Financial aid, scholarship, counseling, and study services are available.

Critical facilities issues for White Pine School District include the maintenance and eventual need for replacement of the three oldest school buildings in the system: White Pine Middle School, David E. Norman Elementary School, and McGill Elementary School. Great Basin College has land for expansion of college facilities to provide new and expanding program offerings. Both the School District and College face critical

budget issues with the state budget crisis and are anticipating budget reductions of 14 to 20 percent.

Issues with County Facilities:

White Pine County's facilities are aging and the County faces the need to make critical decisions on whether to replace or continue to repair them:

- 1) The Courthouse was built in 1912 and it is very difficult for the County to meet needs for security, technology, and ADA access. The primary concern is public safety during jury trials for Ely State Prison's maximum-security inmates. The judicial branch lobbied for funding to construct a judicial facility during the past two legislative sessions and the County is currently completing a facilities plan to include a new judicial and law enforcement complex.
- 2) The County's juvenile detention facility can no longer be used and juveniles must be transported to Elko, Winnemucca, and Carson City. Compliance with all of the rules and regulations regarding juvenile offenders takes a substantial toll in staff time and fuel cost and puts the youth and officers at risk especially during winter driving conditions. The 2007 State Legislature appropriated funds to be used for a juvenile detention facility in White Pine County. Due to current budget cuts, that funding was rescinded.
- 3) The County Courthouse Annex is the former Steptoe Valley Hospital and the building is both antiquated and inefficient as an office building. Electrical systems are inadequate for the use of current technology by County offices. Space arrangements are inefficient and heating and cooling systems are difficult to maintain.
- 4) The County Public Safety Building and Library were both constructed with flat roofs, which do not fare well in the area's climate and snow load. Both are relatively new facilities compared to other County buildings but both are in need of repairs and expansion.
- 5) The County's emergency services facilities are inadequate and scattered. There is a need to upgrade fire facilities at the airport to meet regulations, to consolidate facilities for fire, emergency medical and emergency management services so that the programs can operate efficiently.
- 6) Expansion and development of the airport facilities can provide additional service and economic development potential for the County.
- 7) The County will eventually need to provide a replacement for the existing landfill. Because the projected life of the landfill can fluctuate due to increased population and use, changes in regulations, and changes in management practices, the County cannot count on the 37.4 years indicated in this year's survey. It needs to begin working with Land Management Agencies, the State Division of Environmental Protection, and funding agencies to develop a plan for replacement of the Landfill

**WHITE PINE COUNTY SCHOOL ENROLLMENT
SEPTEMBER 19, 2008**

NO. OF	STUDENTS	DEN	MCGILL	BAKER	LUND		WPHS	LUND HS	SVHS	TOTAL	TOTAL
					ES	ES					
E.CHILDREN	15	19								34	
KINDERGARTEN	77	18		6						101	135
FIRST	78	25		3						106	
SECOND	66	17		5						88	
THIRD	78	24		2						104	
FOURTH	74	26	4	6						110	
FIFTH	69	14	3	4						90	
SIXTH			3	8	108					119	617
SEVENTH					106		4			110	
EIGHTH					104		13			117	
NINTH							4	1		127	
TENTH							8	6		129	
ELEVENTH							5	10		111	
TWELVETH							12	0		86	680
TOTAL	457	143	10	34	318	407	46	17	1432	1432	

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 9
LAND USE DESIGNATIONS

Land use designations identified in the County Code are a vision of the preferred mix in land uses for each area identified in 1987. There have been minor modifications and zone changes approved since that time and the Regional Planning Commission is in the process of reviewing and updating the zoning ordinance. County-wide and community level plans presented in the following sections include a description of the specific design for land uses contained in the existing zoning ordinance and identify recommendations for revisions to the designations to better meet the land use patterns and residents' needs in 2008.

ZONING DESIGNATIONS AND DESCRIPTIONS PER TITLE 17 OF THE COUNTY CODE:

Open Range:

O-5, Open Range

The O-5 Classification is intended to encourage farm activity in conjunction with rural residential living. Normal ranching and agricultural practices shall not be considered a nuisance condition. Nothing in this regulation is intended to interfere with normal ranching or agricultural practices that might result in conditions such as noise, dust, or odor for temporary periods of time. Mineral and natural resources exploration and extraction shall also be permitted in this zone.

Residential Districts:

Low Density Residential

R-A 5, R-A 2.5, R-A 1, Ranch Agricultural

The Ranch Agricultural District is established to provide areas on the fringe of the corporate area where residential uses may be harmoniously integrated with agricultural pursuits. The zone is intended to allow the keeping of farm units to the extent consistent with said development

RE 43, RE 21, Ranch Estates

The purpose of the R-E-43 and R-E- 21 Districts is to provide permanent areas for small farms, hobby farms, and limited agricultural development for personal use.

Medium Density Residential

R-1-100, R-1-75, R-1-50, Single Family Residential

The purpose of the R-1-100, -75, and -50 zones is to provide appropriate locations where medium density residential neighborhoods may be established, maintained, and protected. The regulations also permit the establishment, with proper controls, of public and semi-public uses such as churches, schools, libraries, parks, and playgrounds, which serve the requirements of families. The regulations are intended to prohibit those uses that would be harmful to a single-family neighborhood. R-1-100 zones require a minimum lot size of 10,000 square feet; R-1-75, a minimum lot size of 7,500 square feet, and R-1-50, a minimum lot size of 5,000 square feet.

R-2-75, R-2-50, Single Family Dwellings and Duplexes

The purpose of the R-2-75 and R-2-50 zones is to provide appropriate locations where medium to high-density residential neighborhoods on lots of not less than 5,000 square feet may be established, maintained, and protected. The regulations also permit the establishment of, with proper controls, the public and semi-public uses, such as churches, schools, libraries, parks and playgrounds, etc. which serve the requirements of families. The regulations are intended to prohibit those uses that would be harmful to residential neighborhoods. The R-2 zones allow single family homes and duplexes and require a special use permit for multi-family housing and other uses. The R-2-75 zone requires a minimum lot size of 7,500 square feet and the R-2-50 zone requires 5,000 square feet.

High Density Residential

R-M-75, R-M-50, Multi-Family Residential:

The purpose of the R-M-75 and R-M-50 zones is to provide appropriate locations where high-density residential neighborhoods may be established, maintained, and protected. The regulations also permit the establishment, with proper controls, the public and semi-public uses such as churches, schools, libraries, parks and playgrounds, etc., which serve the requirements of families. The regulations are intended to prohibit those uses that would be harmful to medium to high-density residential neighborhoods. The R-M zones allow multi-family dwellings and public and semi-public use and require a special use permit for commercial development. The R-M-75 zone requires a minimum lot size of 7,500 square feet and the R-M-50 zone requires a minimum of 5,000 square feet.

Mobile Home Designations

M-H-1, Mobile Home Park

M-H-2, Mobile Home Subdivision

M-H-3, Mobile Home, Single Family Dwellings

Commercial Districts:**C1, Neighborhood Commercial Zone**

The purposes of the neighborhood commercial district is to allow sale of necessary and convenient items on a small scale for subdivision residents.

C2, General Commercial Zone

The purpose of the general commercial district is to provide a commercial district intended primarily for business activities normally associated with sale and distribution of new or used merchandise, service facilities, and business and professional offices.

C3, Highway Commercial Zone

The purpose of the highway commercial district is to provide a district wherein business activities catering to the needs of travelers may be developed. The zone is further designated wherein business needing larger land area may be located.

AE, Adult Entertainment

The purpose of the adult entertainment district is to provide an area for adult oriented entertainment and activities on a commercial level. This is the only zone for listed uses.

Recreational Development**RD1, Recreational Development, Low Intensity Use**

The purpose of the low intensity use recreational development zone is to provide a district for development of structures or areas for human enjoyment, refreshment, interaction, diversion, or convenience, where structures are less than 800 square feet of floor area or where vehicular traffic is generally generated in an amount less than one hundred trips per acre per day.

RD2, Recreational Development, Intensive Use

The purpose of the intensive use recreational development district is to provide a district for the development of structures or areas of human enjoyment, refreshment, interaction, diversions, or convenience where structures exceed 800 square feet of floor area or where vehicular traffic is generated in excess of approximately one hundred trips per acre per day.

Industrial Districts:

M1, Light Manufacturing Zone

The light-manufacturing zone (M-1) is established to provide areas where light-manufacturing firms can engage in processing, assembling, manufacturing, warehousing and storage, and wholesale distribution and for incidental service facilities and public facilities to serve the manufacturing area.

Representative of the uses within the zone are light manufacturing, fabrication, processing, storage, warehousing and whole distribution. Uses, which generate excessive noise, vibration, smoke, odor, dust, fumes, or danger of explosives, have been excluded from this zone.

M2, Heavy Manufacturing Zone

The heavy manufacturing zone is established to provide areas in the community where heavy industrial manufacturing and extractive uses may be located in an environment which protects them from the encroachment of commercial and residential uses and which reduces the effect of undesirable characteristics such as odor, dust, and noise. Wholesale distribution of products manufactured in this zone is allowed. The zone is also intended to provide for the development of incidental service facilities such as restaurants, service stations, and public facilities intended primarily to serve the industrial area.

The heavy manufacturing zone will be characterized by the location of open and enclosed manufacturing, processing, and assembly uses, which may potentially create hazards, nuisances, or disturbances. Some peripheral landscaping will be provided where appropriate to reduce the effects of the detrimental characteristics of permitted uses.

Current Use and Issues with Existing Zoning Definitions:

Open Range: The zoning maps identify almost all of the area outside existing communities as Open Range. One exception is Major's Place, which is a single parcel of commercial, C-3 zoning in the O-5 zoning on the east side of Connors Pass in Spring Valley. The community of Cherry Creek is comprised of lots and blocks and is in O-5 zoning. Issues are beginning to arise from the mix of residential and traditional O-5 activity in the areas surrounding communities and the increasing development of O-5, five acre parcels in mountainous areas with sensitive environmental conditions and public outdoor recreation. These areas may not be able to support the full range of O-5 uses or increasing density of developed parcels.

Residential: There is increasing use of RA, Ranch Agricultural, and RE, Ranch Estates, zoning to identify large lot, low density residential development in areas surrounding outlying communities and in the area surrounding Ely. The primary area of RE 43 and RE 21 zoning is in the Lund and Preston area. However, there are areas of RE zoning on the southeastern boundary of Ely and in McGill. The McGill Town Council has proposed an annexation of additional land north and south of the existing townsite and has recommended that the additional area be zoned RE-43 to accommodate residents of that area.

There are large areas of McGill and Baker that are zoned, MH 3, mobile home, single-family dwellings. The MH 3 zoning has been detrimental to the development of single family residential neighborhoods for two reasons: 1) The zone does not allow stick built homes although in practice there are far more stick built homes than manufactured homes in some of the areas zoned MH 3. Anyone wishing to build a home in an area zoned MH 3 must apply for a variance. 2) The minimum lot size in MH 3 is 5,000 square feet but there are no restrictions on the age or size of mobile homes placed on the lots and no requirement to put the homes on foundations and convert them to real property. The Regional Planning Commission has recommended a revision of the ordinance to rescind MH 3 zoning and replace it with R2-50 zoning with requirements that manufactured housing moved into residential zones be placed on a foundation, that it be a minimum of 800 square feet, and that the manufactured homes must be no more than six years old unless a variance is granted and the homes meets current safety standards.

Commercial Zones: There is only one small area within the County (outside the Ely City limits) zoned C1 and there is no commercial activity in that area. The C3 zoning has been extended to areas along the McGill Highway, in McGill, Ruth, Baker, and Lund. There are no areas designated for AE, Adult Entertainment zones in the County (outside the Ely City limits).

Recreational Development Zones: There are no areas designated for the RD1 and RD 2 zones in the County.

Manufacturing Zones: The primary areas of M1 and M2 zoning in the County are the White Pine County Industrial Park on the McGill Highway and the inactive Kennecott Plant site on the eastern boundary of McGill.

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 10
PLANNING AREAS AND LAND USE MAPS

The White Pine County Land Use Plan is intended to provide land use guidance and policy through 2028. In looking twenty years into the future, the Land Use Plan addresses both current land use issues and needs but also attempts to foresee development trends and policy needed to accommodate future growth. In developing the Land Use Plan, planning documents completed during the ten years following the adoption of the 1998 Land Use Plan were reviewed. Each of the County's Town Councils and Town Advisory Boards were consulted and asked not only to consider land use issues within their specific community boundaries but within their entire valley. The City of Ely was consulted about growth needs and capacity and their desires for future annexation. The following Land Use Planning Areas were considered: 1) the communities of Baker, Cherry Creek, Lund, Preston, McGill, and Ruth; 2) the "Urban Interface Area" as defined by the 2005 Open Space Plan (encompassing the area in Steptoe Valley stretching from north of McGill at Mattier and Indian Creeks south through Ely to the Ward Charcoal Ovens and west into Smith and Butte Valley as well as east into Duck Creek Basin), and the Lund/Preston area; 3) the development potential of the County's primary basins as defined in the 2006 Water Resources Plan (White River; Steptoe, Spring, Snake, and Butte; and 4) the County as a whole.

White Pine County Communities:

Baker: The community of Baker sits on the eastern edge of White Pine County in Snake Valley and is the gateway to Great Basin National Park. The Baker Advisory Board discussed current land use needs within Baker, needed for future expansion of the community, and their vision for Snake and Spring Valleys. Primary land use in the town of Baker is residential and commercial. There is a large portion of Baker designated as MH-3 zoning and the current recommendations regarding converting MH-3 zoning areas to R-2-50 zoning throughout the County would impact this portion of Baker. There is a developing area of 5-acre recreational homes in the area west of Baker, and there is some manufacturing activity with D Bar X/Horns-a-Plenty's production site near Sacramento Pass. Public services and facilities include the Baker School, Baker Community Center, Volunteer Fire Department and Emergency Medical Service, and the National Park Visitors' Center. A part-time deputy and justice of the peace are employed by White Pine County. The County provides building inspection services and road maintenance on general standard County roads. The Baker General Improvement District administers the water and sewer systems. Primary activity in Spring and Snake Valleys is agriculture, public services, and tourism including the Border Inn and Hidden Canyon Guest Ranch. The Baker Advisory Board's recommendations include: 1) making efficient use of existing water and sewer systems and continuing the effort to expand the system to include the Lehman Creek residential area; 2) extending the commercial area along State Routes 487, 3) maintaining the land between Baker and the National Park as public land free of development to preserve the viewshed to the park, and 4) development of the

4,660 acre area identified for public land disposal to the east of Baker as commercial and residential land use. In the next twenty years, the Baker Advisory Board envisions continued agricultural production with opportunities for development of alternative crops and processing activity; increased recreational development; increased commercial activity to meet the needs of park visitors; and potential for expansion of home based businesses, energy development, and light manufacturing activity based on the area's access to Internet, location on US 50, and ability to attract entrepreneurs looking for its quality of life. The Advisory Board notes the extreme importance of sufficient water resources to allow full development of the area's potential.

Cherry Creek: Cherry Creek was one of the County's early boomtowns and once housed a population in the thousands. The Nevada Northern Railroad tracks run through the community and it was once a passenger stop on the 140-mile route. The Cherry Creek depot was moved to the White Pine Public Museum in Ely to prevent further deterioration. Today there are approximately 19 year-round residents and the population doubles in the summer with seasonal residents. The town is located in an O-5 zone even though it is comprised of lots and blocks. In addition to residences, the town boasts an historical museum, one commercial business, and a volunteer fire department. It has a privately owned water system and residents rely on individual septic systems. Access to Highway 93 is via State Route xxx. The surrounding uses include agriculture, public land and outdoor recreation. Cherry Creek is an historic mining district and there is currently one mining exploration project proposed for the area. There are three reasons why the community may experience growth in the next twenty years: 1) If the White Pine Energy Station and/or Ely Energy Center are built, Cherry Creek will be the closest community and 2) The BLM Resource Management Plan identifies land along the railroad near Cherry Creek which could provide industrial sites with rail access. The access to rail at Cherry Creek would become more important if the power projects are not built and the rail freight service terminates at Cherry Creek. 3) Property has been purchased by people from outside White Pine County and they are beginning to build summer and/or retirement homes in the area. As the proposed power plants move closer to completing permitting processes, strategies for potential growth will be needed to address the development that could occur in the Cherry Creek area in the next twenty years. The community has never been surveyed and property ownership boundaries and easements are critical issues. The community needs to be surveyed and rezoned.

Lund and Preston Planning Areas: Lund and Preston are located 35 miles south of Ely and they are six miles apart. The area has traditionally supported agriculture in both alfalfa farming and livestock grazing. The main street of Lund is State Route 318 and there is limited commercial activity along it, primarily to meet the needs of community residents. The primary public services include the Lund School facilities which were constructed in 2006, a part-time justice of the peace employed by the County, volunteer fire and emergency medical services. The "old Lund School" facilities are maintained by the School District and made available for use by the community through agreements with the County, there is a community center in Preston, and the County has received funding through SNPLMA to develop a Preston Park facility on the grounds adjacent to the community center. A proposed Boys' Ranch to house troubled youth has been

granted a special use permit and is under construction near Preston. There is no water and sewer service and the lots in town are served by private wells and septic systems. The property in Lund and Preston is zoned primarily RE-43 and RE 21, Ranch Estates, which allows residents to keep a limited number of farm animals on their property in town. There is a small area between the two communities zoned for MH 3, single family mobile homes and the proposed amendment to convert MH 3 to R-2-50 zoning will impact that area. There have been several five-acre parcels approved on land north of Lund. At full development the property being parceled could support 28 new households. There are two parcels identified by Bureau of Land Management for land disposals on the eastern boundary of Lund and a small parcel on the west side of US 6 at the junction of the highway with State Route 318. The Lund Town Council recommends reconsideration of disposal of the southern parcel because of its proximity to springs and the concern that development with septic systems could impact the springs. They would like to see the northern portion disposed of in segments, that there be a requirement for parks and playgrounds to be established along with residential development, and that there be an access corridor established on the northern boundary because it is located in a route used by local ranchers to move livestock through the area as well as to provide public access for recreation. Primary activity in the White River Valley remains agricultural and there is the potential for increased development of services to meet the needs of residents, travelers, and outdoor recreationists. Both the Lund Town Council and Preston Area Advisory Board have expressed an interest in expanding the boundaries of the two communities to encompass the new residential growth surrounding the original communities. As noted by the Chairman of the Lund Town Council, the Council membership can only be drawn from the small area within the boundaries of the townsite and it is called upon to make decisions and recommendations that may impact the residents of the entire area. The Lund Town Council has requested a land use designation for industrial activity on the western boundary of Lund. The community of Lund is bisected by State Route 318, which causes safety concerns for pedestrian and bicycle traffic in town. The community has expressed interest in the potential of signal lights or a highway bypass to address the safety issues. The Preston Area Advisory Board has also discussed the desire to expand its boundaries and to be recognized as a township. The primary land use issue for Lund and Preston is the appropriate level of commercial agricultural activity to be allowed within the RE-43 and RE 21 zoning and still maintain the residential quality of the area. Future consideration of the County's zoning ordinance should include a review of the RE zoning definitions and requirements.

McGill: The community of McGill is located approximately 12 miles north of Ely and was the site of the Kennecott Copper Company smelting operations. The town was built in the early 1900's to house the workforce at the smelter. Even though the homes were sold by Kennecott in the late 1950's and the smelter has not operated since 1983, McGill retains the look of a company town. Long time residents remember when the community neighborhoods were divided by ethnic origin and they still refer to portions of the community as Greek Town or Slav Town. In the spring 2008, McGill approached the County Commission to approve annexation of additional, undeveloped land. The initial proposal was 8,000 acres and the Commission faced significant complaints from property owners who did not want to have additional regulation of their rural lifestyle. McGill has

agreed to pursue a smaller annexation and the First Reading of the Ordinance is on the Commissioners agenda in January 2009. The town is bisected by US Highway 93 and it has a commercial district along both sides of the central portion of the highway. The historic McGill Club is open limited hours but draws visitors to the community to see the historic slot machines and the bar that was brought to the West "around the Horn". One of the few historic bars in the state that does not have video poker installed in it, it has been used for several commercials and movie sets. Another attraction in McGill is the McGill Drug Store Museum, a well-preserved vintage pharmacy complete with an old fashioned soda fountain. The Kennecott Plant site is located on the eastern edge of the community and it is zoned M-2. Kennecott buildings outside the security fence for the plant site have been sold and continue to house business and industrial firms. Much of the community is zone for medium density housing and MH-3. The proposed zone change from MH 3 to R2 50 will impact those areas. The McGill elementary school serves to kindergarten through fifth grade students. One of the focal points for the community is the McGill Post Office. McGill has an active volunteer fire department and emergency medical program. The community's senior population is 15 percent, higher than that of the County as a whole or the state. When Kennecott closed, the County inherited three parks in McGill: 1) The community park is located on the west side of the high at the north entrance to town. The park includes the only public swimming pool in White Pine County. It is in operation from late May until after Labor Day weekend and provides both swimming lessons and recreational swimming time. 2) The old ballpark is adjacent to the McGill Grade School. It is reported to be the oldest ballpark in the state for organized team play. 3) The Circle/Avenue K Park is located in the center of the town and was once the grounds for the Kennecott administrative building. All three parks are in need of renovation and stabilization. Several projects in the McGill parks have been funded through Rounds 8 and 9 of the SNPLMA (Southern Nevada Public Lands Management Act) Parks, Trails, and Natural Areas. The McGill Town Council has asked that the commercial zone along US Highway 93 be extended for the full length of the community, that a parks and facilities designation be extended the full length of the community on the east boundary of the town to accommodate development of an OHV use area, and that the area between the residential district and the Kennecott plant site be zoned for business and industries. Portions of the area to be annexed include residences, small ranches, and an auto-wrecking yard allowed through a special use permit. Ownership includes a substantial amount of land owned by Kennecott and BLM. A portion of the BLM land has been identified for disposal in the Resource Management Plan. The McGill Town Council has asked that the area for annexation be zoned RE 43 to accommodate existing property owners. The Council anticipates development in the future due to its proximity to the potential power plant sites and recreational development in north Steptoe Valley and Duck Creek Basin.

Ruth: The community of Ruth was established in the early 1900's to house the copper mine workers. At one time the community boasted an active retail center, movie theaters, churches, and schools. Today, the majority of the land use is medium density residential. There is one active business in town and residents travel to Ely for all other needs. The Ruth School is closed and the School District has had a difficult time selling it because of the amount of asbestos removal required to remodel or demolish the school and use the

property. There is a community center/fire station in a renovated Kennecott Building and an active volunteer Fire-Med service. The community maintains two parks and was recently awarded a USDA Community Facilities grant for new playground equipment. The park has been identified as one of the County parks to be renovated with Round 9 SNPLMA funds. The primary activity is Ruth is the administration and operation of the Robinson Copper Mine. The Robinson mine is completing development of a housing project to provide up to seventy-three 1,600 square foot single-family modular homes. Mine employees will have first opportunity to purchase the homes and then they may be sold to the general public. The McGill Ruth General Improvement District lacked sufficient capacity in the Ruth Water and Sewer systems to accommodate the 73 homes to be built. The mine facilitated the project by donating land to enlarge the sewer ponds and the mine is working with the District to make a well available to ensure adequate water supply. The County sponsored a successful grant application for HUD, Community Development Block Grant funds to expand the sewer ponds to provide the additional capacity needed for new homes in the community. Recommendations for the Land Use Plan include expansion of the community along Sunshine, Keystone, and Cedar Streets for residential and commercial activity, encouraging recycling to make efficient use of Landfill space, adding alternative processing methods as permitted uses in the O-5 zones, and requesting BLM land transfers to even up the mine's boundaries.

Urban Interface, McGill Highway Area, and Georgetown Ranch:

One of the areas experiencing the greatest change during the last ten years is portion of Steptoe Valley from north of McGill through Ely and south to the Ward Charcoal Ovens, west into Smith and Butte Valleys, and east into Duck Creek Basin. In 1999, the area between Ely and McGill was beginning to see some residential development, there was limited commercial development along US 93, and the County's Industrial Park, airport, golf course, and fairgrounds were located along the highway a few miles from Ely. Conflicts arose over increased interest in the McGill Highway area for commercial development as well as requests to reduce parcel size from 5 to 2.5 acres. Many residents of the McGill highway considered themselves "rural" and they wanted to keep their lifestyle as it was. The conflicts prompted the development and approval of the McGill Highway Area Master Plan which outlined the division between commercial and residential as well as low density housing on 5 acre parcels versus 2.5 acre parcels and even smaller lots in existing and proposed subdivisions. The plan was adopted in 2000 after substantial input from highway residents. It is incorporated into the 2008 Land Use Plan by reference and the approved land use map is included as **Exhibit 15h**. The growth to the south was also minimal at the time the 1999 plan was completed. Mineral Heights was built by Magma Copper to house its management employees when it owned the copper mine and the housing project were sold to BHP along with the mine. Other than Mineral Heights, Cedar Grove trailer park, and expansion of tribal housing, there was little development further south. Today, residential development extends north of McGill to Indian Creek and Mattier Creek, west into Smith Valley. the Cross Timbers/Lackawanna area continues to grow, and there has been substantial parceling of private property in Duck Creek Basin with new homes being built at East Creek as well as on the south end of the Basin. The County was awarded a \$1.49 million grant from the

state's Question 1 program with a matching commitment from the Rocky Mountain Elk Foundation to purchase Bassett Lake, the surrounding 6,000 thousand acres, and the water rights from Kennecott to develop a public recreation area. The negotiations on the purchase agreement fell through but the parties are continuing the discussions for a conservation easement. If approved and developed, this will provide an important outdoor recreation and open space resource in the middle of the urban interface growth. There are now homes stretching along the Ward Mountain bench all the way to the Ward Charcoal Ovens and there is a portion of the Blue Diamond development on the east side of the highway. According to the County Assessor, there are 522 vacant lots in the urban interface area. Part of the growth was spurred by the housing market in Las Vegas, the reduction in home values following the BHP closure and the fact that so many Clark County residents purchased homes in the Ely area as second and summer homes. When that housing stock was no longer available, the newcomers continued to purchase land and build new homes. They are joined by other newcomers to the County unable to find housing within the existing housing stock and long-term residents purchasing land to upgrade and build new homes. During this period, the City of Ely annexed the Georgetown Ranch, 2,400 acres of open space between Ely and McGill that houses the Landfill, Waste Water Treatment Plant, and the County Golf Course. The growth in the urban interface area presents two significant issues: 1) the growing conflicts and need for developing a compatible zoning designation for the rural/limited agricultural; and residential areas surrounding the communities where people can maintain livestock and yet preserve the quality of life for their neighbors and 2) the need to provide adequate mapping, manpower, equipment, and procedures to provide emergency services in the outlying areas.

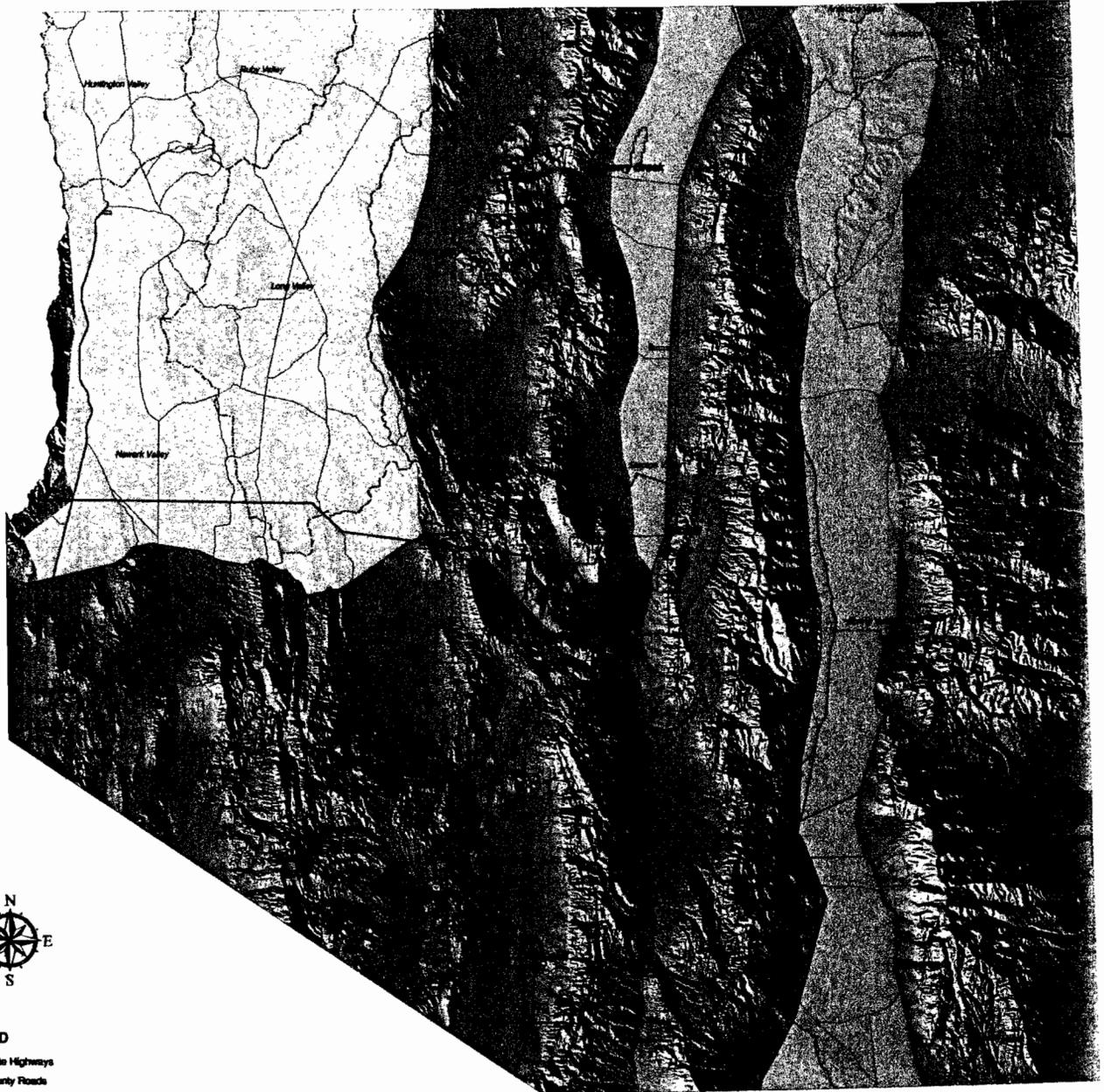
Two specific areas of coordination are required between the City and County and between the Ely Shoshone Tribe and the County. Per Nevada Revised Statutes, the City's land use designations and regulations prevail in a one-mile boundary around the City limits. The City and County need to work together to identify mutual goals and development strategies. The City Council has been involved in the development of the Land Use Plan and the discussion about areas for potential annexation. A review of the parcels in the City of Ely, shows there is enough land purchased by private developers with plans for housing to provide at least 800 building lots. Projections show that if all of the land were developable and desirable, this would be enough to meet the projected population increases for the next twenty years. It is unlikely that developers will find 100 percent of their land developable or that purchasers may not want other options to consider. The City representatives recommend that the land within a three-mile radius of the corporate boundaries that has been identified for disposal by the BLM in their Resource Management Plan should be made available for annexation and growth of the City of Ely. The City and County should also coordinate on development options for the Georgetown Ranch area. The Ranch represents an important area of open space and it houses a portion of the County's golf course. It is adjacent to the County's Fairgrounds, Marich Softball Field, Industrial Park, and Airport. Much of the ranch is in the flood zone and development must demonstrate beneficial use of the water rights from Murry Springs. Long-term goals have also been to use it for an outdoor recreation complex. While the ranch may not represent immediate growth and development in the area, it will

be important to coordinate development and preservation of open space in the future. The second area of coordination required is with the Ely Shoshone Tribal Council. The Tribe received 535 acres of land for residential and commercial development south of Ely along Ward Mountain and it is currently developing a land use plan. The Tribal Chairman has agreed to work with the County to coordinate land use plans for the area along the Ward Mountain Bench to preserve the environmental and community quality of the area. Since the completion of the Open Space Plan in 2005, other areas have begun to experience recreational residential development including the Sacramento Pass area in Snake Valley, the Willard Creek area in South Spring Valley, and increasing residential development in the Lund/Preston Area. The trend toward residential development in the outlying areas and especially in the mountainous areas where there may be environmental concerns and conflicts with the public accustomed to using the areas for access to outdoor recreation on public lands indicates that there is a need to evaluate the O-5 Open Range zoning designations and add other zoning designations and regulations to protect the environment, access to public lands, and investment in recreational residences.

Basin-by-Basin Development Potential: Spring, Snake, Steptoe, Butte and White River Valleys: The 2006 White Pine County Water Resources Plan divided the County into three types of hydrographic basins: 1) *Primary Basins*, which represent the primary development potential of the county, 2) *Secondary Basins*, which are entirely or primarily within the County but do not have active development or primary infrastructure to support development, and 3) *Peripheral Basins*, those basins which have only a small segment in White Pine County and the primary economic activity for the basins takes place in an adjacent county. The primary basins are identified as Steptoe, Spring, Snake, Butte, and White River on the basis that they house the County's communities, transportation, communication, and transmission corridors and are best able to support development. The Secondary Basins are identified as Long, Newark, Jakes, Pleasant, Tippitt, and Railroad Valleys. Although there is substantial mining and agricultural activity in portions of these valleys they lack the primary infrastructure to support development and do not house communities. One exception is that there are transportation, communication, and transmission corridors along the US 50 corridor and the western portion of the County demonstrates slightly more solar energy potential than the rest of the County, which could lead to solar energy development in that area. The Peripheral Basins are Huntington, Ruby, and Antelope Valleys, which are on the northern boundary, and the primary activity for the valleys is in Elko County; Deep Creek Valley, which is primarily in Utah; Hamlin, Lake, and Cave Valleys, which are primarily in Lincoln County; and Railroad and Little Smokey Valleys, which are shared with Nye and Eureka Counties. The Water Resource Plan analyzes development potential in each of the Primary Basins based on land ownership, recreational activity, residential activity, energy development potential, agricultural potential, and mineral resources. The Water Resources Plan is incorporated into the Land Use Plan by reference and the Basin-by-Basin analysis is attached. The conclusions of the basin-by-basin analysis provide the following conclusions for the Land Use Plan: 1) North Steptoe Valley represents the primary municipal, industrial, and residential center for the County and the corridor from Ely to Elko County along the Nevada Northern Railroad and US Highway 93 represents a primary industrial corridor, 2) Spring Valley has potential for agricultural activity and

development, recreational development, approximately 3,000 acres of land taxed as single family residential property with potential to support 600 five-acre parcels for residential development, and it has been identified as a significant area for wind energy resources. 3) Snake Valley was also identified as having potential for agricultural activity and development, energy development, recreational development, residential development, and the ability to attract entrepreneurs for home based businesses and industrial development, 4) Butte Valley was identified as a primary area for agriculture and mineral resource development and with potential for residential and recreational development, 5) White River Valley was identified as a primary agricultural area which provides hay and alfalfa production that supports winter feed for livestock throughout the County. It has potential to provide services to travelers on US Highway 6 and State Route 318 and the support residential and recreational growth as is demonstrated by immigration of urban residents, and the 6) the western portion of the County has potential for solar energy development.

County-wide issues: County-wide the community recommended that the BLM land transfers be located near existing communities to provide land for expansion rather than in undeveloped areas where new communities may develop. All of the communities noted the desire to work with the BLM and other agencies to establish OHV use areas nearby with routes to them so that OHV enthusiasts could enjoy their sport and keep dust and noise away from residential areas. In all areas of the county there was a need identified to resolve issues with open range, agricultural, and low density residential uses.

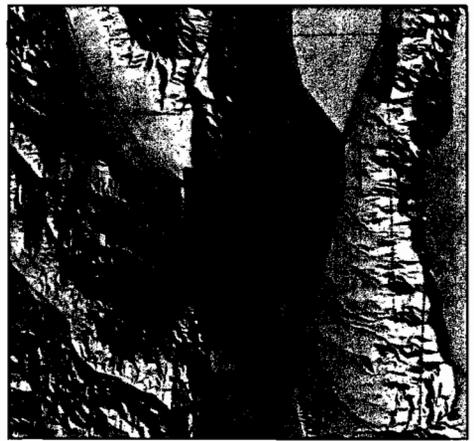


LEGEND

- State Highways
- County Roads
- Falcon-Gardner Transmission Line
- SWP Transmission Line (Proposed)
- Land Use 5 Mile Zone
- BLM Disposal Parcel
- Expanded Town Boundaries
- Groundwater Basin Boundaries

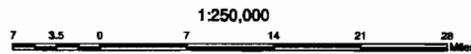
Land Use

- AIRPORT
- COMMERCIAL
- COMMERCIAL/RESIDENTIAL ZONING
- INDUSTRIAL
- INDUSTRIAL CORRIDOR
- PUBLIC
- RECREATION
- RECREATION, PUBLIC FACILITIES & OHV USE AREA
- RECREATIONAL RESIDENTIAL ZONE OVERLAY
- RESIDENTIAL 3 DU/ACRE
- RESIDENTIAL > 3 DU/ACRE
- RURAL
- SOLAR POTENTIAL
- VIEW SHED
- WIND POTENTIAL

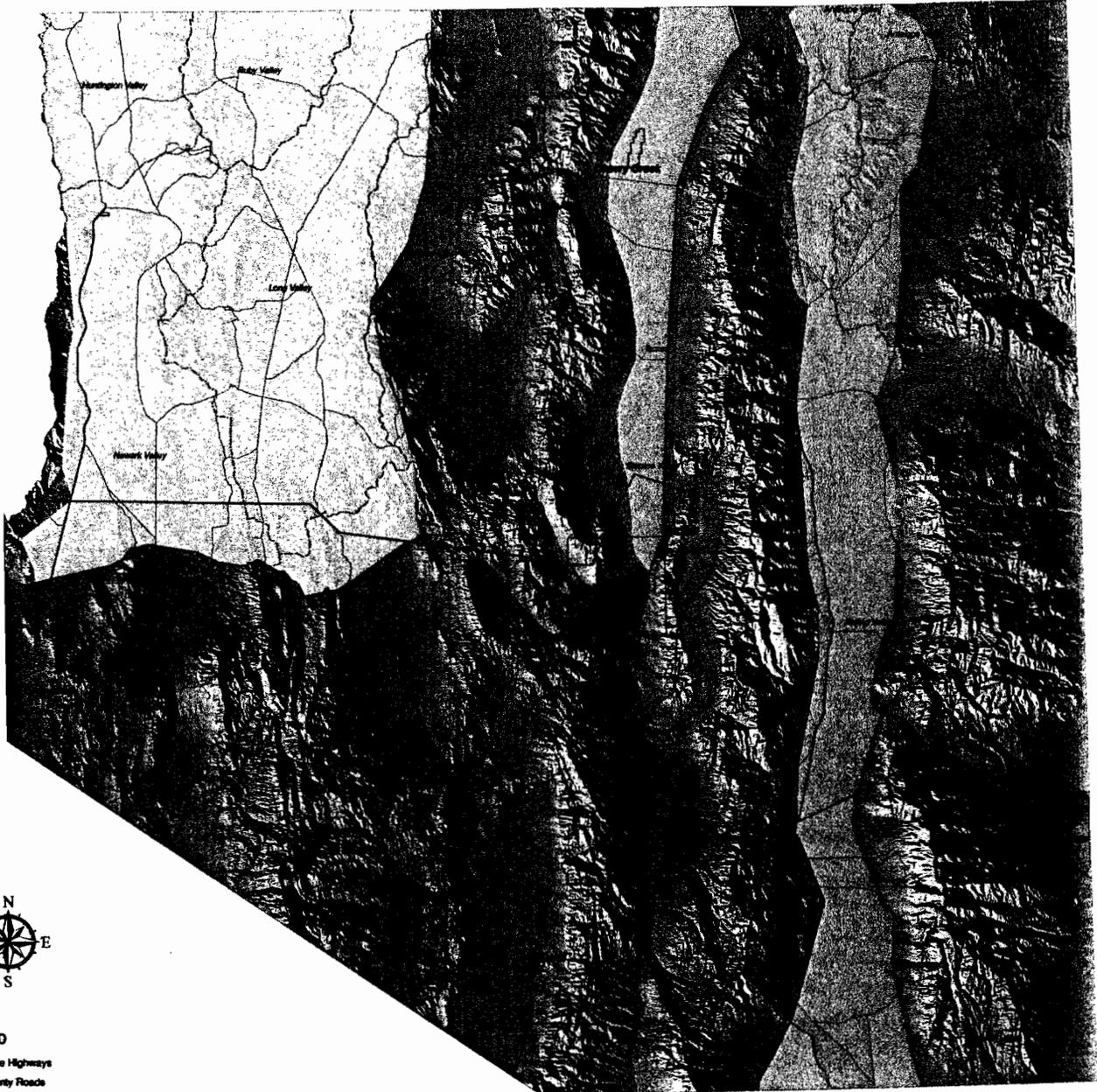


White Pine County Land Use

Steptoe Valley Area



1:100,000

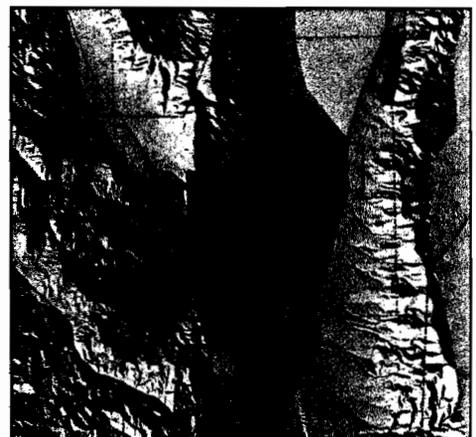


LEGEND

- State Highways
- County Roads
- Falcon-Gonder Transmission Line
- - - SNMP Transmission Line (Proposed)
- Land Use 5 Mile Zone
- BLM Disposal Parcels
- Expanded Town Boundaries
- Groundwater Basin Boundaries

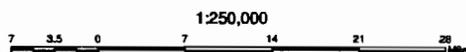
Land Use

- AIRPORT
- COMMERCIAL
- COMMERCIAL/RESIDENTIAL ZONING
- INDUSTRIAL
- INDUSTRIAL CORRIDOR
- PUBLIC
- RECREATION
- RECREATION PUBLIC FACILITIES & OHV USE AREA
- RECREATIONAL RESIDENTIAL ZONE OVERLAY
- RESIDENTIAL 3 DU/ACRE
- RESIDENTIAL > 3 DU/ACRE
- RURAL
- SOLAR POTENTIAL
- VIEW SHED
- WIND POTENTIAL



White Pine County Land Use

Steptoe Valley Area



1:100,000



STEPTOE VALLEY LAND USE

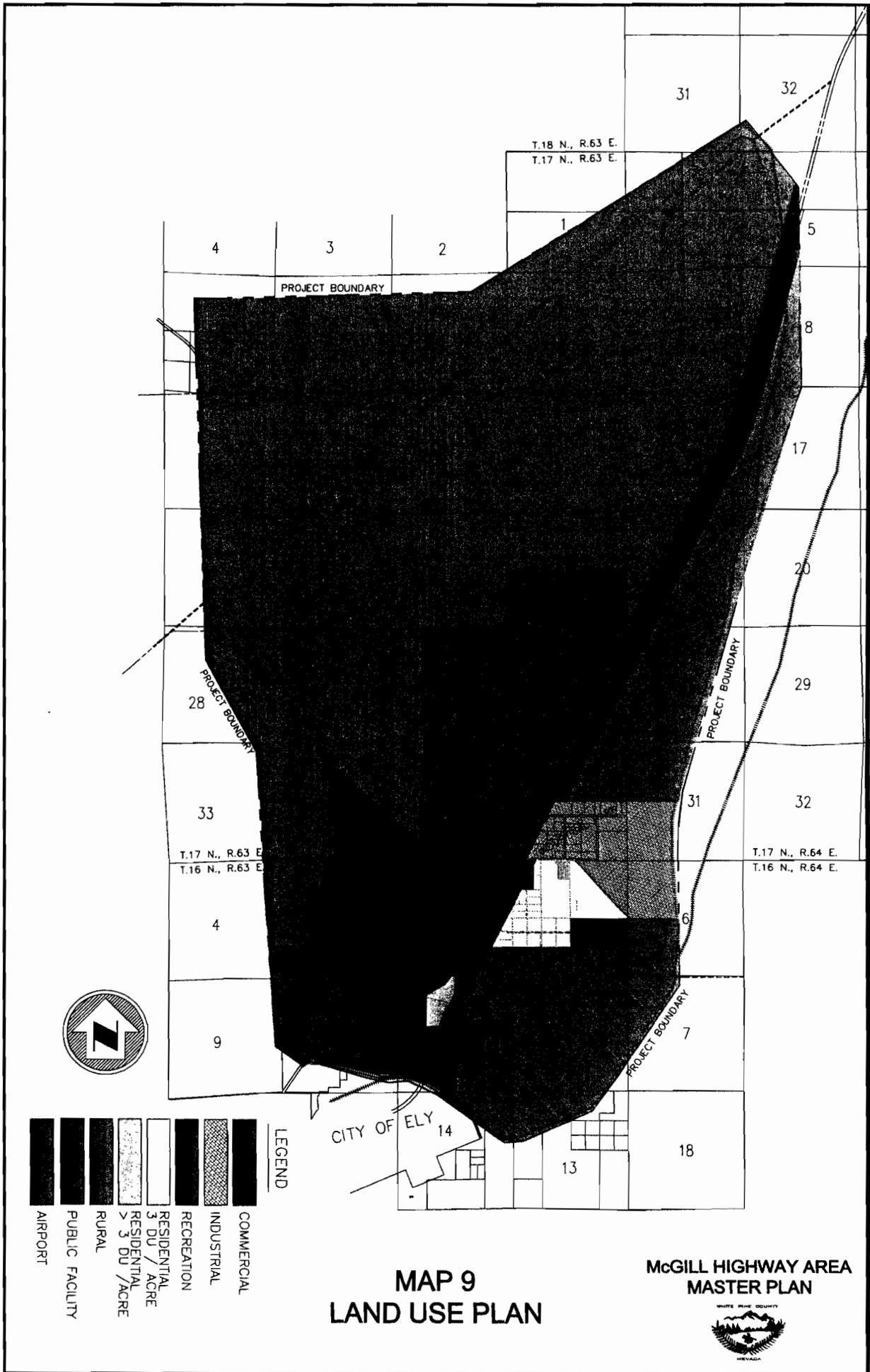
1:150,000

LEGEND

- | | |
|--------------------------------------|--|
| — County Roads | AIRPORT |
| — State Highways | COMMERCIAL |
| - - - Expanded Town Boundaries | COMMERCIAL/RESIDENTIAL ZONING |
| - · - · Groundwater Basin Boundaries | INDUSTRIAL |
| - · - · BLM Disposal Parcels | INDUSTRIAL CORRIDOR |
| - · - · Land Use 5 Mile Zone | PUBLIC |
| | RECREATION |
| | RECREATION, PUBLIC FACILITIES & OHV USE AREA |
| | RECREATIONAL RESIDENTIAL ZONE OVERLAY |
| | RESIDENTIAL 3 DU/ACRE |
| | RESIDENTIAL > 3 DU/ACRE |
| | RURAL |



McGill Area Detail
1:50,000



**MAP 9
LAND USE PLAN**

**McGILL HIGHWAY AREA
MASTER PLAN**



- LEGEND**
-  AIRPORT
 -  PUBLIC FACILITY
 -  RURAL
 -  RESIDENTIAL > 3 DU / ACRE
 -  RESIDENTIAL 3 DU / ACRE
 -  RECREATION
 -  INDUSTRIAL
 -  COMMERCIAL

WHITE PINE COUNTY 2008 LAND USE PLAN
CHAPTER 11
LAND USE GOALS AND IMPLEMENTATION STRATEGIES

Development of 2008 Land Use Goals:

The 2008 Land Use Plan was developed in 2007 and 2008 through three processes: 1) a review of planning documents approved since the adoption of the 1998 Land Use Plan including the 2000 McGill Highway Area Master Plan, the 2005 Open Space Plan, the 2006 Water Resources Plan, and the 2008 Public Land Use Policy; 2) review by the Town Councils for Ruth, McGill, and Lund and Advisory Boards for Baker and Preston and their recommendations for revisions for their communities and the surrounding area; and 3) a total of seven public workshop over a period of almost two years to provide White Pine County citizens maximum opportunity for input into the recommendations for the 2008 plan. During the process, reports were given routinely to the Regional Planning Commission, County Advisory Boards including the Public Land Users Advisory Committee and the Economic Diversification Council, and the County Commission. Their input was added to the recommendations. The City of Ely was consulted regarding annexation needs and coordination of development plans for the areas bordering the City. There are two other land use plans in the process of development: The Ely Shoshone Tribe's land use plan for the expansion areas acquired through the White Pine County Conservation, Recreation, and Development Act of 2006 and the Southern Nevada Water Authority land use plan for the ranches purchased in Spring Valley. Both will be reviewed for coordination with the Land Use Plan as they are available. The Bureau of Land Management completed its Resource Management Plan process and the Record of Decision was signed in October 2008. The County was a cooperating agency in the development of the plan and participated throughout that process. The Resource Management Plan provides the BLM guidance for land use on the 4.4 million acres it administers for the Ely District in White Pine County. Concepts in the Resource Management Plan and especially the lands identified for disposal were included in the development of the Land Use Plan.

The primary theme of the 2008 Land Use Plan discussions is the need to address the development in the outlying areas of the County. In previous plans, the areas outside the existing communities were considered, Balance of County, and were listed as Open Range or Federal Reserve. In the past ten years, residential development in the urban interface areas in Steptoe Valley north of McGill through south of Ely as well as west into Smith Valley and east into Duck Creek Basin, development on Sacramento Pass and parceling in Spring Valley, and parceling and development in White River Valley near Lund and Preston is creating new issues and the need to consider new zoning designations and regulations. The County Commission has identified the need to achieve balance between private development, protection of sensitive environmental areas, preservation of access to public lands, and the ability to provide services. The Regional Planning Commission is working with questions on O-5, RA, and RE zoning to ensure residential quality of life at the same time protecting traditional agricultural and Open

Range land uses. Each of the outlying communities in the County noted the need to expand their boundaries and requested modifications on the land use designations to meet current and potential growth patterns. Development potential was identified throughout the County and the discussions identified the need for an industrial corridor along US 93 and the Nevada Northern Railroad through North Steptoe Valley, the potential for wind energy projects in Spring Valley, and the potential for solar energy projects especially in the western portion of the County. The countywide goal with public land disposals is to assist development in and around existing communities and along the industrial corridor in North Steptoe Valley rather than establishing entirely new communities. The Public Land Users Advisory Committee and Lund Town Council suggested that specific parcels identified for disposal in the Resource Management Plan be reconsidered due to environmental concerns. All of the outlying communities identified the need for OHV use areas near the communities with routes to them so that noise and dust from OHV use can be minimized around residential areas. In addition, the process identified that when large parcels of public land are made available for disposal, there is a need for reservations of rights-of-way for public access for recreation and ranching activity.

Implementation of the Land Use Plan:

The goal of updating the White Pine County Land Use Plan is to provide guidance on general land use concepts and goals for the County Commission and Regional Planning Commission as they make decisions on specific requests for parcel maps, zone changes, special use permits, and variances. The Land Use Plan incorporates other planning documents that have been adopted and made a part of the County's Comprehensive Master Plan over the past ten years so that there is one set of planning goals and recommendations for reference when the Regional Planning Commission and County Commission are called upon to make a Finding of Fact that a particular request is in compliance with the Master Plan. Copies of the approved plan will be provided to each member of the County Commission and Regional Planning Commission as well as made available for public review at the County Clerk's Office and Library. The maps accompanying the Plan will be on display in the County Commission Chambers and available during meetings for reference when asked to make decisions on specific requests. Copies of the maps for each planning area will be made available to the Town Councils and Advisory Boards for review during their meetings and when they are called upon to review and make comment on specific requests.

The Land Use Plan will be used as a tool in assisting the County Commission to work with the Bureau of Land Management to identify the lands to be made available for disposal under the White Pine County Public Lands Bill. This will include the scheduling of land disposals based on the lands already identified in the Resource Management Plan and identifying additional lands that may be made available for disposal through the process of amending the Resource Management Plan.

The Land Use Plan will be reviewed by the Regional Planning Commission and County Commission on an annual basis and per NRS 278.0286, the Regional Planning Commission will prepare an annual report to be presented to the County Commission

identifying progress in meeting the goals outlined in the plan and recommend plan revisions.

Land Use Goals:

1. Provide guidance for residential development in the urban interface areas to preserve both residential and agricultural character and quality of life
2. Provide guidance for recreational residential development throughout the County that balances development of private property with protection of important and sensitive environmental qualities and access to public lands
3. Reduce impacts of subsequent parceling by requiring the tentative map for the entire acreage with the second or subsequent map and considering conditions up to and similar to subdivision requirements when future concentration of new parcels is anticipated
4. Provide corridors and areas for industrial growth, agricultural production and processing, mineral extraction and processing, and recreational development throughout the County
5. Provide adequate land for expansion of communities and industrial development
6. Maintain open space and rights-of-way to provide access to public lands
7. Coordinate land use planning and implementation with water resource and conservation plans
8. Coordinate land use planning and implementation with policies for public land use
9. Coordinate land use planning and implementation with Tribal Land Use Plan
10. Maximize the efficient use of existing community infrastructure and develop vacant or under-utilized land within community areas
11. Encourage expansion of the mining sector compatible with environmental quality within the County
12. Retain and expand irrigated agriculture and livestock enterprises within the County
13. Encourage recreational development to meet the needs of residents and visitors
14. Develop and encourage alternative land use categories to address the balance of needs for residential development and environmental quality
15. Coordinate land development with provision of services and infrastructure
16. Enhance quality of communities and residential neighborhoods by encouraging development of pedestrian and bicycle pathways
17. Encourage development of Off Highway Vehicle use areas and access routes to minimize impacts of OHV use on residential areas and take an active role in working with federal land management agencies in the development of travel management plans that provide guidelines for OHV use which protect environmental and residential quality in the County

18. Encourage community design standards and preserve and manage significant cultural resources for maximum benefit of the County and its residents
19. Implement the Land Use Plan through adoption of ordinances and annual review of progress in meeting the Land Use Goals

Implementation Strategy:

Goal 1: Provide guidance for residential development in the Urban Interface Areas to preserve both residential and agricultural character and quality of life

- A. Review and revise definitions of zoning designations to include enforceable standards for animal husbandry and nuisance abatement.
- B. Adopt a policy to accept new parcels within a five-mile radius around communities as RA, Ranch Agricultural or RE, Ranch Estates rather than adding new Open Range parcels within the perimeter of communities where residential growth is expected.

Goal 2: Provide guidance for recreational residential development throughout the County that balances development of private property with protection of important and sensitive environmental qualities and access to public lands

- A. Adopt a new zoning designation for recreational residential development designed to allow development of private property and protect environmental and scenic qualities and preserve access to public lands.
- B. Adopt a Wildland-Urban Interface Fire Code with regulations requiring construction to comply with standards for defensible space, building materials, and water supply for fire protection.
- C. Adopt a zoning designation for Open Range with minimum lot sizes larger than 5 acres for use where needed to protect resources and open space.

Goals 3: Reduce impacts of subsequent parceling by requiring the tentative map for the entire acreage when the second or subsequent map is submitted and considering conditions up to and similar to subdivision requirements when future concentration of new parcels is anticipated

- A. Require submission of a tentative map with a second or subsequent map to parcel land within five years of approval of the first map.
- B. Adopt ordinances, which allow the Regional Planning Commission and County Commission to consider the full range of development requirements allowed under the NRS as conditions for approval of parcel maps.

Goal 4: Provide corridors and areas for industrial growth, agricultural production and processing, mineral extraction and processing, and recreational development throughout the County

- A. Revise the Zoning Ordinance description of O-5 zoning and adopt policies and regulations that encourage agricultural and mineral processing and recreational development throughout the County.
- B. Identify North Steptoe Valley along US Highway 93 and the Nevada Northern Railroad as an industrial corridor and establish zoning regulations that foster industrial development in that area.
- C. Identify renewable energy development as a land use category and a preferred use in areas where renewable energy resources exist. Identify Spring Valley as a potential area for wind energy development and Long, Newark, and Jake's Valleys as a potential area for solar energy development.

Goal 5: Provide adequate land for expansion of communities and industrial development

- A. Work with the Bureau of Land Management to process public land disposals in and around existing communities and in the identified industrial corridor in North Steptoe Valley.
- B. Work with the communities within the County to determine their needs and complete annexation processes to allow them to expand their boundaries.

Goal 6: Maintain open space and rights-of-way to provide wildlife corridors and access to public lands

- A. Develop and implement zoning requirements that minimize the visual impact of development in areas with scenic and open space values.
- B. In public land disposals, request reservations of rights-of-way to maintain wildlife corridors, corridors for livestock movement, and access to public lands for recreation.

Goal 7: Coordinate land use planning and implementation with water resource and conservation plans

- A. Incorporate by reference and include the goals of the County's Water Resource Plan for conservation and development.
- B. Encourage Best Management Practices for spring development.
- C. When considering BLM land for disposal, request rights-of-way to provide access to water sources for wildlife, livestock, and public recreation.

Goal 8: Coordinate land use planning and implementation with policies for public land use

- A. Incorporate by reference and include the goals of the County's Public Land Use Policy in the County's Land Use Plan.
- B. Refer actions that have implications for public land use to the Public Land Users' Advisory Committee for comment.

Goal 9: Coordinate land use planning and implementation with Tribal Land Use plans

- A. Encourage discussions and coordination with Ely Tribal Council to convey goals and policies for land use and development in areas adjacent to tribal lands.

Goal 10: Maximize the efficient use of existing community infrastructure and develop vacant or under-utilized land within community areas

- A. Develop policies and regulations that encourage use of vacant and under-utilized land within streets, roads, water, and sewer services including modification of set back requirements to allow use of under-sized and unusually shaped lots while maintaining safety requirements.
- B. Adopt and implement standards for location of manufactured housing in residential zones that supports quality of residential neighborhoods including a requirement that the homes be placed on permanent foundations, requirements for a variance to locate older homes in residential zones, and a size limit to restrict placement of travel trailers to be used as dwellings on lots in residential zones.
- C. Encourage rehabilitation of substandard housing units and removal of uninhabitable housing units in residential zones.
- D. Prohibit location of mobile and manufactured residential housing units for purposes other than dwellings.
- E. Access all possible resources for infrastructure development.

Goal 11: Encourage expansion of the mining sector compatible with environmental quality within the County

- A. Define Open Range uses to include mineral exploration, extraction, and environmentally sound processing activity.
- B. Encourage development and expansion of mining activities, which minimizes visual impacts to adjacent communities and scenic corridors.
- C. Encourage reclamation and reuse of mine sites for mining or other industrial purposes.
- D. Encourage development and expansion of mining activities, which minimize irreversible damage to key environmental resources including

municipal watersheds, unique wildlife habitat, historic sites, and outdoor recreation areas.

Goal 12: Retain and expand irrigated agriculture and livestock enterprises

- A. Identify areas where soil, climate, and water availability render irrigated agriculture possible.
- B. Identify mechanisms for reducing costs of irrigated agriculture within the County.
- C. Identify new markets for irrigated crops produced within the County.
- D. Encourage “working ranch” commercial and tourist activities, which are incidental to farm and ranch enterprises.
- E. Encourage application of Best Management Practices.
- F. Adopt policies and regulations that support development of alternative agricultural and agri-business enterprises.

Goal 13: Encourage recreational development to meet the needs of residents and visitors

- A. Modify or rescind the existing Recreational Development zoning designation.
- B. Include development of recreational facilities compatible with scenic values and open space, and outdoor recreation in Open Range districts.

Goal 14: Encourage alternative land use categories to address the balance of needs for residential development, commercial development, and environmental quality

- A. Provide zoning regulations and policies that accommodate cluster development to avoid areas of significant natural resources including wildlife habitat, migration corridors, visual resources, and open space.
- B. Encourage a variety of residential densities and housing types.
- C. Encourage development of affordable housing through the resources and techniques available to federal, state, and local government entities.
- D. Develop and adopt policies to allow residential/commercial zone overlays to encourage better utilization of main street residences and expansion potential of home based businesses.

Goal 15: Coordinate land development with provision of services and infrastructure

- A. Consider comments from the County Public Works Department and State Department of Transportation in consideration of proposal for development and parceling.
- B. Consider comments from the utility providers on capacity and ability to serve areas proposed for development.

- C. Consider comments from the County Fire District, Emergency Medical Services, and Law Enforcement on the ability to provide emergency services for areas proposed for development.
- D. Consider comments from the White Pine County School District on the cost and ability to serve proposed developments.

Goal 16: Enhance quality of communities and residential neighborhoods by encouraging development of pedestrian and bicycle pathways

- A. Include provisions for development of pedestrian and bicycle trails within existing communities.
- B. Include provisions for development of pedestrian and bicycle trails and pathways to link existing communities to each other and to adjacent areas of public land for outdoor recreation.

Goal 17: Encourage development of Off Highway Vehicle use areas and access routes to minimize impacts of OHV use on residential areas and take an active role in working with federal land management agencies in the development of travel management plans that provide guidelines for OHV use which protect environmental and residential quality in the County

- A. Work with the BLM to identify appropriate areas and develop OHV use areas. Work with the City and County to develop appropriate ordinances to allow OHV access routes to the use areas.
- B. Work with the BLM and Forest Service on the development of travel management plans and potential trail systems for OHV use that preserve the environmental, scenic, and residential quality of the County.

Goal 18: Encourage community design standards and preserve and manage significant cultural resources for maximum benefit of the County

- A. Identify areas within communities with structures and sites of historic significance and develop historic preservation districts to benefit community design and encourage recreation and tourism.
- B. Develop and adopt community design guidelines (signage, underground utilities, density bonuses for better quality designs, parking).

Goal 19: Implement the Land Use Plan through adoption of ordinances and annual review of progress in meeting the Land Use Goals

- A. Adopt and Implement ordinances including:
 1. Establish a Master Plan amendment process.
 2. Establish Requirements for Finding of Consistency with the Master Plan.
 3. Create a Recreational Residential Overlay zoning District

4. Rescind the MH-3 zoning and replace it with R-2-50 zoning, and develop regulations on manufactured homes placed in residential zones to maximize public health and safety and preserve neighborhood qualities.
 5. Modify or rescind the RD 1 and RD 2 (recreational development) land classifications.
 6. Amend the Zoning Ordinance to revise Open Range (O-5), Ranch Agricultural (RA), and Ranch Estates (RE), zoning definitions and requirements to provide enforceable animal husbandry and nuisance abatement provisions, incorporate provisions for agricultural and agri-business activity compatible with low density residential neighborhoods in RA and RE zones, and allowance of certain types of industrial activity including energy production, processing of mineral resources, and agricultural processing, and recreational development in Open Range districts.
 7. Adopt ordinances providing for cluster development and a residential commercial zone overlay.
 8. Adopt a Wildland Urban Interface Fire Code ordinance.
 9. Adopt an ordinance to allow the Regional Planning Commission and County Commission to require conditions for development on parcel maps approved under the subsequent parceling ordinance.
- B. Provide copies of the Land Use Plan and maps for reference in Regional Planning Commission, County Commission, and town advisory board/town council meeting rooms.
- C. Provide an annual report of progress in meeting Land Use Plan goals to the County Commission

Baker:

1. Extend commercial zoning along State Route 487.
2. Zone 4,600 acres of BLM land for disposal adjacent to Baker as a mix of residential and commercial land.
3. Retain sufficient water resources for development potential in Baker and Snake Valley.
4. Establish designated energy development corridors in Spring and Snake Valleys.
5. Retain viewshed from Baker to Great Basin National Park.
6. Rescind M-H-3 zoning and replace it with R-2-50 zoning.

Cherry Creek:

1. Survey the community.
2. Zone the community appropriately for existing and potential land use.
3. Monitor progress on power project and other development and consider need for a development plan for the community.

Lund:

1. Explore potential of expanding boundaries.
2. Identify an area on the west side of the community for industrial development .
3. Review and revise RE-43 zoning to meet the needs of residents.
4. Consider extending the commercial district along the highway north of Lund to Preston.
5. Work with Nevada Department of Transportation to explore the potential of signal lights or a highway bypass.
6. Consider conducting an aerial survey of Lund to determine property lines.
7. Work with the County Commission and BLM on disposal of land adjacent to Lund.
8. Explore the potential of an OHV use area near the community.
9. Ensure appropriate zoning for a potential multi-purpose outdoor recreation center.

McGill

1. Use the modified annexation map and zone land to be added to the community of McGill as low density residential, RE 43.
2. Extend the commercial district the full length of the community along 4th Street (US 93).
3. Extend parks and facilities land classification the full length of the community, east of the existing town boundary to accommodate an OHV use area.
4. Change zoning designation of the land east of the "Circle" to commercial/industrial.
5. Rescind the M-H-3 zoning designation and replace it with R-2-50 zoning.

Preston

1. Consider expanding the town boundaries.
2. Consider establishing Preston as a township.
3. Review and revise RE-43 zoning to meet the needs of residents.

Ruth

1. Consider expanding Ruth along Keystone, Chance, and Sunshine Streets for residential and commercial activity.
2. Encourage transfer of BLM land to even out the boundaries of the Robinson Copper Mine.
3. Add mining as a preferred use for BLM land disposals.
4. Add mineral processing activities as permitted uses in Open Range.
5. Encourage recycling to reduce the burden on landfill facilities.

McGill Highway Area/Urban Interface

1. Retain division of residential and commercial zoning from the McGill Highway Area Master Plan.
2. Ensure an adequate clear zone for airport expansion.
3. Address issues related to O-5, RA-5, R-A 2.5, and RE zoning.
4. Coordinate with the City of Ely on annexation in the areas surrounding the City limits.
5. Coordinate with the City of Ely on potential development of the Georgetown Ranch property.

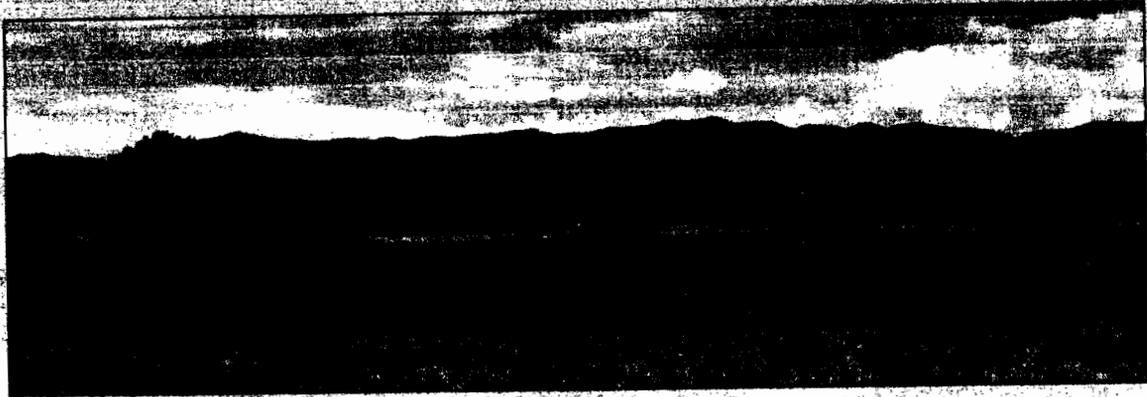
***WHITE PINE COUNTY
LAND USE PLAN***

ATTACHMENTS

***WHITE PINE COUNTY
LAND USE PLAN***

***ATTACHMENT 1
2000 White Pine County Open Space Plan***

White Pine County Open Space Plan



**White Pine County Open
Space Advisory Committee**

**Kalem Lenard and Associates
Ely, Nevada**



September 2005

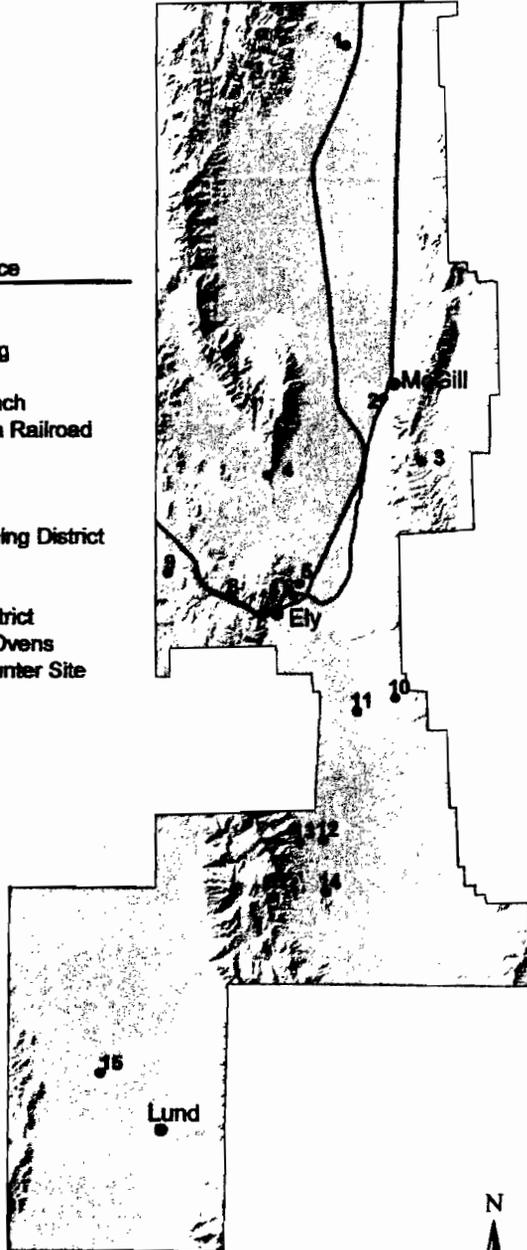
Cultural Resources Map

-  Planning Area
-  Cultural Resources
-  Cultural Resources

0 5 10 15 Miles

Important Cultural Resources

ID #	Type of Resource	Name of Resource
1	Historic Ranch	Monte Neva
2	Historic Town	McGill
3	Rock Art	Axehandle Spring
4	Rock Art	Hercules Gap
5	Historic Ranch	Georgetown Ranch
6	Historic Railroad	Northern Nevada Railroad
7	Historic Photo Point	WP Hill
8	Historic Town	Lane City
9	Historic Town	Ruth
10	Historic Mining District	Tambertaine Mining District
11	Historic Ranch	CCC Ranch
12	Historic Cemetery	Ward Cemetery
13	Historic Mining District	Ward Mining District
14	Historic Mining District	Ward Charcoal Ovens
15	Prehistoric Campsite	Preston Dove Hunter Site
16	Historic Railway	NNRR Track
17	Historic Road	Lincoln Highway



Important cultural resources were identified in coordination with Bureau of Land Management Archaeology Specialists.



Appendix 1: Summary of Public Meeting

April 19, 2005

Summary: A notice of a public meeting to discuss a county wide open space plan was released in the Ely Times on the 15th of April and was also released via the local radio stations. The meeting was held on April 19th, 6:30 p.m. at the White Pine County Library. 9 people were in attendance. After brief introductions regarding what a plan of this nature is intended to address, a list of issues were presented. These issues were developed through earlier meetings with stakeholders, local input, along with case studies from other areas. The group then went through this list of issues and identified whether or not each issue should be addressed in this plan and if so, what the best approach would be. These issues and the discussion that surrounded them are outlined below. An issue highlighted in yellow was important to the group and should be addressed by this plan. An issue with a red strikethrough, although important, should not be addressed by this plan.

Issues:

Issue 1: Preservation of Access – Want to maintain access to dispersed recreation close to town and within surrounding mountains, “We don’t want the same situation as the Ruby’s (Mountains)”.

- Important access points should be identified by local users, sportsmen, and BLM staff especially in areas prone to land disposal.
- A reservation could then be placed upon these access points that would reserve a right-of-way for public access after the land is disposed.

Issue 2: Off-Highway Vehicles – Want to address the problem of OHV use on city and county streets by identifying “OHV emphasis areas”.

- It was felt that OHV emphasis areas could address the issue of dispersed use and conflicts within the urban interface area by providing a designated riding area but would not address the problem of OHV use on city and county streets.
- This should be included in the plan but use wording that identifies a need for this type of an area but does not go as far as identifying actual areas. It is understood that an area of this nature would need to be close to communities to provide easy access to the area but be designed in a manner that will reduce conflicts.

Issue 3: Bassett Lake – Opportunity exists to acquire this important wildlife and recreation area from Kennecott, along with water rights.

- This is a very important component of this plan but should be put into an acquisitions category since two other potential acquisition projects have been targeted by citizens of the area.

Issue 4: Georgetown Ranch – Wish to preserve the “open feel” and “rural lifestyle” of the area.

- It was felt that this property is important to the area and a balanced approach to development should be implemented in this area. Many areas associated with this land have qualities that are desirable to maintain as open space, while some areas may be suitable for development.

~~Issue 5: Training for Commissioners and RPC – Important for the implementation of ideas, suggestions, and tools identified in this plan.~~

~~Issue 7: Subdivision Requirements – Concern regarding the current trend of subsequent parceling without meeting subdivision requirements.~~

~~Issue 10: County Code – This has not been updated since the 1970s and should be updated in order to implement suggestions and ideas within this plan.~~

~~Issue 18: Zoning – Recommendations for zoning were made in county and city planning documents. Zoning should be updated following the adopted recommendations.~~

- Although deemed important to the success of an open space program it was felt that these issues have already been addressed through the recommendations of the Land Division Ordinance Review Committee.³³

~~Issue 6: County Tax Base – Worry about losing tax dollars by taking county land out of development potential.~~

- Since this plan would not specifically be designating county lands for open space preservation or change current zoning this issue would not play a role in this plan.

~~Issue 8: Rural Lifestyle Preservation – Wish to preserve the “open feel” and “rural lifestyle” of the area.~~

~~Issue 9: Agricultural lifestyle – Felt that agricultural way of life is important to the communities of the county.~~

~~Issue 13: Compatible Uses – Concern regarding current uses, such as duck hunting and OHVs, with future development.~~

~~Issue 19: Sprawl – Sprawl is a concern and there should be a balance between growth and maintaining the rural feel and open space characteristics of the area.~~

- It was felt that all of these issues fall under Issue 8, “Rural Lifestyle Preservation” and should be considered one issue. Many of the other issues identified through this process also fall under this general theme of preserving the rural character of the area.
- Potential methods identified for preserving this resource include implementing open space preservation tools and identifying important resource areas such as prime farmland and agricultural areas.

~~Issue 11: Availability of Preservation Tools – Some of the “preservation tools” may not be available in the state or the county.~~

³³ These recommendations can be found in Appendix 2.

- **The Transfer of Development Rights and Purchase of Development rights programs are currently not available through the county code. A cluster development zoning is currently not available within the zoning ordinance. All of the other preservation tools identified thus far are available for use within the county.**
- **It was felt that this plan should describe these tools and call for making all of the tools available for use within the county.**

Issue 12: ~~Sportsmens Access~~ – Need to identify sportmans access along with recreation access, may have different access needs.

- **It was felt that this type of access has been addressed through issue 1 where general access areas were identified.**

Issue 14: Wellhead Protection – Need to preserve Ely's municipal watershed.

- **This is viewed as very important and should be identified within this plan regarding the open space qualities of this area. Protecting this area has been identified in several existing planning documents.**

Issue 15: Viewsheds – Mountain ranges provide the backdrop for the communities of the area, this viewshed should be preserved for all citizens.

- **It was felt that viewsheds are important for the area but defining what this would entail is still required. Methods other areas have used to protect this resource include hillside zones that have building requirements or special permits and height restrictions for buildings in certain areas.**
- **A hillside zone would be most effective within and near communities.**
- **A hillside zone would not protect viewsheds from commercial developments on public lands such as wind farms, air pollution, or power plants.**
- **Federal agencies already have visual management protocol in place that would address these commercial developments.**
- **It was felt that there needs to be a balanced approach with new development and protecting this resource.**

Issue 16: Wildlife Habitat – Important to identify crucial wildlife habitat areas prior to development and land disposal.

- **This is an important resource to the citizens of the county and should be addressed within this plan.**
- **Important wildlife habitat areas could be identified and included within this plan along with a description of the resource and its importance.**

Issue 17: Cultural Areas – Felt preserving the history of the area was important.

- **This should be included in an open space plan due to the importance of these areas to the counties history and its citizens.**
- **Important cultural areas should be identified through local organizations and the BLM archaeologist and future planning efforts should coordinate**

with the BLM Resource Management Plan, which prioritizes and offers solutions to protecting this resource.

Issue 20: Airport Buffer – In order to prevent development within close proximity to the airport a development buffer could be considered.

- **Something like this should be considered but more research still needs to be done regarding current protections and plans in place.**

~~Issue 21: Magdalena Ranch - This is a piece of property located near Cherry Creek, just north of the planning area, that is important to citizens of this community for the role that it plays in providing rural characteristics and resource values. This ranch is located near Cherry Creek, Nevada and is 120 acres in size, 40 of which has already been approved for division into 2 ½ acre parcels.~~

- **This project is still in the early stages of negotiations and also falls outside of the planning area.**
- **Although deemed important for its conservation values and development pressure it will not be addressed in the open space plan at this time for these reasons.**

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Introduction

White Pine County is synonymous with open spaces due to the large tracts of undeveloped federally managed land that includes expansive valleys, rugged mountain ranges, and scenic vistas, all of which play an important role in the quality of life for the citizens of the area. These open spaces provide for exceptional recreation opportunities, abundant wildlife habitat, aesthetics, and also provide other benefits to public safety such as municipal water sources and floodplains.

Purpose of Plan

This plan is intended to provide direction for the conservation of open space over the next twenty years and is meant to provide a balanced approach between much needed and desired economic growth and the retention of the open space qualities that make White Pine County a desirable place to live and visit. This is best accomplished through a pro-active approach and realizing that now is the time to plan for open space resources, not after they are gone.

It is the intention of this plan to establish a framework for open space planning for White Pine County, making the immediate need for this type of planning apparent based upon current open space resources, trends affecting the area, and planning policies currently in place. The initial plan focuses on the urban interface planning area which has been identified as the area of the greatest immediate need, but the concepts outlined in the plan should be applied to the entire county. Revisions of the plan in the future should reflect and consider changes in trends, developments, and outside forces and eventually incorporate the entire county not just the planning area.

Need for Plan

Because White Pine County is largely comprised of public land (owned by federal and state agencies) and other privately undeveloped land, many residents take these open space resources for granted, assuming that much of the existing open land is protected. Yet, when you look at current growth trends, ownership patterns, and public land policy you will see that this is not the case. Second home ownership is on the rise, there is a high demand for new housing, tourism is increasing, and public land is subject to disposal and other types of development, all of which affect open space resources. If an active program for preserving the resources treasured by the citizens of the county is in place now, it will help assure that these same resources will be available for future generations.

Planning Area

Although the plan is county wide, an urban-interface focus area was pre-determined by county officials due to levels of growth and related concerns in certain areas. This region encompasses the majority of Steptoe Valley with the

Northern border being just South of Cherry Creek and the Southern border at Conners Pass and includes the communities of Ely and McGill along with other housing development areas such as Cross Timbers and Blue Diamond. The region also includes White River Valley around the communities of Lund and Preston and DuckCreek Basin, just on the other side of the DuckCreek Mountain Range from Ely and McGill.

Land managed by the US Forest Service was not included within the planning area because this government agency generally does not dispose of land and if so, only under very special circumstances.

Since this plan is to direct open space over the next twenty years it should be an evolving document that is revisited often in order for it to reflect changes and developments within the planning area. This should be done at least bi-annually. As new developments occur, the planning area should also be revisited and revised to include other portions of the county as needed.

Open Space Conservation Strategy

Rural counties such as White Pine rarely have surplus funds available for open space acquisitions or the management of an extensive open space program. This suggests that the County must exercise a high degree of creativity and work with as many partners as possible to leverage all available resources. As it currently stands, open space and the resources that they provide are exceptional within the county and the best time to start planning for and conserving this resource is now. This plan should be revisited one year following approval and after that bi-annually in order to take into account new situations, trends, and issues that would affect open space and conservation strategies.

1) Plan for conservation and open space.

Many of the resources identified within this plan are still abundant and exceptional in quality. These resources should direct future planning and decision making so that a balance between growth and open space conservation can be achieved. Coordination should occur with federal and state agencies to help identify and protect important open space resources. Through planning for open space resources, the rural lifestyle and quality of life will be maintained making White Pine County a highly desirable place to live and work in the future while still meeting the demands of growth and development. This will also reduce the amount of funding that is needed to implement an open space strategy in the future.

2) Incorporate and update recommendations, including zoning and overlay zones, made in the White Pine County Land Use Plan and the White Pine County Open Space Plan during the next plan revision.

This land use plan provides a framework for achieving a vision for the future of the area and offers several suggestions and recommendations that would address many of the local growth concerns. Many of the ideas and methods identified in the Open Space Plan were taken from the county land use plan including a Recreation Residential Overlay Zone, cluster zoning, and resource based planning maps. The Land Use Plan should be updated and incorporated into the planning and decision process in order to meet this collective vision and should be done during the next plan revision. The Open Space Plan as incorporated into the Land Use Plan will provide further direction regarding open space conservation and resources and is meant to be a supplemental addition to the land use plan.

3) Purchase land only when necessary

Due to the high cost associated with purchasing and most importantly long-term maintenance of land, acquisition and retention by the county should only be implemented after all other methods and resources are exhausted or when the county is more financially prepared and means are

available for this cost. Acquisitions may also affect the county tax base, another reason this option should be carefully considered. Other agencies and organizations are often times more prepared and setup for the management of properties of this nature. If purchase is the only option available, initial and long-term funding should be addressed during the planning and negotiations process.

4) Continue with conservation projects identified within the plan and identify other important areas.

Areas identified as important for open space conservation within this plan include Bassett Lake and Kennecott Ranch. Both of these properties contain many of the open space resources identified in this plan. Bassett Lake should have higher priority since negotiations are further along and is closer to completion. Funding for these projects, including long-term needs, should be identified prior to acquisition. Other key parcels and important conservation areas should also be identified protection measures should be initiated.

5) Develop and implement a Recreation Residential Overlay District Zone.

An overlay-zoning district should be developed and implemented to allow for the protection of open space resources where present or deemed necessary in order to contribute to open space conservation. This district would encourage development of low-density homes in appropriate or suitable areas with nearby access to open space, solitude, or outdoor recreation opportunities. This would still allow for growth and development while taking open space resources into consideration, providing a balanced approach. As directed by the White Pine County Land Use Plan, a Recreational Residential Overlay District should provide development guidelines that are designed to protect scenic amenities, watersheds, riparian areas and access. This should also include hillside development guidelines, aesthetic qualities, and cluster development options as well.

6) Develop and Implement a Hillside Zone for the communities of the County.

A hillside zone does not necessarily impede development but places guidelines for developments in areas where steep hillsides occur. This will allow the public entity to have more of a say in how these developments occur including more stringent design guidelines, making sure higher costs associated with these types of developments are accounted for, and reducing the overall impact that these type of developments may have on visual resources and community infrastructure. Many communities have these types of guidelines already in place and can provide a basic framework for the development of hillside zones for the communities within White Pine County.

7) Develop Water Quality Protection Plans for all of the communities within White Pine County.

All of the communities should develop and implement a plan that addresses the protection of water quality including wellheads, watersheds, and groundwater. Existing plans should be considered and followed.

8) Implement zoning that would encourage the protection and conservation of agricultural land.

In order to help preserve the county values and the rural characteristic of the area along with maintaining the availability of agricultural lifestyles, non-agricultural development should primarily be directed away from current agricultural areas and areas containing soil types that are indicative of prime farmland. This could be encouraged through agricultural zoning.

9) Seek protections for access.

Important access on land managed by the Bureau of Land Management for recreation and sportsmen are identified in this plan and steps should be taken to protect these access areas. Reservations should be placed on the identified areas, which would reserve the option for a right-of-way in the future, if desired. The access points were identified as important due to the potential for land disposal by the Bureau of Land Management in these areas over the next twenty years. Tools should also be made available to the county and its municipalities that would allow for the requirement of access during the approval process for developments. Guidelines for a Recreational Residential Overlay Zoning District could address this need.

10) Make all conservation tools available to the county.

During the planning process it was determined that a Transfer of Development Rights Program or a Purchase of Development Rights programs are currently not available due to lack of language in the County Code. This code should be updated so that these tools can be available for open space planning in the future.

11) Create a development checklist, based upon existing planning documents and resource maps.

A checklist should be made available to decision makers that could be used when approving and directing new developments. This could include a list of items relating to open space that should be considered for new developments such as floodplains, proximity to existing water and sewer infrastructure, location of biological and cultural resources, access, etc...

12) Plan for Open Space throughout the entire county

This plan specifically focuses on the urban interface area where it was felt an immediate need for an Open Space Plan existed. This does not necessarily mean that issues and needs do not exist in other areas of the county. During plan revision other areas of the county should be considered for inclusion into the Open Space Plan based on need.

13) Funding options for Open Space Conservation.

- a. A variety of grants are available that specifically fund open space related projects including acquisitions, conservations agreements, and trails. These should be actively researched and pursued.
- b. The county should maintain an open space program in order to be eligible for imposing an open space tax pursuant to NRS 376A.040 when this would be feasible. This allows for a tax based on retail sales to go towards an Open Space program. This tax cannot exceed one-quarter of one percent and must be approved by the majority of the registered voters of the county. Currently the county is at its tax cap and a tax of this nature cannot be imposed but should be considered in the future.

Background Information

Natural Environment

✦ **Geology**

White Pine County is made up of the elongate north-trending mountain ranges and generally flat-bottomed valleys that typify the Basin and Range physiographic province. The dominant rock types found within the County include quartzite, limestone, dolomite, sandstone, siltstone, and shale.

The area was affected by two major tectonic events; the younger of the two produced the elongate fault-block mountain ranges and flat-bottomed valleys that characterize the region today. The older event produced a variety of structural features including high-angle faults and low-angle faults, and large amplitude folds (Hose, Richard K. and Blake M.C. Junior).

The geologic units of White Pine County may be grouped into seven categories: 1) the valley-fill deposits, comprising mixtures of gravel, sand, silt and clay that include the alluvial and playa deposits; 2) younger volcanic rocks, comprising ash-flow tuff and basalt; 3) older volcanic rocks, comprising dacite, latite, andesite, and tuffs; 4) Triassic sediments, comprising freshwater limestone, conglomerate, sandstone, siltstone, and tuff; 5) intrusive rocks, comprising granitic plutons; 6) upper Paleozoic carbonate rocks, comprising predominantly limestone and dolomite, but with inter-bedded shale and siltstone aquitards; and 7) lower Paleozoic and older rocks, comprising predominately clastic rocks including shale and quartzite, but with some

interbedded carbonate units (Intertech Services Corporation and Buqo, Thomas S.).¹

◆ **Climate**

White Pine County has a semi-arid climate and the Basin and Range topography results in a cold desert climate with seasonal shifting of the sub-tropical highs influential less than six months of the year. Interior locations are dry because of their distance from moisture sources or their locations in rain shadow areas on the lee side of mountain ranges. This combination of interior location and rain shadow positioning produces the cold desert. The dryness, generally clear skies, and sparse vegetation lead to high heat loss and cool evenings (Intertech Services Corporation and Buqo, Thomas S.).

White Pine County's average annual precipitation is 9 inches, the average for the state of Nevada (which is the driest in the nation). The average annual precipitation increases with altitude: between 5,000 and 6,000 feet, it is less than 8 inches per year, between 6,000 and 7,000 feet it is 8 to 12 inches, between 7,000 and 8,000 feet, 12 to 15 inches, between 8,000 and 9,000 feet, 15 to 20 inches, and above 9,000 feet, more than 20 inches (Hose, Richard K. and Blake M.C. Junior). At higher elevations snow accumulates to considerable depths. Much of the snowmelt irrigates nearby valleys. Drought is common and expected. Historically, critical water sources in the County respond to drought conditions and climate changes with approximately four years lag time (Intertech Services Corporation and Buqo, Thomas S.).

In White Pine County's mid-latitude climate the average potential evaporation rate exceeds the average annual precipitation, with actual average evaporation ranging from 45 to 51 inches. On an annual basis, as much as 90 to 95 percent of the total annual precipitation is lost through evaporation and transpiration; only an estimated 5 to 10 percent recharges the ground water regime (Intertech Services Corporation and Buqo, Thomas S.).

In western White Pine County, summers are hot, especially at the lower elevations and winters are cold. The length of the growing season ranges from about 100 to 120 days with the shorter season in the western part of the County. The mean annual temperate in Ely is 44 degrees. The lowest temperature on record for Ely is -30 on February 6th, 1989, and the highest recorded temperature was recorded in Ely on July 5th, 1988 at 100 degrees (Intertech Services Corporation and Buqo, Thomas S.).

◆ **Hydrology**

The majority of White Pine County is located within the Great Basin, meaning that the water within this physiographic region does not flow to the ocean;

¹ For a more detailed description of the geologic units present refer to Nevada Bureau of Mines and Geology, Bulletin 85, Geology and Mineral Resources of White Pine County, Nevada Part 1 Geology, 1976, by Richard Hose and M.C. Blake.

instead it is deposited entirely in underground aquifers. Hydrology of the area can be described in the surface water resources and the ground water resources, the latter of which less information is known.

- **Surface Water Resources**

Although White Pine County has no major lakes, reservoirs, or rivers, there are important surface water resources in many locations. Surface water flows are important sources of irrigation water in the agricultural areas in the major valleys of the county. Groundwater that discharges to the surface at springs is also an important surface water resource. Many springs in White Pine County have been developed for irrigation, livestock watering, municipal and domestic water supplies, and the mining industry. The surface water resources of White Pine County are also extensively used for recreational purposes including, fishing, hunting, boating and skiing, swimming, camping, picnicking, and relaxation. Wildlife cannot thrive without a dependable source of water and the many springs, streams, and lakes in White Pine County support the habitat for many desirable species (Intertech Services Corporation and Buqo, Thomas S.).

- **Ground Water Resources**

In addition to their surface water resources, White Pine County has considerable groundwater resources. Groundwater occurs at various depths under the entire county and has been developed for municipal, agricultural, and mining supplies as well as for other purposes. In recent years, the demand on the groundwater resources has grown significantly, in part reflecting the growth of the various economic sectors of the County, and in part reflecting the interest in exporting water from White Pine County through large-scale interbasin transfers of water. Because most of the surface water resources of White Pine County have already been appropriated, the groundwater resources represent the only remaining source of water that is available to support the future water supply of the County, through diversification and expansion of the economy making the county highly dependent upon this water source (Intertech Services Corporation and Buqo, Thomas S.).²

- ◆ **Vegetation**

The type of vegetation varies widely with amount of rainfall and temperature and hence with altitude. Shrubs and grasses dominate the valley floors while in the foothills and on slopes at intermediate altitudes, there are many juniper and pinon trees. Between 8,500 feet and timberline, the most abundant tree species are limber pine, bristlecone pine, and white fir (Hose, Richard K. and Blake M.C. Junior).

² For more information regarding the water resources of White Pine County refer to the White Pine County Nevada, Water Resources Plan, July 1999.

✦ **Wildlife**

The expansive amount of public land in White Pine County provides vast amounts of habitat for a variety of wildlife including big game species such as elk, mule deer, bighorn sheep and antelope, a variety of bird species, both migratory and resident, including sage grouse, as well as a variety of reptile, small mammal, and fish species.

It was estimated by Nevada Department of Wildlife that as of spring 2005 there are 3,300 elk, 14,000 mule deer, and 3,000 antelope that populate White Pine County. These numbers reflect some of the largest big game herds in the State of Nevada making White Pine County one of Nevada's premier hunting and wildlife viewing destinations. These animals require large amounts of contiguous unfragmented land, which includes the seasonal habitats required for their survival.

In addition to impressive big game resources White Pine County is also known for being one of the key fishing areas of the state. The lakes and streams of the county provide habitat for four species of trout (rainbow, brook, brown, and cutthroat) and largemouth bass that are highly sought after by recreational anglers. The counties streams and lakes also provide habitat for a number of native fish species as well, such as the Relict Dace, White River Mountain sucker, the White River Speckled Dace, the White River Springfish, Bonneville cutthroat trout, Newark Valley tui chub, and the Duckwater Creek Tui Chub (Intertech Services Corporation and Buqo, Thomas S.).

The counties lakes, streams, and wetland areas also provide nesting habitat for a variety of shorebird, wading bird, and waterfowl species including the Black Tern, American avocet, eared grebe, common loon, and Long-billed Curlew and a number of important raptors including the Bald Eagle, Peregrine Falcon, Northern Goshawk, Golden Eagle, Prairie Falcon, American Kestrel, and several species of owls. The water sources of the county are also important stopping off points for a variety of migratory bird species that travel through the area (Intertech Services Corporation and Buqo, Thomas S.).

Sage grouse are also an important bird species that inhabit White Pine County. This chicken size grouse is a barometer of the health of sage brush plant communities and was nearly federally listed as threatened or endangered, which would have added special protections on the extensive seasonal habitats required by this bird.

✦ **Culture and History**

White Pine County and the surrounding areas have at least 10,000 years of continuous human occupation and can be seen through thousands of recorded cultural resource sites. Some of the earliest cultural sites include several substantial finds of the Paleo-Indian tradition, the earliest prehistoric peoples known in North America. More abundant pre-historic sites are

related to the hunter-gatherers of the Desert Archaic tradition and the more recent Shoshone and Southern Paiute groups. Sites from the Fremont culture, a horticulturally based group, can be found in the eastern part of White Pine County. The various remains of these pre-historic cultures are found in a variety of site types including campsites, rock art, artifact scatters, rockshelters, isolated finds, and structural sites (Bureau of Land Management, *Proposed Egan Resource Management Plan*).

Historic use of the area began with early exploration efforts during the first half of the nineteenth century by the likes of Jedediah Smith, John C. Fremont, and Kit Carson. These early explorations led to the establishment of the Pony Express route traveling through this area in 1860-1861 and later to the discovery of silver and subsequently expansive mining efforts comprised of boom towns and mining camps (Bureau of Land Management, *Archeology in the Ely BLM District*). All of this mining effort led White Pine County, throughout its history, to produce more mineral wealth than any other county in Nevada through the mid twentieth century (Hose, Richard K. and Blake M.C. Junior). In the early 1900's copper mining and the establishment of the Nevada Northern Railroad also came to the area along with agriculture and livestock grazing. The evidence of this development and history can be found in historic trails, mining buildings and structures (there are 37 mining districts in White Pine County), homesteads, and cemeteries (Bureau of Land Management, *Proposed Egan Resource Management Plan*).

◆ **Recreation**

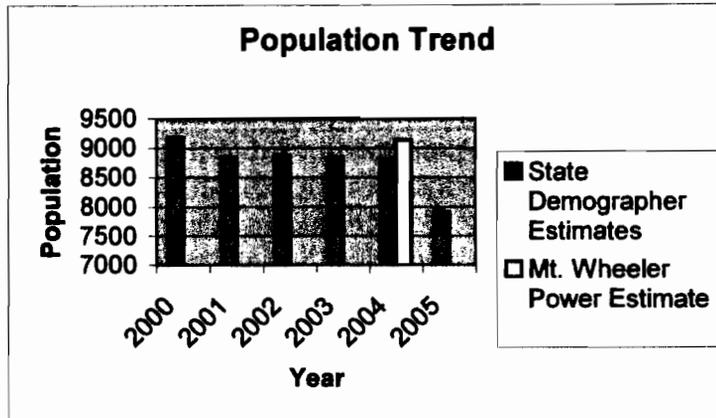
The majority of the recreation in the area is based upon Public Lands and the resources that they offer. The major recreational pursuits include hunting, fishing, camping, hiking, horseback riding, along with off highway vehicles and motorcycles. As recreation interest in the region grows other forms of recreation in the area are seeing a slight increase as well such as mountain biking, rock climbing, skiing, and snowmobiling.

Economic, Housing, and Population Trends

◆ **Population**

According to the Nevada State Demographer's Office, the County experienced a slight decrease in population from 2003 (8,842) to 8,804 in 2004. However, based on utility billing for residential electrical service connections, the population in the County is as high as 9,131. This indicates the number of newcomers from other urban areas moving to the community for retirement and second homes. The 2000 census data shows that the County's senior population accounts for 13.5 percent compared to 11 percent for Nevada and 9.5 percent for the national average. At the same time School enrollments dropped significantly from 1,446 in 2003 to 1,380 in 2004. With a possibly increasing population and an above average senior population combined with a dropping in school enrollment it is reasonable to assume that there is a shift to a senior and retirement population while young

families move from the area to find better job opportunities (White Pine County, *2004 Comprehensive Economic Development Strategy*). This shift could also indicate an increase in the number of second home purchases and retirees moving into the area. The demographics of this type of population increase would be an older generation that would not have children attending local schools.³



◆ **Economics**

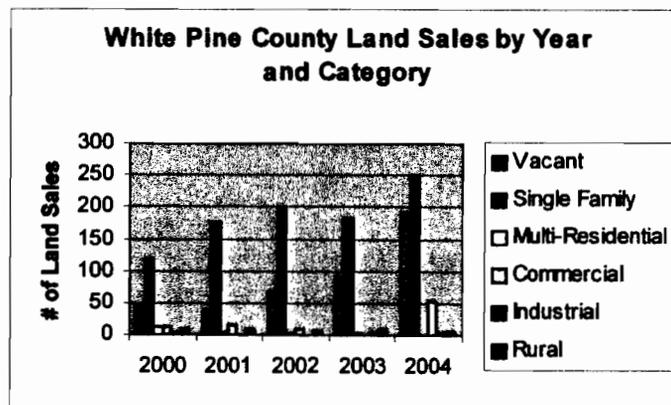
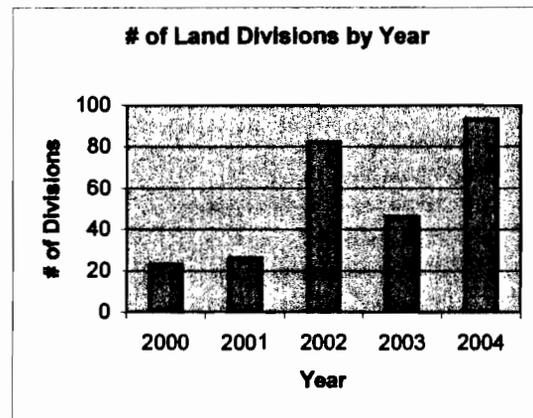
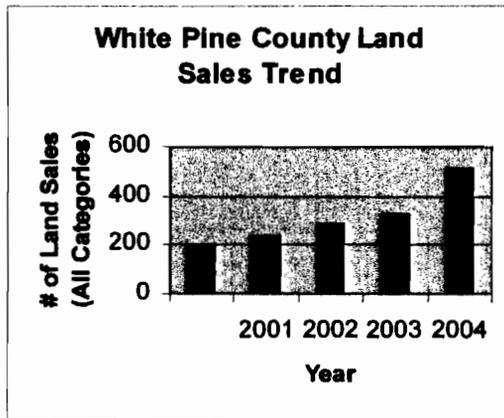
The total number of firms doing business increased from 216 firms in 2003 to 241 in 2004 representing a 13 percent increase. The majority of the firms doing business in the County are small, owner operated firms with 78 percent of the companies reporting less than 20 employees. Taxable sales appear to be increasing slightly with an increase from \$68.4 million in 2003 to \$77 million in 2004. Room tax revenues experienced an increase from 2003 to 2004 which is a good indicator for an increase in tourism activity (White Pine County, *2004 Comprehensive Economic Development Strategy*).

◆ **Housing**

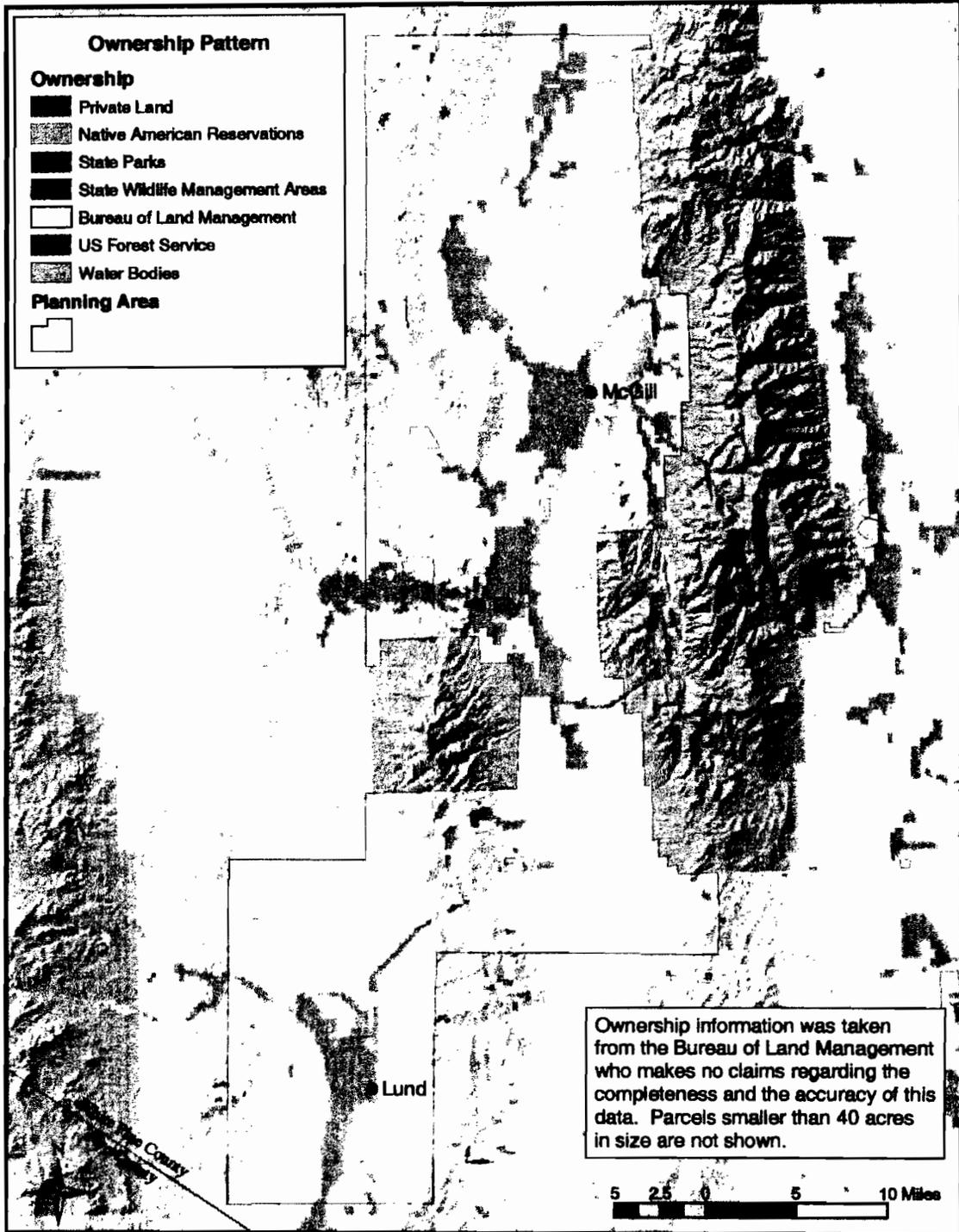
Any increase in housing construction or development is a common indicator of growth for an area. In Ely, analysis of new construction you would show little signs of growth in the area, since there are so few new home construction projects. Instead, looking at the trend in the number of home sales in the area and looking at the number of land divisions one can start to see a pattern for growth, especially in 2004. When compared to declining population estimates for the area, this increase in sales and land divisions could indicate an increase in the purchase of homes and lots by people living outside of the area as indicated in the population section. This data also indicates that there is an increase in the dividing of large parcels into smaller 2.5 and 5 acre parcels for single family homes, having a significant impact on existing open space.⁴

³ Population data and figures were taken from the 2004 Community Economic Development Strategy.

⁴ Data used to analyze land sales and subdivision trends was taken from the county assessors office.



Land Sales and Subdivision Data based on County Assessor data.



Issues Identified

"Life is going to change" for the citizens of White Pine County regarding the impacts of growth and development on the area. This quote was a common sentiment amongst the stakeholders and the public and is the thought that will drive the preservation of open space in the area and in turn the White Pine County Open Space Plan. Throughout the planning process through discussions with the stakeholders and the public, several issues regarding the preservation of open space were identified.

- Issue 1: Preservation of Access** – Want to maintain access to dispersed recreation close to communities as well as access to the surrounding mountains, "We don't want the same situation as the Ruby's (Mountains)".
- Issue 2: Off-Highway Vehicles** – Want to address the problem of OHV use around the communities.
- Issue 3: Key Conservation Properties** – Opportunities for conserving key parcels of land for the benefit of open space, wildlife habitat, and recreation have already been identified. These include Bassett Lake and Kennecott Ranch.
- Issue 4: Rural Lifestyle Preservation** – Wish to preserve the "open feel" and "rural lifestyle" of the area by conserving key areas that contribute to this including maintaining the availability of agriculture and farming lifestyles.
- Issue 5: Availability of Preservation Tools** – Make Transfer of Development Rights, Purchase of Development Rights, and cluster zoning programs available for the county.
- Issue 6: Water Quality Protection** – Need to preserve and protect communities municipal watersheds and wellheads.
- Issue 7: Hillsides**– Hillsides adjacent to the communities contribute to the viewshed of the area and efforts should be made to conserve this resource.
- Issue 8: Wildlife Habitat** – Important to identify crucial wildlife habitat areas and areas with threatened and endangered species.
- Issue 9: Cultural Areas** – These resources are important to the citizens of the area and efforts should be made to protect these areas and maintain them for public enjoyment.
- Issue 10: Airport Buffer** – In order to prevent development within close proximity to the airport a development buffer could be considered.

Open Space Inventory, Protections, and Opportunities

Development of Inventory

The rural characteristic of the communities of White Pine County is what the citizens of the area cherish. This characteristic is primarily due to the vast amounts of undeveloped land that offers exceptional vistas, excellent access to recreation, and abundant wildlife. Developed through meetings and workshops with stakeholders along with the integration of current planning documents and case studies from other areas it has been found that valued open space in White Pine County can be broken down into four basic categories:

- ✦ Rural Lifestyle Resources (Community backdrop, scenic areas, feeling of openness)
- ✦ Biological Resources (crucial wildlife habitat, threatened and endangered species, surface water sources)
- ✦ Open areas important to public health/safety and welfare (flooding, watersheds, OHV use)
- ✦ Cultural and Recreation Resources (historic, existing use areas, recreation potential, access)

Level of Protection Criteria

Driven by the issues identified during the stakeholder and public meetings this section first identifies and categorizes important existing open space resources within White Pine County and then identifies the amount of protection, or lack thereof, for these resources and the probability of development. The level of protection and the probability of development is based upon current trends, land management policy, and planning efforts which are described for each resource. This matrix of level of protection and probability of development is intended to help decision makers focus their open space planning efforts.

Opportunities and possibilities for the balanced conservation of these same resources are also identified. These opportunities are based upon meetings with the stakeholders and ideas identified within this plan. It is not the intention that these suggestions become policy, but are identified in order to help decision makers develop strategies for conserving open space resources.

Resource Map and Modeling Methodology

Geographic Information System (GIS) mapping and modeling were used to portray the opportunities, constraints, and resources of the planning areas. Environmental data from various sources were combined to create composite models of areas with high Open Space resource values. The objective for data collection was to create a database that comprised the physical and social attributes of the region for the purpose of identifying prime locations for open space preservation as identified through the stakeholders and the public.

When using the maps in this report as a guide for Open Space conservation, there are four important points to keep in mind:

1) *The maps show general patterns, not exact locations.*

The lines and areas on the maps do not represent exact boundaries. Only the general locations of characteristics and resources are indicated, and the boundaries and areas shown are relative.

2) *The maps are evolving.*

The data used for the mapping process are the result of the most recent information and technology available. They will need to be periodically updated as new information is desired and/or becomes available.

3) *The models are subjective.*

The values associated with each resource used to develop the composite models are completely subjective and can easily be altered. Attempts were made to assign reasonable values to resources and presenting unbiased modeling information. For each composite model the values and weights are given for the resources analyzed in order to give more background information to the reader.

4) *The maps should be used as part of the decision making process.*

The maps are not an absolute determinant for decision-making. Rather, they are tools that, in combination with common sense and good judgment, can be used to enhance decisions for Open Space conservation and to communicate the basis for those decisions. Maps and modeling can be a powerful tool in visually demonstrating the importance of certain areas.

The Region

GIS analysis and mapping includes only the planning area as identified above.

Data Collection

After the type and level of data was determined the next goal was to find the best representative for the attributes that were identified. Most of the regional scale data sets were obtained from federal and state agencies. Nevada and White Pine County are in the middle of several planning processes so much of the data required was not available at the time of this planning document. To obtain this data, specialists were consulted and assisted in identifying features and attributes that met the pre-determined data requirements. On each map presented in this plan the source of the data is identified.

Resource Models

The models presented in this planning document are to provide a visual reference for the reader and the decision maker. Models are developed from geographic data where each attribute, such as a floodplain area, is then weighted based on the value of the resource. This weight is on a scale of 1 to 5. For

instance, having a floodplain present would be assigned a value of 5 and where no floodplain is present would be assigned a value of 1. Each resource is then assigned a percentage for the overall model, such as the public safety and welfare model where floodplain is 33%, the wellhead protection area is 33% and the airport buffer area is 34%. These weights and percentages are calculated to then form a composite model. For each model the assigned weights and corresponding percentages are given to the reader since these values are subjective.

Rural Lifestyle Resources:

- ✦ Community Backdrop
- ✦ Agricultural Lands
- ✦ Prime Farmland

Community Backdrop

The mountain ranges of White Pine County provide a stunning backdrop for the communities of the area. These ranges include the Egan Range, Squaw Peak, DuckCreek Range, and the Schell Creek Range. The Bureau of Land Management and the United States Forest Service manage the majority of these mountain ranges with the exception of small private in-holdings. The Forest Service does not dispose of land and it is not the policy of the BLM to dispose of these types of lands as identified in their Resource Management Plan.⁵

Within the City of Ely there are many private land holdings that are located on steep hillsides with the potential for development that would affect the visual landscape and community backdrop of the city. Development on hillsides also have higher costs associated with them due to large amounts of cut and fill along with additional needs for water and sewer systems. Steep hillsides are also more prone to natural disasters such as mudslides and rock falls. Current trends have shown that these are highly desirable for development by offering outstanding views of the surrounding valleys and mountain ranges. This is evident by new housing construction projects currently underway that fit this description. Within the City of Ely there is an increase in the development of housing on hillsides, which affects this resource.

✦ **Level of Protection**

Since the federal government manages the majority of the land outside of the city and the communities that would affect this open space resource, the probability of it being developed is *low* and the level of protection is *high*. However, the Bureau of Land Management is a land disposal agency and could potentially sell land that fits this open space criteria to private interests. Federal land agencies also have a visual management

⁵ The Resource Management Plan states "Land which would be disposed of are those lands whose disposal would provide for more effective management...these lands are not in big game or upland habitat". Additionally personal conversations with BLM staff reassure this would not be the policy in the updated Resource Management Plan.

protocol that must be followed for all undertakings⁶. Within the City of Ely, the level of protection for hillsides is *low* with no restrictions or guidelines in place that would direct this type of development. The City of Ely does have a 35' foot maximum building height restriction that helps protect visual resources. Due to the amount of private land in these steep hillside areas and the desirability of the location for housing developments the probability for development is *high*.

⊕ **Conservation Opportunity**

Within communities, hillside development could be directed by instituting a hillside overlay zone that does not necessarily forbid development but guides it. Other areas have instituted these types of zones that either restrict, or maintain special requirements for building in these zones. Carson City, for example, has a manual for building on hillsides greater than 15% that must be followed, and building on anything greater than 33% requires a special use permit.⁷ Having a hillside zone not only protects viewsheds, but it also provides for public safety. Steep slopes are more costly to build upon and are more prone to natural disasters such as mudslides, rock falls, and avalanches.

The White Pine County Land Use Plan recommends implementing a Recreational Residential Overlay District that is intended to direct development in "suitable areas with nearby access to open space, solitude, or outdoor recreation areas". This could also address aesthetics and hillside development. Guidelines for this district should be developed that address the protection of scenic amenities, protection of watersheds, protection of riparian areas, maintenance of access to federal lands, hillside development, and aesthetics. This district should then be implemented during the next revision of the land-use plan.

Agricultural Lands

Agricultural lands are another aspect of White Pine County that contributes to the openness and rural feel for the area. Currently there are approximately 7,500 acres of land being used for agricultural purposes within the planning area⁸, which does not include grazing on public land. Historically, much of the land surrounding the communities was devoted to agricultural uses. This is still true in the Lund/Preston area, Duck Creek Basin, and Baker. Ely and McGill have less of an agricultural influence. In many areas throughout the West, agricultural lands are being bought and developed as growth and development pressure occurs.

⁶ This is called Visual Resource Management.

⁷ These hillside development standards can be found in appendix 5.

⁸ Based on data derived from the Vegetation Gap GIS layer.

✦ **Level of Protection**

Agricultural zoning is one mechanism that the county has implemented that would assist in the conservation of agricultural lands in White Pine County. This zoning restricts the types of developments that may occur in areas and also dictates the size of lots allowed and number of housing units. This zoning is intended to allow for the keeping of farms on the fringe of corporate and residential areas.⁹ This zoning encourages continued use of agricultural lands however, changes in zoning can be implemented and this zoning does not encompass all areas of current agricultural use. The overall current level of protection for these areas is *moderate*.

✦ **Conservation Opportunity**

In order to assist in the conservation of this resource, development priorities should be directed to non-agricultural areas and zoning should encourage maintaining county values and the availability of agricultural lifestyles. Other, voluntary, open space conservation tools could also be utilized towards conserving this resource including estate planning, which is a very effective tool for the preservation of existing agricultural land. When done properly this would allow families to hand down farms through generations while avoiding the often expensive inheritance tax. Information about this type of program should be made available to the farming and ranching communities. Other tools should also be explored and implemented in conjunction with willing landowners and on a case-by-case basis including conservation easements and deed restrictions.

Prime Farmland

Prime farmland is defined as the land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses, meaning it is currently undeveloped. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, and is on low angle slopes. This land is of major importance in meeting the Nation's short and long range needs for food and fiber and because the supply of high-quality farmland is limited, wise use of this land should be encouraged and facilitated.¹⁰ There are approximately 10,750 acres of land that fulfill these requirements within the urban interface planning area¹¹. By preserving this land for agricultural uses it reserves the ability of the area to continue crop production in the future and maintain the rural lifestyle.

⁹ According to White Pine County's current zoning code.

¹⁰ Taken from the Natural Resources Conservation Service, "Prime farmland".

¹¹ Based on the White Pine County Soil Survey produced by the Natural Resources Conservation Service.

⊕ **Level of Protection**

Of the approximately 10,750 acres of prime farmland within the planning area, only 4,400 of these acres are in private ownership. The remaining 6,350 acres is either under federal or state management.¹² The prime farmland that is privately owned is the most susceptible to development pressures although any land managed by the Bureau of Land Management is also subject to disposal to private interests. Under the National Environmental Protection Act (NEPA), prime farmland is a critical element that must be analyzed prior to any action on federal land. This provides some protection as well. The overall level of current protection for prime farmland is *moderate*.

⊕ **Conservation Opportunity**

In following the direction of the White Pine County Land Use Plan for agricultural lands, prime farmland should fall under the same guidance for both private and public lands that meet this criteria in order to “promote the continuation of agricultural pursuits”. Prime farmland should be included in zoning considerations that would encourage conservation of farming land and non-agricultural uses should be encouraged in other areas. The same type of information should be made available and pursued for land falling under this criterion as well regarding conservation tools and strategies.

¹² Acreages based upon GIS overlay of White Pine County Soil Survey and Ownership data taken from the Bureau of Land Management.

Biological Resources:

- ◆ Surface Water Sources and Riparian Areas
- ◆ Potential Wetlands
- ◆ Big Game Crucial Habitat and Migration Corridors
- ◆ Special Status Species
- ◆ Bassett Lake Property
- ◆ Kennecott Ranch

Surface Water Sources and Riparian Areas

Nevada is the driest state in the Nation receiving an average of only 9 inches per year, and White Pine County's average is only slightly higher than this¹³. Because of this low amount of precipitation surface water sources are limited. These water sources and their corresponding riparian areas are important sources for irrigation water, livestock watering, municipal and domestic water supplies, and the mining industry. These surface water sources are also crucial to wildlife in the area including big game, fish, and threatened and endangered species and are frequently used for recreation purposes including fishing, hunting, boating, and wildlife viewing. Surface water in White Pine County is found in seeps, springs, creeks, and man-made reservoirs. Adjacent to surface water sources are corresponding riparian areas. These areas play important roles for wildlife, livestock grazing, and water dependent plant species. Some spring sources in the county are under private ownership but the majority are on federally managed land. The majority of the creeks flow through federally managed land as well. Both Comins Lake and Cave Lake are managed by the state of Nevada for multiple recreation uses.

◆ Levels of Protection

Since the majority of surface water sources in the county are under public management by both the Bureau of Land Management and the United State Forest Service, the possibility of development is *low*.¹⁴ Several springs in the Whiter River Valley near Lund and Preston are home to threatened and endangered fish species. Agreements are being worked on between Nevada Department of Wildlife, US Fish and Wildlife Service, and private landowners to protect these springs along with the threatened and endangered inhabitants¹⁵.

◆ Conservation Opportunity

Due to scarcity and importance of surface water sources and riparian areas in the region all efforts should be made to conserve and protect these areas that meet this criteria. Areas rich in this resource should be identified and made available for development planning purposes. Residential cluster land use should be implemented in sensitive areas to

¹³ Based on data taken from the Western Regional Climate Center.

¹⁴ The BLM Resource Management Plan under Realty Management states "(Land disposals will not) lead to the loss, destruction, or degradation of wetlands or riparian areas".

¹⁵ Based on personal conversation with Nevada Department of Wildlife personnel.

preserve this resource as open space, which would benefit wildlife, recreation, and biological diversity. The Recreation Residential Overlay District could also address the protection of this resource in areas targeted for residential development. Other tools could also be used to preserve this resource in conjunction with willing landowners as well.

Potential Wetlands

Wetlands are among the most productive ecosystems in the world, comparable to that of rainforests and coral reefs. An immense variety of species of microbes, plants, insects, amphibians, reptiles, birds, fish, and mammals can be part of a wetland ecosystem (U.S. Environmental Protection Agency). Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. Water saturation (hydrology) largely determines how the soil develops and the types of plant and animal communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils (U.S. Environmental Protection Agency).

Although hydrology, vegetation, and soil characteristics all must be met for an area to be determined as a wetland, hydric soils are usually the first indicator that a wetland is present which then leads to further field research being required (Natural Resources Conservation Service). Soils that have hydric characteristics have been identified by the Natural Resources Conservation Service and are supplied in their soil surveys that are intended to assist in land-use planning. There are approximately 54,600 acres of land within the planning area that have hydric soils, approximately 21,750 of these are under private ownership with the remainder on federal or state managed lands.¹⁶

◆ Level of Protection

High levels of protection for wetlands currently exist through the US Army Corps of Engineers and the Environmental Protection Agency. These two agencies require permitting whenever wetlands are involved. The regulations do allow for limited development but usually requires expensive mitigation measures. It also calls for an overall analysis to determine alternatives to wetland degradation. Additionally it is not the policy of the Bureau of Land Management to dispose of lands in a manner that would "lead to the loss, destruction, or degradation of wetlands".¹⁷ The current overall level of protection for this resource is *high*.

¹⁶ Acreages taken from a GIS overlay analysis of White Pine County Soil Survey data and Ownership data provided by the Bureau of Land Management.

¹⁷ Taken from the Bureau of Land Management Resource Management Plan, Realty Management.

⊕ **Conservation Opportunity**

As with water sources and riparian areas, soils that meet these criteria should be identified and made available for the development planning and approval process to ensure that this resource is considered. Cluster development or a Recreation Residential Overlay District should be implemented in areas where this resource is present.

Big Game Habitat and Migration Corridors

With the large tracts of high elevation undeveloped public land in White Pine County it is no surprise that the area is home to an abundance of big game species. These species include elk, antelope, bighorn sheep, and mule deer. Hunting is one of the primary recreation activities of the local population and also brings in thousands of out-of-town hunters annually.

These species require large tracts of contiguous unfragmented land to meet their requirement for forage, cover, and water. Seasonal movements may simply be elevational in response to forage conditions or snow cover. More substantial movements can occur as big game animals move along migration corridors towards critical winter ranges when harsh winter conditions develop. These winter ranges generally offer foraging areas with lighter snow accumulations and few disturbance factors. Additionally, due to the cold temperatures and lack of quality forage during winter the animals are stressed and cannot afford additional unnecessary expenditures of energy such as those imposed by the crossing of fences and other obstructions (Nevada Department of Wildlife).

⊕ **Level of Protection**

Nevada Department of Wildlife is responsible for the management of these animals and has developed programs and guidelines to help facilitate this. They have also mapped areas of seasonal habitats that are crucial to the survival of these species. One of the largest concerns regarding these crucial areas is the disposal of land by the Bureau of Land Management, especially along the benches of mountain ranges, which are also highly desirable places to build homes¹⁸. Land disposal policy directs the BLM to not dispose of land that is big game or upland habitat which ensures greater security for this resource¹⁹. The proportionately small amount of existing private land plays a much less significant role regarding big game habitat. Adhering to land disposal policy with seasonal habitat areas remaining under federal management the overall protection for this resource is *high*.

⊕ **Conservation Opportunity**

Areas identified as seasonal big game habitat should be identified and incorporated into the planning and decision making process to ensure that this resource is considered. Cluster development, overlay districts, or

¹⁸ Conversations with Nevada Department of Wildlife resource specialists.

¹⁹ Bureau of Land Management, Resource Management Plan: Realty Management.

other conservation measures could be implemented where this type of resource is present in order to further enhance and conserve big game seasonal habitat.

Special Status Species

The planning area is home to several federally listed threatened and endangered species or species that have potential to become federally listed as threatened or endangered²⁰. Sage grouse is the best known of the species that have potential to become federally listed as either threatened or endangered. Sage grouse habitat is associated with sagebrush communities and is most often found on the benches of mountain ranges. Breeding areas, known as leks, are a good indicator of known sage grouse habitat. These leks can be found throughout White Pine County and the planning area. Habitats utilized during the summer/brood rearing period are often located at higher elevations near natural water sources²¹.

Under the Endangered Species Act, a species is endangered if it is in danger of extinction within all or a significant portion of its range, or threatened if the species is likely to become endangered within the foreseeable future. In April, 2004 petitions were received to list the sage grouse under this listing. In January, 2005 it was determined the species does not warrant protection under the Endangered Species Act at this time, however this does not mean that it cannot be listed in the future²². Several federal, state, and local management plans were developed to help protect this species and its habitat in order to avoid it being listed, making sage grouse habitat an important consideration for land management, development projects, and open space resources.

Like the sage grouse, the pygmy rabbit is ecologically tied to sagebrush plant communities and has been petitioned for listing as threatened or endangered. Increasingly, observations of pygmy rabbits are being documented by NDOW and other agencies to gain additional knowledge about this species.

The Relict Dace (*Relictus solitarius*) is Steptoe Valley's only native fish species and can be found at the Georgetown Ranch, Bassett Lake, the Steptoe Valley Wildlife Management Area, and other spring sources that are associated with the Steptoe slough. This fish is listed as sensitive with both the state of Nevada and the Bureau of Land Management²³.

There are also several species of threatened and endangered fish located in springs in the Lund/Preston area. 80-90% of these springs are privately owned

²⁰ According to the State of Nevada Department of Conservation and Natural Resources, Natural Heritage Program.

²¹ Personal conversation with Nevada Department of Wildlife resource specialists.

²² Taken from the United States Fish and Wildlife Service news release, "Status Review Completed: Greater Sage-Grouse Not Warranted For Listing as Endangered or Threatened".

so preservation and protection measures are difficult to undertake. However, US Fish and Wildlife Service and Nevada Department of Wildlife have been working with private landowners in the area to develop agreements and partnerships in protecting these species.

✦ **Level of Protection**

Any species listed under the Endangered Species Act has strict restrictions and protections that go into assisting the species recovery. Species listed as Sensitive have these same types of protections. Large portions of sage brush habitat associated with sage grouse and the pygmy rabbit is located on land managed by the Bureau of Land Management whose policy is to "not adversely affect threatened or endangered species or their habitat, or reduce the likelihood of their recovery" in regards to land disposal²³. The areas associated with Relict dace habitat include both protected areas such as the Steptoe Valley Wildlife Management Area as well as privately owned land including the Georgetown Ranch near Ely, and Bassett Lake. Depending upon the species and land ownership current levels of protection for this resource are highly varied. Overall protection is *moderate*.

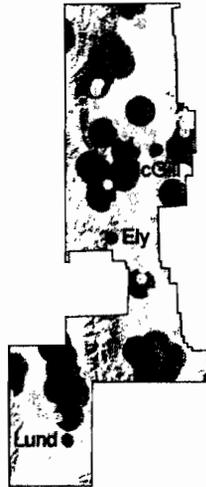
✦ **Conservation Opportunities**

In regards to open space planning, the known location and habitat of these species should be considered during the development planning process. Known areas could be protected through open space tools that would still allow for development. The Bassett Lake Property is associated with a number of special status species, and is targeted for conservation measures and is discussed elsewhere in this plan.

²³ Bureau of Land Management, Resource Management Plan.

Biological Resources Models

Sage Grouse Leks - 2 Mile Buffer
Special Status Species - 100 Yard Buffer



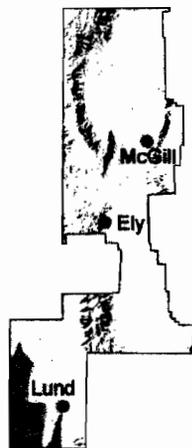
Hydric Soils
Springs - 100 yard buffer
Streams - 100 yard buffer

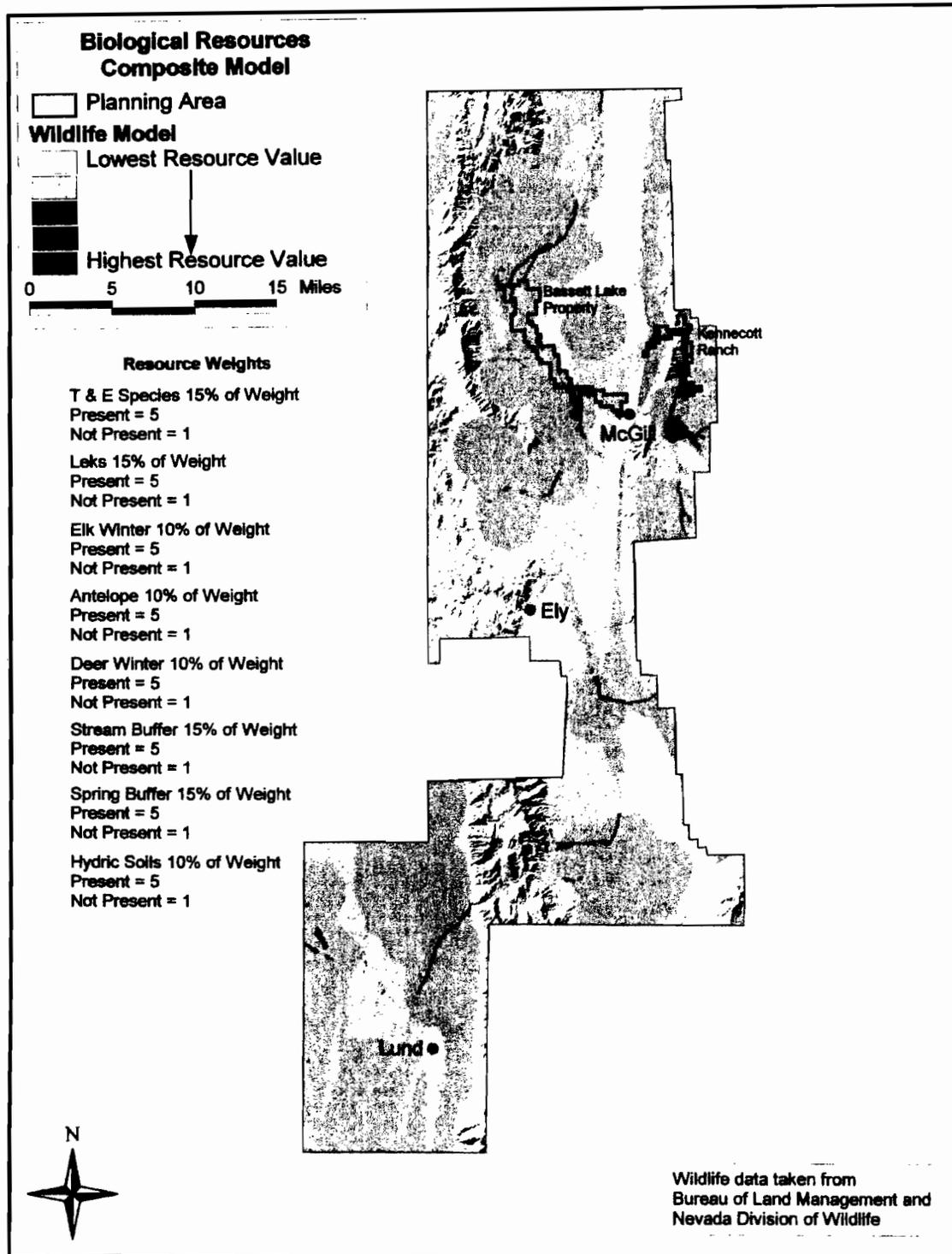


Elk Winter Habitat

Antelope Habitat

Deer Winter Habitat





Bassett Lake Property

This property is located to the West/Northwest of McGill and is owned by the Kennecott Minerals Company. There have been recent talks of this land being acquired from Kennecott along with the water rights associated with it in order to preserve and enhance the wildlife and recreation opportunities the area provides. This would include approximately 6,279 acres of land and 53.535 acre ft of water. Bassett Lake and its corresponding streams and riparian areas that would make up this purchase provide a key area for wildlife and recreation. The lake, although currently inhabited by northern pike, a predatory fish species detrimental to game fish populations, has the potential to become a world-class fishery, further increasing the recreation opportunities available in the area²⁴. This area is also home to the endemic Relict Dace, Steptoe Valley's only native fish species, which is also a Nevada Special Status Species. Other special status species associated with this area include the Steptoe Valley crescent spot (*Phyciodes pascoensis arenacolor*) and the Dark Sandhill Skipper (*Polites sabuleti nigrescens*)²⁵. The corresponding riparian and wetland areas are crucial for a variety of bird species including waterfowl, wading birds, shorebirds, and also provides an important stopover for migrating birds. Sage grouse can also be found in this area. Big game species also use this property as a winter area and it provides an important watering source. The property also is comprised largely of hydric soils, a key indicator for wetlands, which are important for the level of biodiversity that they provide. The soils in the area are also considered prime farmland based upon their chemical composition and the hydrology of the area with some areas currently under agricultural production. Portions of this property are located within the 100-year floodplain²⁶.

◆ **Level of Protection**

Under the ownership of Kennecott Minerals Company there is very little protection that ensures that this important wildlife area and the associated water rights will not be sold for development in the future. The current level of protection is *low*.

◆ **Conservation Opportunity**

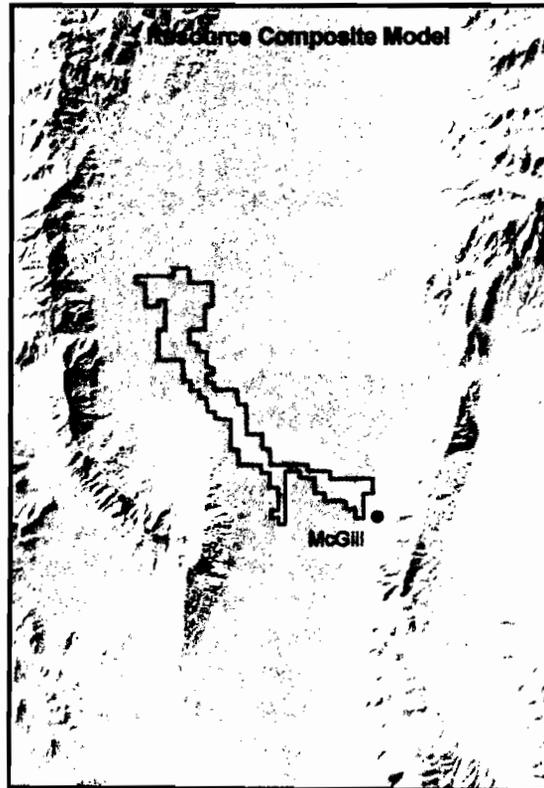
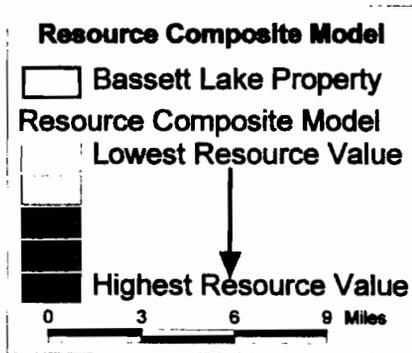
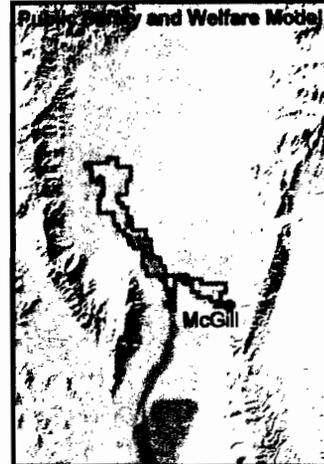
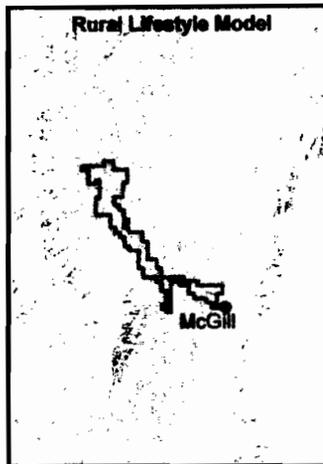
One way to preserve and enhance this property is an outright purchase by an agency or organization that is capable of managing and enhancing it. Talks thus far have involved a cooperative venture between White Pine County and the Nevada Department of Wildlife. It is foreseen that this would become an extension of Steptoe Valley Wildlife Management Area, another important piece of property under NDOW management for the purpose of wildlife protection and recreation. Funds could be applied for through the Question 1 conservation grant program in order to facilitate this purchase.

²⁴ Personal conversation with Nevada Department of Wildlife resource specialists.

²⁵ According to the State of Nevada Department of Conservation and Natural Resources, Natural Heritage Program.

²⁶ Based upon GIS overlay analysis.

Bassett Lake Property Resource Maps



The "Bassett Lake Property" as identified in the maps shown here is based upon discussions with Kennecott Mining Corporation.



Kennecott Ranch

The Kennecott Ranch is a large tract of land located in Duckcreek Basin that is also owned by Kennecott Minerals Company. Initiated by local concerned citizens, talks began with Kennecott regarding this property and the conservation of it in early 2004. Kennecott's interest in a project of this nature lies in their tie with the communities that they helped create and their wishing to leave a well-remembered legacy that will continue to benefit these areas. The citizen's interest lies in the location and the size of this property as well as the water rights associated with it and the benefits it could provide in the future if conservation measures are put into place.

Located in the heart of the Duckcreek Basin, this working ranch plays a major role in the landscape and the rural feel of this area. This property is also associated with exceptional wildlife habitat due to the surface water sources and hydric soils making Duckcreek Basin the most popular hunting destination within the county²⁷. Sage grouse and special status species are also known to occupy this area²⁹. If developed exclusively for housing, the dynamics, feel, and look of this basin would be drastically altered as well as the surrounding mountain ranges and the exceptional wildlife habitat. The conservation of this land could also include the revitalization and rehabilitation of the streams and creeks that flow from high up in the Schell Mountain Range. For almost a century these streams have been diverted into pipelines and transported to Steptoe Valley to be used for mining and reclamation purposes. Through conservation agreements these streams could be day lighted and brought back to life for the benefit of recreation and wildlife in the area²⁸.

⊕ Level of Protection

Kennecott Minerals Company is open to disposing of land under their ownership including the Kennecott Ranch. Due to the location of this property and the associated water rights there is a large amount of interest from private parties to acquire this land³¹. Being under private ownership and looking at current trends in the area, the current level of protection for this land is *low* and the pressure for development is *high*.

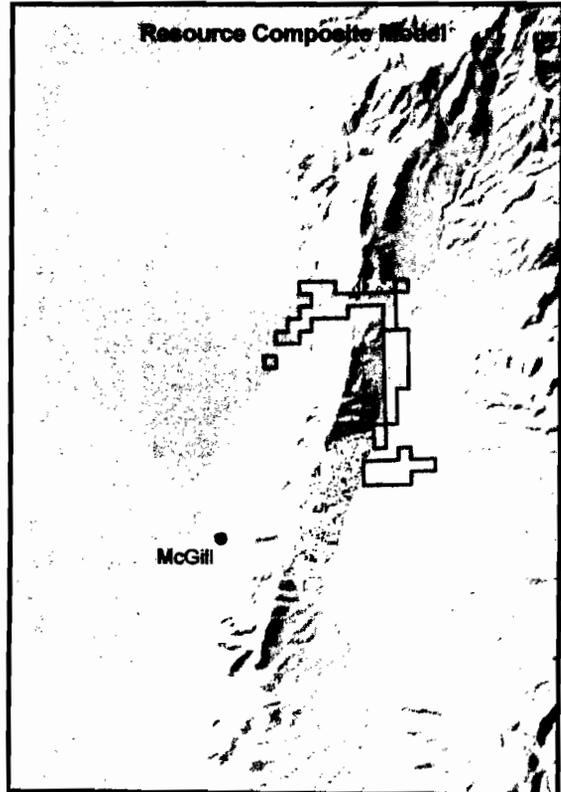
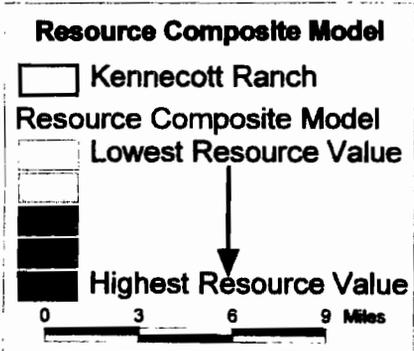
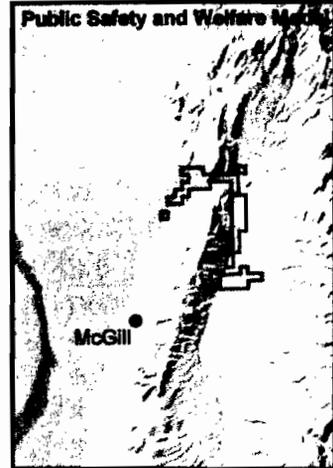
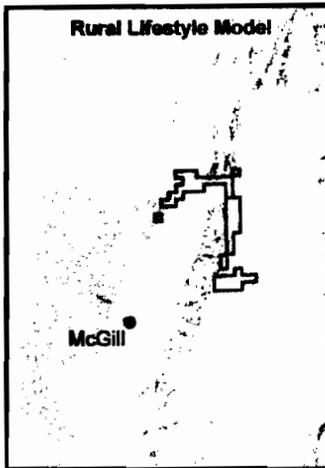
⊕ Conservation Opportunities

Talks thus far have involved acquiring the land and placing it into some form of public ownership that would benefit the citizens of the area. Due to the high-assessed value of this property, acquisition would be expensive and coordination with various entities would be required in order for a transaction of this nature to be successful. Other options such as conservation easements and deed restrictions may also protect this land and the resource values that it provides.

²⁷ Based upon personal conversation with Nevada Department of Wildlife personnel.

²⁸ Based upon personal conversations with citizens involved with the acquisition of this property.

Kennecott Ranch Resource Maps



These maps show all of the land owned by Kennecott Mining Corporation within the DuckCreek Basin. A conservation agreement does not necessarily incorporate all of these parcels and future negotiations will determine which parcels would be included.



Public Safety and Welfare:

- ◆ Floodplain
- ◆ Water Quality Protection
- ◆ OHV use

Floodplain

Flooding is the most common and widespread of all natural disasters, except fire, and is one of the most likely natural hazards to affect the planning area²⁹. These most frequently occur from intense warm winter storms that melt a heavy snow pack or summer monsoon thunder storms that drop large amounts of rainfall in a short period of time. The areas subject to flooding are indicated by flood plain designations on FEMA flood hazard maps. Just like many other landscape features that can affect the public, floodplains have the potential to threaten human health, damage structures and infrastructure, and increase health care costs when development occurs within these areas. Thousands of people perish each year by drowning or other injuries incurred during flooding, and billions of dollars in property damage occurs. When people become stranded, special rescue personnel must be called in to save them, which is extremely costly.

At the same time floodplains can be extremely beneficial when not occupied by homes or structures. Floodplains are excellent areas for agricultural uses and other open space areas and contribute to the natural hydrology of the area. Areas subject to flooding should maintain minimal and appropriate development in order to protect structures and minimize property damage and disaster relief expenses to taxpayers.

Much of the floodplain area, as identified by FEMA, highly corresponds with hydric soils meaning there is potential for wetlands. These areas are excellent for agricultural uses due to natural hydrology of the area and are less desirable for housing. Much of the floodplain area is associated with Steptoe Valley including the Steptoe Valley Wildlife Management Area, to the North, private property including Bassett Lake, and lands associated with the Steptoe Valley Slough including parts of Ely.

◆ Level of Protection

The portion of the floodplain area in the Steptoe Valley Wildlife Management Area is currently protected and is under excellent land use for a floodplain area based on allowed uses and lack of structures. Bureau of Land Management land disposals "(will not) lead to the modification, occupancy, or loss of the natural and beneficial functions of floodplains"³⁰. The floodplain areas on private land have no restrictions on types and nature of development unless they fall under agricultural zoning. The current level of protection for this resource is *moderate*.

²⁹ According to the Federal Emergency Management Agency

³⁰ Bureau of Land Management, Resource Management Plan.

✦ **Conservation Opportunity**

Intensive levels of development should not occur within the floodplain and the location of this area should be incorporated into the planning and decision making process. One excellent preservation opportunity is the purchase of the Bassett Lake Property, which is associated with the floodplain in Steptoe Valley. This would greatly minimize the development potential of the floodplain in this area. Other floodplain areas could be zoned as agricultural or other less intensive types of land use to encourage compatible development within these areas.

Water Quality Protection

The water sources for the majority of the communities with the planning area are based upon ground water sources such as springs as wells. Protecting this water source should be a high priority for all of the communities and the county. The City of Ely has already developed the Ely Wellhead Protection Plan that identifies strategies for protecting its water sources including a wellhead protection area. This is the area that recharges Murry Spring which in turn supplies the drinking water to the citizens of Ely. This wellhead protection area is based on the watershed from which recharge to the spring is derived, the geology of the watershed, and the topography. The area is divided into 3 zones based upon level of concern regarding contamination of the watershed (Buqo, Thomas S.).

This area is a crucial area of protection for the citizens of Ely and all steps should be taken to minimize exposure to contamination of this water source. Other communities should have plans developed to protect their water sources as well.

✦ **Level of Protection**

There is very little private land that occurs within Ely's wellhead area. The majority of this area is under the management of the US Forest Service, which has restrictions in place to minimize erosion including limitations to the types of activities allowed. None of the other communities have developed plans that identify areas of concern regarding water quality so the current level of protection for these communities is unknown. The level of protection for the city of Ely's wellhead would be considered *high*.

✦ **Conservation Opportunity**

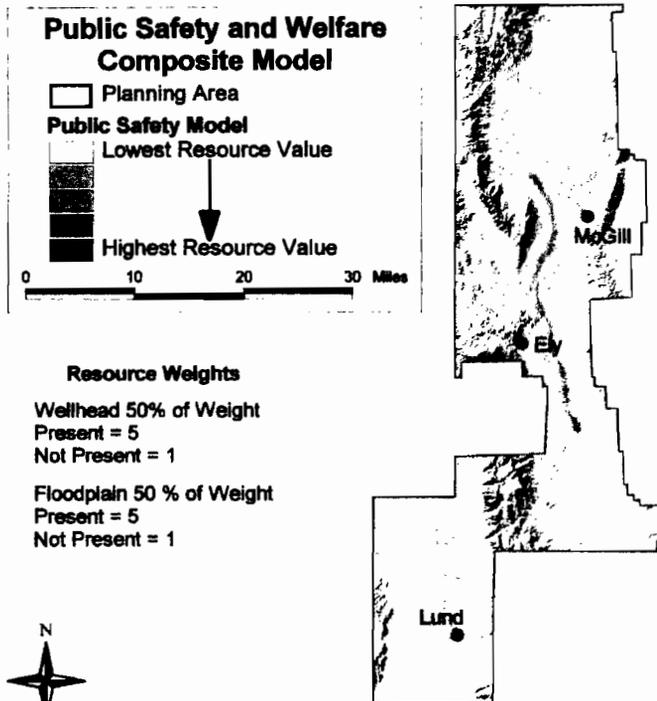
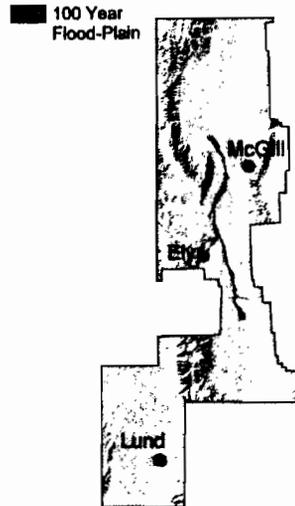
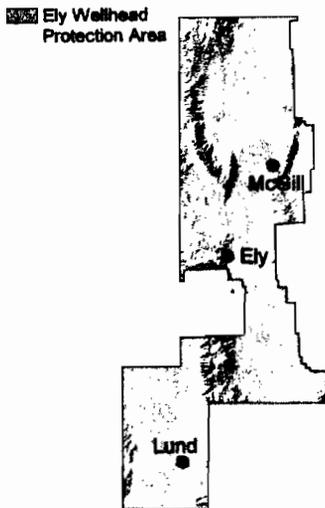
Wellhead and watershed protection planning should be considered for all of the communities within the county in order to protect the integrity of municipal water supplies. Findings from these plans should then be incorporated and addressed in future planning efforts and development proposals. Ely has already developed a Wellhead Protection Plan that identifies critical areas in regards to water quality protection. All future planning efforts and development proposals should consider the impacts that activities would have upon each communities water quality, watersheds, and wellhead areas.

OHV Use

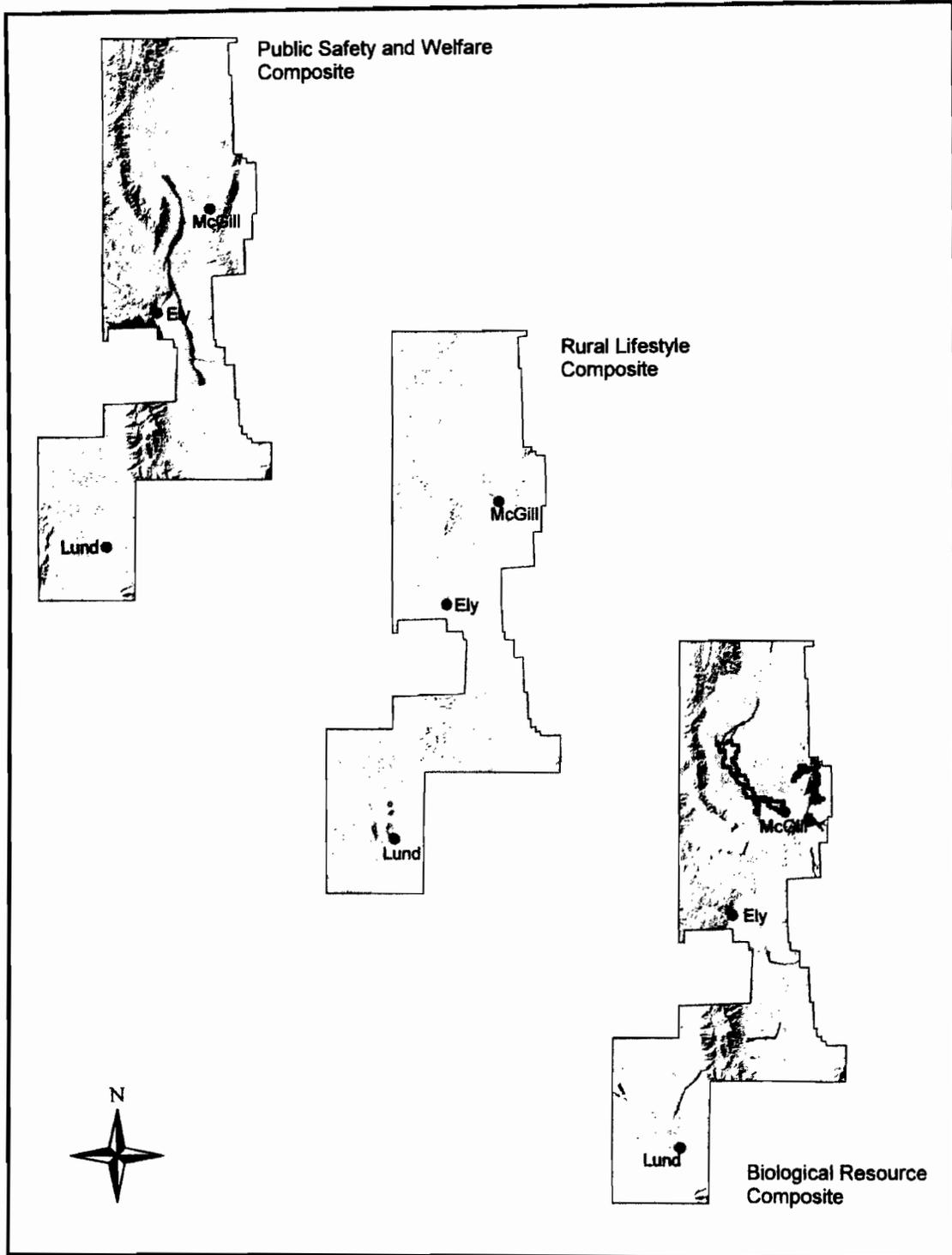
A major concern regarding recreation within the urban interface area is that of OHV use. This type of use occurs in close proximity to towns usually near residential areas with the most common complaints being loud noise, dust, and excessive damage to vegetation and soils. At the same time off-highway vehicles are amongst the most popular form of recreation in the area, especially with the youth. One solution to this problem is the development of OHV emphasis areas in communities where this is an issue that would direct this type of use away from homes and other potential conflicts. A facility of this nature would need to be suitable for this type of use and close enough to urban areas so that users can travel to them easily with legal routes being provided.

An act was recently passed that will go into affect in 2006 which requires a certificate of operation for off-highway vehicles. This act also allows off-highway vehicles to be operated on unpaved county roads, unless prohibited by that entity, designated city and county streets, and to cross and ride along state highways under certain circumstances. This alleviates the county from liability issues and also allows for the designation of routes to connect communities with trails and OHV emphasis areas. This designation should be implemented in conjunction with an OHV emphasis area.

Public Safety and Welfare Model



Floodplain data taken from FEMA 100 year flood plain maps. Ely Wellhead Protection Area taken from the Ely Wellhead Protection Plan.



Cultural and Recreational Resources:

- ◆ Potential recreation areas
- ◆ Recreation Access to Dispersed Use
- ◆ Cultural Resources

Potential Recreation Areas

The City of Ely Master Plan and the White Pine County Land Use Plan both identify areas for public/recreation use. These can be found in the respective zoning maps included within each of these plans. Some of these exist as public facilities/recreation areas already such as parks and ballfields. The plans also identify potential recreation areas that are currently on undeveloped land that is owned by the city and the county. The City of Ely Master Plan also identifies the need to “support all scenic and recreational resources to be preserved as open space development within planned developments and/or cluster type projects” and “encourage the development of trails and trailheads in the Ely area”.

- ◆ **Level of Protection**

Having these areas identified within Master Plans is a good first step towards conserving these areas for recreation uses, but as development and housing pressure increases these areas could potentially be lost to development. The current level of protection for these areas is *moderate*.

- ◆ **Conservation Opportunity**

Recommendations in zoning by the White Pine County Land Use Plan and the City of Ely Master Plan should be adopted and incorporated into decision-making. Plans could be developed and implemented for these recreation areas prior to development pressure that would ensure their existence in the future.

Recreation Access to Dispersed Use

The majority of the recreation that occurs in the area is not at official developed recreation sites, but occurs on the public land surrounding the communities. The majority of this recreation entails trail use including hiking, cross-country skiing, snowshoeing, horseback riding, bicycling, motorcycling, ATVing, and Jeeping. Rock climbing, rock hounding, and wildlife viewing are other popular forms of recreation in the area. Currently access to the recreation opportunities is outstanding where the majority of recreation enthusiasts simply start from their house or take a short drive. From the recreationists standpoint this is one of the characteristics that people love about the area and feel that preserving this access to nearby public land and recreation is a key component to an open space plan.

- ◆ **Level of Protection**

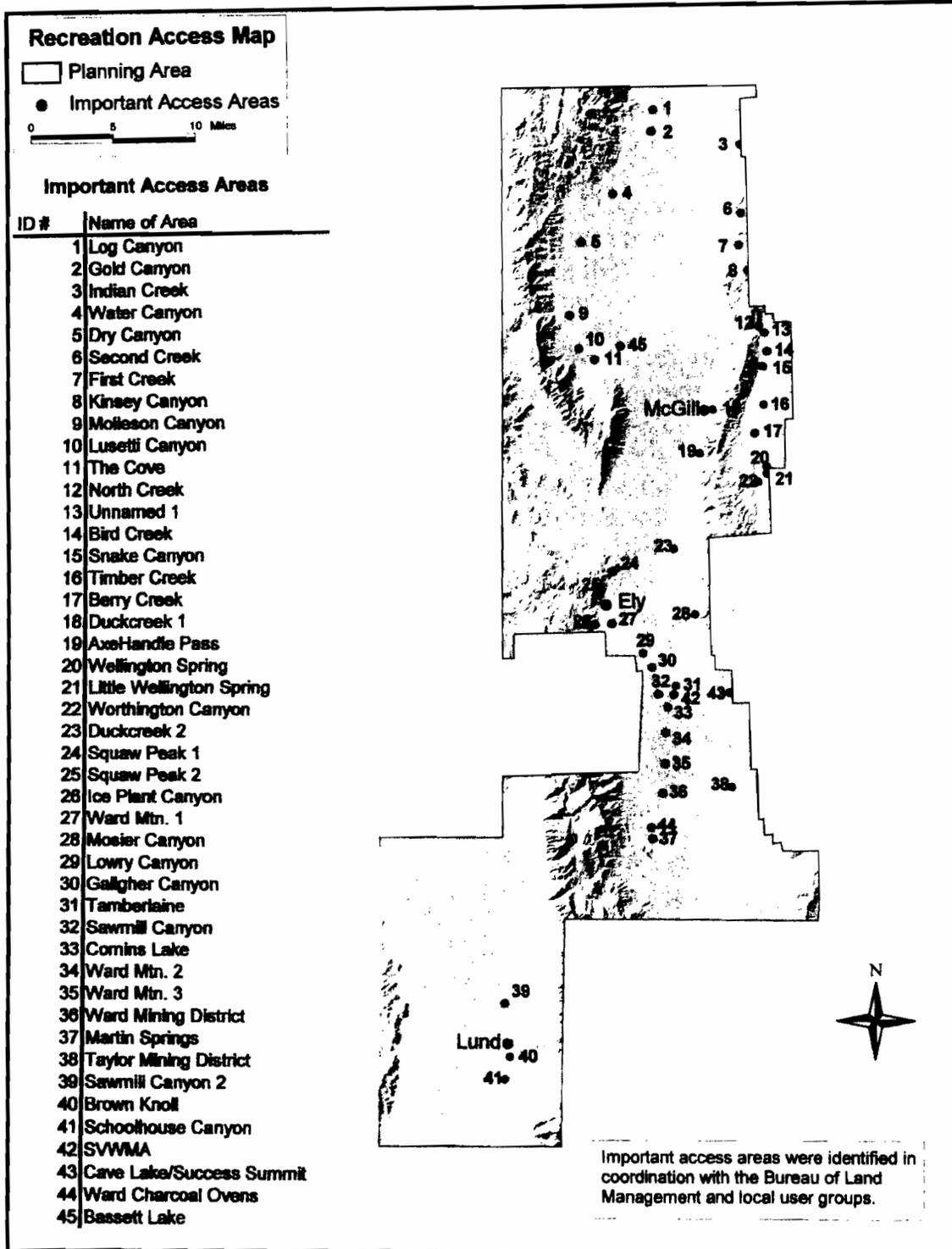
Although the majority of the recreation opportunities exist on federally managed land, much of the access to these recreation opportunities, especially within the urban interface area is through privately owned land

or land owned by the city or county. Land managed by the BLM is subject to disposal, especially near the urban interface area where there is the greatest pressure for growth and land needs³¹. The current level of protection for this resource is *low* and the pressure for development is *high*.

✦ **Conservation Opportunity**

In areas subject to land disposal by the BLM, important access corridors should be identified and retained prior to disposal, or if private, perform other negotiations to retain access. Reservations could also be set in place prior to BLM disposal that would reserve an option for a right-of-way for the benefit of trail corridors and access in the future. These should be at least 60 feet in width. If access is city or county owned rights-of-ways or other negotiations should be pursued prior to development pressure. Planning tools should be made available to the county and all of the municipalities that would allow for access requirements on development proposals where needed. Priorities should be placed in areas immediately adjacent to communities where development pressure is the greatest. Guidelines for a Recreation Residential Overlay District could be developed that would address this need. The County should also work with local groups and individuals to help identify and maintain access points to recreation opportunities.

³¹ According to the Bureau of Land Management, Resource Management Plan.



Cultural Resources

Because of low population density in White Pine County and the geographic isolation of Eastern Nevada archaeological resources are well preserved, largely intact and relatively undamaged. However, increasing demands for outdoor recreation, housing, resource extraction, and development of Public Land threatens to accelerate damage to heritage resources and measures should be taken to preserve these areas. Archaeological resources are seen as being valuable for their scientific, conservation, education, scenic, recreation, and historic qualities. Not all of the cultural resources of the area are suitable for full public knowledge and availability due to the sensitivity of some sites. These sites may be more suitable for further research. However, many sites can be made available for recreation and interpretation opportunities. (Bureau of Land Management, *Draft-Ely District Heritage Resources Strategy: Protection through Partnerships*).³²

The types of archaeological sites that can be found in White Pine County and within the planning area fall under two basic categories; prehistoric and historic. Prehistoric resources include sites such as rockshelters and cave sites, campsites, toolstone sources and quarries, and rock art. Historic sites include historic roads and trails, historic towns and mining districts, cemeteries, and historic ranches and landscapes (Bureau of Land Management, *Draft-Ely District Heritage Resources Strategy: Protection through Partnerships*).

The Ely BLM Field Office is developing a strategy for the protection of these resources that will help implement the Resource Management Plan. This strategy categorizes and prioritizes sites of importance and identifies management strategies to protect them. Important cultural sites have been identified within the planning area, both on public and private land.

⊕ **Level of Protection**

There are several laws that offer some form of protection regarding cultural resources including the National Historic Preservation Act and the Archaeological Resources Protection Act. This being said, these acts do not mandate full protection of these resources, only that they be considered for projects. On private land these acts offer very little protection. The current level of protection for this resource is *moderate*.

⊕ **Conservation Opportunity**

Proposals and planning should consider cultural resources that are important to the public and encourage maintaining the integrity of these sites. This could be done through progressive development proposals, cluster development, or an overlay district. Knowledge of cultural resources and preservation opportunities are best identified through local individuals and organizations devoted to this resource along with local

³² This document is still in draft form and is not available to the public as of May 2005. A public review draft is anticipated to be released in June of 2005.

archaeologists. The Bureau of Land Management has developed strategies for cultural resource protection and preservation including the identification of key public sites and could help identify conservation opportunities.

Open Space Feature	Level of Protection	Likelihood of Development
Hillsides	Low	High
Agricultural Lands	Moderate	Moderate
Prime Farmland	Moderate	Low
Water Sources and Riparian Areas	Moderate	Moderate
Potential Wetlands	High	Moderate
Big Game Habitat	High	Low
Special Status Species	Moderate	Moderate
Bassett Lake Property	Low	High
Kennecott Ranch	Low	High
Floodplain	Moderate	Moderate
Water Quality Protection	Unknown	Unknown
OHV Use Area	Unknown	Unknown
Potential Recreation Areas	Moderate	High
Recreation Access to Dispersed Use	Low	High
Cultural Resources	Moderate	Low

The ratings in this table are based upon trends, current planning documents, and land management policies as identified earlier in this section. It is the intention of this matrix to help decision makers prioritize and direct open space conservation. Resources with a lower level of protection and higher probability of development should be a higher priority for implementing open space conservation strategies or policies. Recreation access for instance, where the level of protection is considered low and the likelihood of development is high, would have a high priority on implementing some form of protection for this resource. Once a measure is in place, the level of protection would move to moderate or high, and become a lower priority.

Open Space Tools

Listed below are a variety of means that can be used to protect Open Space. Relatively few involve outright purchase of land. Others utilize incentives related to development regulations or tax law. Many of the tools can be used in combination.

Conservation Easement

A conservation easement is a voluntary and permanent agreement to restrict the developability of one's land in order to preserve conservation values. The easement can be donated by the landowner (usually with a tax benefit for the

value of development that is precluded), or purchased by a public or non-profit entity. The landowner retains ownership of the land and the uses that are not restricted in the easement. The purchaser/recipient is required to make periodic inspections to assure the conditions of the easement are being applied. Like all easements, it applies to future owners of the land as well. A conservation easement can be very flexible, limiting development as much as the landowner desires. Since the easement restricts future development, it reduces the value of the land and can therefore be an effective means of reducing estate taxes.

Cluster Development

Instead of spreading development evenly across a parcel, cluster development results in smaller lots grouped on one portion of the site, leaving the rest of the land undeveloped. For example, on a 10-acre tract of land zoned for 1 unit per acre, rather than 10 1-acre lots, cluster development might result in 10 ½ acre lots, leaving 5 acres of Open Space. Cluster development can be implemented through zoning requirements or incentives (more units if they are clustered). Usually site plan criteria are established so the Open Space protects the most valuable resources; agricultural land, wildlife habitat, visible hillsides, surface water sources, etc... The Open Space is usually protected by a permanent conservation easement granted to a public agency or land trust.

Deed Restrictions/Covenants

Another option for landowners that wish to set aside land for Open Space, is a deed restriction or covenant. Since deed restrictions and covenants are usually enforced by other parties to the agreement (adjacent landowners for instance), the restriction enforcement is not assured and as a last resort must be done through the court system, which makes it less likely. Deed restrictions may contain language that allows for any person or entity to institute a suit to correct a violation.

Estate Planning

The combination of state and federal inheritance taxes can create obligations of 55% or more of the value of the property. Often, inheritors are required to sell the inheritance to pay the taxes. A surprising number of landowners are not knowledgeable about inheritance taxes and are unprepared for the consequences to their estate. Land trusts and other public agencies seeking to preserve open space should actively encourage landowners to seek proper assistance in estate planning. In this process, landowners will be more likely to become aware of the advantage and opportunities for charitable donations to reduce estate taxes.

Estate planning may also include the use of a "reserved life estate." This program allows the landowner to continue to use the property during their lifetime and/or the lifetime of their immediate family may remove a barrier to a sale or donation by making it possible to take advantage of the income while still enjoying the property. Under this strategy a commitment is made by the property

owner to donate the property to a public or private agency or sell the development rights at a future date.

Cash Purchase

Cash purchase at fair market value is one of the most common transactions between landowners and a public entity. Nevertheless, while this may yield the greatest gross return, capital gains, estate and other taxes may make other types of transactions more attractive in the long run. Additionally, with an outright purchase an entity must be in place that is able to manage and run the acquired property.

Donation or Gift

Over and above public-spirited citizens, landowners in special financial/tax circumstances may find charitable donation particularly advantageous for tax and estate planning purposes.

Land Exchange

Public entities occasionally have properties that are of suitable size and location to make them attractive to be traded for private lands desired for Open Space. Land exchanges are generally done on the basis of appraised value rather than size. Land trades can be time-consuming and complex but can be beneficial to both the seller (no tax for an equal exchange) and the purchaser (no cash required).

Purchase of Development Rights (PDR)

While not currently available in White Pine County, PDR may be attractive to a landowner that desires to retain ownership and use of the land, but does not wish to develop it. PDR is a means of compensating an owner for relinquishing the development potential of his/her land. The development potential (right) is purchased by a public entity and extinguished. The value of a development right is the difference between the value of land as farmland (or vacant land) and its value for development. For example, if a 10-acre tract of farmland (without development potential) would sell for \$30,000 and the same 10-acre tract of land with development potential sell for \$100,000, the difference (\$70,000) would be the value of the development rights. Furthermore, if the zoning of the land (say 1

unit per 5 acres) allowed two units to be built, these two development rights would have a value of \$35,000 each. As a general rule, the value of development rights ranges from 30% to 80% of the fair market value of the land, usually in direct proportion to the closeness of roads, utilities, and other services that allow development. When development rights are purchased, the land is usually restricted from future development through a deed restriction or conservation easement granted to a non-profit organization.

Transferable Development Rights (TDR)

TDR's are similar to PDR's in that the seller can be compensated for relinquishing development potential, but instead of being purchased and extinguished, the development rights may be purchased by private entities and transferred to other parcels of land. To be sure the TDRs are placed in acceptable locations, some communities formally designate "sending" and "receiving" sites for TDRs. The "sending" sites are areas desired to remain as Open Space, the "receiving" sites are areas that are suitable for higher development densities. Once implemented a TDR system can be an effective means of preserving Open Space at little public cost, though it does require the setup of a system that requires extensive management.

Land Preservation Development

A recent innovation is special not-for-profit organizations that achieve Open Space preservation objectives through limited development. They typically acquire a property and do limited, carefully planned development to recover the costs of the land. This approach requires specialized expertise and funding. Although it does result in some development, it has been found to be effective in preserving key parcels in areas where other Open Space tools are not workable.

Intergovernmental Agreements (IGAs)

IGAs are a form of cooperation between governments or agencies. Possible topics that could be addressed by IGAs include: appropriate land uses on lands that have high value for Open Space, continuity of trails and coordination of trail heads, common Open Space objectives and priorities, reciprocal review of development proposals, annexation considerations, etc...

***WHITE PINE COUNTY
LAND USE PLAN***

***ATTACHMENT 2
2006 Comprehensive Economic
Development Strategy, Analysis***

White Pine County, Nevada
2006 Comprehensive Economic Development Strategy

Chapter I
Analysis



White Pine County, Nevada

2006 Comprehensive Economic Development Strategy

CHAPTER I, ANALYSIS

SECTION A: GEOGRAPHY AND HISTORY

1. Physical Geography:

Location and Size:

White Pine County is located in east, central Nevada. It is bordered on the east by Utah, Elko County on the north, Eureka County to the west, and Lincoln and Nye Counties on the South. Ely, the County seat, is located to the west and south of the County's center at the cross roads of US Highways 50 and 93. It is 320 miles from Reno, Nevada, and 250 miles from Las Vegas, Nevada, and Salt Lake City, Utah. Ely is the largest population center in a 150 mile radius serving the White Pine County communities of McGill, Ruth, Lund, and Baker; Eureka, 80 miles west; Pioche (Lincoln County), 129 miles south; and Ibapah, Garrison, and Goshute on the Nevada/Utah border approximately 100 miles east. Recent growth in southern Utah makes St. George (population 64,201) 217 miles from Ely) and Cedar City (population 23,983) 200 miles from Ely) the closest population centers for retail shopping and medical services. They join Elko, Nevada, (population 18,642) 180 miles north and west; Fallon (population 8,386) 250 miles west; and Twin Falls, Idaho (population 70,000) 255 miles north as closest communities providing larger business and service centers.

The County is roughly square in shape, measuring approximately 104 miles north to south and 96 miles east to west. It covers 8,941 square miles making it larger than the state of Massachusetts. The County ranks fifth in size in Nevada, covering 8.1 percent of the state's total land area.

See Figure 1, Regional Map.

Climate:

White Pine County's high desert climate is characterized by sunny, clear days, low humidity, and a wide variation between night and day time temperatures. Its weather is a result of its elevation, nighttime radiation, cold air drainage from the mountain slopes, and western storm patterns. Summer daytime temperatures center around 85 to 90 degrees and drop to 40 to 45 at night. Winter temperatures usually range from 30 to 40 degrees during the day to 10 to 20 degrees at night with nighttime temperatures occasionally dropping below 0. Ely's growing season (consecutive frost free days) is 70 to 90 days while the eastern portion of the County (Snake Valley/Baker area) records 120 frost-free days. Annual precipitation averages 10.1 inches per year with mountainous areas recording 12 to 22 inches per year. Annual snowfall in the mountains averages 50 inches per year with the heaviest snowfall from January through

March. Because of the altitude, the area's snowfall is extremely dry, usually taking 20 inches of snow to equal one inch of water (twice the normal level). The County records an average of 200 to 220 clear days per year. Prevailing winds are south/southwest and average 10.1 miles per hour.

In 2005, precipitation was higher than normal with 13.02 inches compared to 10.1 inches average. The annual mean temperature in 2005 was 46.0 degrees. The coldest months of the year were December (29.0 degrees) and January (30.2 degrees) and the warmest months were July (70.3 degrees) and August (66.0 degrees). The wettest months were May (2.45 inches) and April (1.97 inches).

Five aspects of the County's weather have a bearing on development potential: 1) the county's cold winters, low precipitation, and short frost free growing season limit the types of agricultural activities that are economically viable, 2) White Pine County does not contend with any catastrophic weather conditions that severely damage property and endanger lives, 3) the constant south-southwest wind that averages ten miles per hour has potential for development of alternative energy resources, 4) Ely ranks in the top 13 percent of the nation for solar potential during the winter months and compares favorably with Phoenix, Arizona and Los Angeles, California making winter solar potential an opportunity for cost savings for industrial, residential and public facilities, and 5) the high desert climate with cool summer temperatures is an attraction for residents of the Las Vegas area and southern Utah.

See Figure 2, Monthly High, Low, and Mean Temperatures, 2005.

Geographic Features:

White Pine County is typical of the Basin and Range topography. The landscape is dominated by north-south mountain ranges from 8,000 to 12,000 feet in elevation. White Pine County's mountain ranges are the result of intense folding followed by thrust faulting during the late Permian period. Intrusions of granite rocks cut across the older, complex geological structures. Early deposits of marine conglomerate, sandstone, limestone, and dolomite occur throughout the County. This carbonate rock contains arches, rock shelters, and highly decorated caves. From west to east, the major ranges are the Diamond Mountains, the White Pine Range, the Butte Mountains, the Egan Range, Cherry Creek Range, Schell Creek Range, and the Snake Range-Kern Mountains. The highest point is Wheeler Peak in the Snake Range at 13,061 feet in elevation. Natural gaps or passes in the mountain ranges are important in allowing cross-country transportation. Between the mountain ranges are long narrow valleys, which range from 5,000 to 7,000 feet in elevation. The valleys are the sites of transportation corridors, agricultural activity, industrial development and urban centers.

The major valleys are:

- 1) Newark Valley on the western edge of the county, irrigated by Cole and Newark Creeks and several springs
- 2) Steptoe Valley between the Egan and Schell Creek ranges is one of the longest valleys

in the United States at over 100 miles extending from Elko County on the north through the entire length of White Pine County. The valley's water is supplied by Duck Creek and Steptoe Creek. It houses the County's major urban and industrial development as well as 70,000 acres of tillable land.

3) Spring Valley between the Schell Creek and Snake ranges is twelve miles wide and almost one hundred miles long. Its northern portion has a number of small creeks, which provide irrigation water for the valley's cropland

4) Snake Valley lies on the eastern border of the county, sloping to the south and east its climate is the warmest in White Pine County

The major bodies of water in the County are four reservoirs: Cave Lake (320 acres), Comins Lake (382 acres, maximum pool), Bassett Lake (120 acres) and Illipah Reservoir (160 acres maximum pool) The southern portion of Ruby Lakes extends into the northeastern corner of the County. There are numerous small ponds and lakes in the County for a total of 773 water acres. Ninety streams (281 stream miles) have been surveyed in the County. White Pine County has sixteen warm or hot springs. Only one, Monte Neva Hot Springs in Steptoe Valley has been identified by the U.S. Geological Survey as having enough potential for geothermal steam to warrant investment.

Vegetation and wildlife occur throughout the County in patterns that generally reflect the elevations, which give them the optimum moisture and temperature combinations. Vegetation in the valley floors includes shadscale, sagebrush, and winterfat. Heavy bands of pinyon pine and juniper exist in the foothills giving way to mountain mahogany at the 7,500-foot level. Alpine forests cover the highest mountain slopes. Above 8,500 feet there are stands of white fir, Englemann spruce, and limber pine. At the 9,000-foot level, bristlecone pine forests can be found. Some of White Pine County's specimens of bristlecone, the oldest known living species, have been aged at over 4,000 years. The swamp cedar sub-species of juniper is found in three places in the world, all of which are located in White Pine County. White Pine County's wildlife includes the largest Rocky Mountain elk herd in the state, the second largest mule deer herd, and the third largest antelope herd. The wild horse population in the county is estimated at 1,100. Other species include mountain lions, bobcats, coyotes, cottontail rabbits, jack rabbits, upland game birds (sage grouse, blue grouse, chukar, Hungarian partridge, and doves); waterfowl including geese and several species of ducks; reptiles; and fish. Threatened and endangered species occurring the County include bald eagles, peregrine falcons, and several species of fish.

See Figure 3, White Pine County Map, Geographic Features, Figure 4, Map, Geothermal Hot and Warm Springs.

Water Resources:

Most of White Pine County is in hydrographic Region 10 (the Central Region) including the following sub-basins: Jake's Valley, Long Valley, Newark Valley, Tippet Valley, Spring

Valley, most of Steptoe Valley, Antelope Valley and Butte Valley as well as parts of Ruby Valley, Lake Valley and Railroad Valley. Ruby Lake is in the Humboldt River Basin (Region 4), and White River Valley is in the Colorado River Basin (Region 13).

Water available for urban uses, irrigation, livestock, and industrial development is taken from streams, springs, and ground water reserves. Mountain snow melts throughout the spring and summer. The water percolates into the ground emerging eventually as streams or forming underground reservoirs. The ground water occurs in alluvial valley fill and along the valley edges in the alluvial fan deposits. Springs occur in the mountains along valley slopes and in the alluvial valley fill where the ground water table has been exposed by erosion.

Seven valleys have sizeable quantities of ground water. They are: Butte and Jakes Valleys, Spring Valley, Steptoe Valley, White River Valley, Newark Valley, and Long Valley. All of them have existing water uses in both urban and industrial developmental and irrigated cropland. Steptoe Valley, which houses Ely, Ruth, and McGill is designated as a Subterranean Basin, giving preference to municipal and industrial water users. White Pine County has water rights for 25,000 acre-feet, which were designated for industrial uses for the White Pine Power Project preferred site in North Steptoe Valley. The County currently has an agreement with LS Power Development to use the water for a coal fired electrical power plant. In early 2006, the company announced plans to convert the original design from a water cooled plant to a modified air cooled plant reducing the amount of anticipated water consumption to 5,000 acre feet. The County had applications pending for 25,000 acre feet for power generation in Spring Valley and those were denied by the State Engineer in May 2006. The County maintains applications pending for power generation in Butte Valley as an alternate site for a coal fired power plant. In December 2005, Sierra Pacific Power filed on the County's points of diversion for the water permits in Steptoe Valley and the applications in Butte Valley for the purpose of constructing a second coal fired power plant.

See Figure 5, Hydrographic Regions; Figure 6, Hydrographic Basins in White Pine County; Figure 7, Water Commitments by Hydrographic Basin in White Pine County

Environmental Issues and Overview:

There are seven environmental issues, which impact the county's development efforts.

1. *Water is the most visible and critical environmental issue facing the community.*

In 1989, the Las Vegas Valley Water District filed on water rights in three rural counties. The filings represent a total of 863,000 acre feet of water, 337,000 acre feet of perennial yield plus "temporary mining" of an additional 526,000 acre feet per year. The filings in White Pine County are concentrated in Spring Valley and Snake Valley (Spring and Snake Valleys are the two valleys at the foot of Wheeler Peak and the Great Basin National Park). There are no filings in Steptoe Valley. The concern over the water filings stems from the potential environmental damage due to large scale pumping of water resources from the County and the

loss of water resources to support future economic growth in White Pine County. The temporary water mining could draw from the top one hundred feet of ground water, having an immediate impact on the water table, surface waters, and vegetation as well as the long-term impact on land use. The additional concern is that by setting a precedent for inter-basin transfers, the Las Vegas Valley Water District filings would open the door to further depletion of resources in the rural areas to support the uncontrolled growth of southern Nevada. There has always been a great deal of concern about the potential of a deep carbonate aquifer underlying the entire Great Basin region and whether inter-basin transfers could lead the way to depleting water resources throughout the region. The issue is still under review by the State Engineer. If granted, the applications in Spring Valley (78,200 acre feet from White Pine County and 13,000 acre feet from Lincoln County) would represent the largest withdrawal of water from a single basin since Los Angeles built its pipeline to draw water from the Owens Valley. The hearings before the State Engineer opened on September 11. The County is one of the few remaining protestants seeking to make a case to the State Engineer to deny or modify the award of water resources to support growth in Southern Nevada and to preserve the environmental quality and economic viability of White Pine County.

During the past two years, a private water purveyor and real estate company have purchased 1.2 million acres of land and water rights throughout rural Nevada. The Company's website outlined its express purpose to purchase land and secure water rights to facilitate land exchanges with BLM, sever the water rights and sell those to outside interests in the urban Southwest, and transfer the land to public ownership. This generates extreme concern among White Pine County residents because it could deplete water resources needed to sustain the area's quality of environment, economic development, and recreational opportunities and reduce the already limited amount of private property available to generate property tax revenues.

In 1998, White Pine County completed Phase I of its Water Resources Plan identifying general planning guidelines, basic information on water resources available; current, projected, and potential use of water resources; and short and long term strategies. Phase II was completed in 1999 using funding from a Community Development Block Grant to hire an hydrologist to complete the technical portion of the plan. The County has recently completed the 2006 Revision of the plan with the technical assistance of an engineering firm to provide a GIS data base and establish the format for a County initiated water resources program. The difference between the earlier efforts and the 2006 Plan is the emphasis on an active program of establishing a baseline, monitoring, management, and mitigation.

The White Pine County Water Advisory Committee and County Commission will be reviewing the various organizational structures available under Nevada State Law to determine the best approach to a citizen based water resource program.

White Pine County's water is one of its most precious resources and a key to its development potential. The loss of the water whether to Las Vegas Valley Water District or private water companies poses a threat to the County's environment and economic future.

2. *Ely's primary water source, Murry Springs is located close to the intersection of US 6 and the Highway "Bypass" from US 50/93. The amount of truck traffic on the route has increased dramatically and the City is quite concerned about the safety and integrity of the springs. The Wellhead Protection Plan recommends monitoring wells and a back up well that could replace the springs if they were contaminated. The City is working to implement the recommendations of the Wellhead Protection Plan.*

3. *Ely's location at the confluence of Murry and Gleason Creeks presents some problems for the community. The downtown area is a flood zone. Renovation of the storm drains is needed to eliminate threats to downtown and the residential area of Central Ely. .*

4. *The fire seasons for the past several years have raised serious concerns about pinon juniper encroachment and urban interface issues. The heavy canopy created by thick stands of pinon and juniper on the foothills surrounding Ely present serious fire danger, reduce productivity of the range for wildlife and livestock, and increase potential for serious damage due to erosion following a fire. The Eastern Nevada Landscape Restoration Initiative is an effort to offset damage done by previous fire management strategies, reduce fire danger, improve the ranges, and enhance economic development.*

5. *The County is working with the Bureau of Land Management on the completion of its Ely Resource Management Plan, which will determine the agency's policies regarding lands it administers in White Pine and Lincoln Counties. The Humboldt Toiyabe National Forest is beginning its Forest Plan process. The Congressional delegation is working on the White Pine County Conservation, Recreation, and Public Land Bill, which designates over 500,000 acres for wilderness and 45,000 acres for land disposal. All three actions have the potential to impact public land use policy. In a County where 93 percent of the land base is administered by the federal government, the Public Lands Bill and planning efforts can have a significant impact on the its direction and development potential.*

Environmental Overview:

Endangered Species of Plants and Animals: White Pine County hosts species of endangered fish, migrating bald eagles, and several candidate species currently under consideration as threatened or endangered species. The White Pine Power Project, Environmental Impact Statement identified three endangered species within its study area: bald eagle, the Pahrump killifish, and the Big Springs spinedace. Two other endangered species, the White Pine spinedace and White River springfish, are located within the county. The ferruginous hawk, which inhabits the county, is being studied as a candidate for the endangered species list. In addition, nine plant species, twelve fish species, and six terrestrial wildlife species which inhabit White Pine County are under review by the U.S. Fish and Wildlife Service for consideration as threatened or endangered species. The potential listing of the sage grouse as a candidate for Threatened and Endangered status was of great concern to the County, which has abundant sage grouse habitat. Sage grouse occupy different areas for breeding, nesting, and feeding. If critical habitat for all

three were identified through the planning process it could cause substantial delays and increased costs for development throughout the County. The listing was not approved in 2005 but the potential for future efforts to list them would impact the County's ability to develop its resources for economic activity. White Pine County hosts a population of almost 1,100 wild horses, which are not threatened or endangered, but they are protected under the provisions of the Wild Horse and Burro Act. The potential impact of any projects on these species is evaluated on a site-specific basis.

Historic Register: The White Pine County Courthouse, Requa Passenger Depot (now the Ely Senior Center), the Nevada Northern Passenger Depot in East Ely, McGill American Legion Hall, and the original L.D.S. Stake Center in Ely are listed on the National Register of Historic Places. The communities of Ely, Ruth, and McGill have several buildings, which could qualify for the National Register of Historic Places, and the State's Office of Historic Preservation has stated that the commercial district of McGill and the Nevada Northern Rail Yards could qualify as historic districts. Native American and historic mine sites that have potential to be listed on the register are located throughout the county on both public and private land.

Floodplain/Wetlands: The County has not been fully mapped for the flood insurance program. The flood plain map of the City of Ely identifies the low lying areas of Murry Canyon (southwest area of Ely) and the Central Ely area running the full length of downtown Ely as being in the flood zone. Steptoe Valley, north of Ely is in both a flood plain and sheet flow area. The western boundary of McGill is in the sheet flow area, a portion of Baker is in a flood plain, and a portion of the highway leading to Ruth sits in a flood plain. The City of Ely has a flood control ordinance in place and is a member of the federal flood insurance program. White Pine County is currently working on its ordinance.

The closest jurisdictional wetlands area is at Ruby Lakes National Wildlife Refuge (U.S. Fish and Wildlife Service), 90 miles from Ely. The Army Corps of Engineers has recently identified Duck Creek and Steptoe Creek in Steptoe Valley as potentially navigable waters. If Corps of Engineers claims jurisdiction over projects involving areas adjacent to the two creeks, it would have significant impact on the time frames and costs of developments, both public and private. Of greatest concern is the potential impact on renovation of the Nevada Northern Railroad track.

Hazardous Materials: There is one site designated as a Super-Fund site in the county; the Silverado Mine.

The Kennecott smelter site includes several acres of industrially zoned property and some buildings which could be used for industrial development but the company faces significant environmental issues with the property that was used for processing copper ore from 1906 through 1983. The County worked with the Brownfields Program in 2005 to clean of the "Old White Pine County Landfill" south of Ely. The project eliminated an eyesore and it made acreage available for residential development. In addition, the White Pine Historical Railroad Foundation worked with Brownfields to remove barrels of potentially hazardous material from

the East Ely rail yards.

Several public buildings have asbestos, lead based paint, and underground tank issues that may interfere with the ability of public entities to remodel and use them for new purposes. Over 92 percent of the County's housing stock was built prior to 1978 and will need to meet new requirements for testing and abatement to qualify for financing or rehabilitation funds.

White Pine County has been given status as an affected unit of local government for oversight, study, and planning activities in conjunction with the proposed High Level Nuclear Waste Repository at Yucca Mountain. The primary and secondary transportation routes proposed to transport the waste to the repository are in the county. Primary impacts are anticipated for transportation systems and emergency services.

The City of Ely's concern about the potential for contamination of its primary water source at Murry Springs because of its proximity to US Highway 6, prompted formation of a Wellhead Protection Committee. The Committee is exploring means to protect Murry Springs and the City's wells. The Murry Springs area has been posted as a Wellhead Protection Area, the community is completing its Wellhead Protection Plan.

Air Quality: The SO₂ non-attainment area status in north Steptoe Valley was dropped by the EPA in 2005.

Water Quality: The County has never had a ruling of a sole-source aquifer on any of its environmental impact statements, environmental assessments, or state clearinghouse review. Water quality has not been in question in any of the water systems in the county. The City completed a Water Supply, Storage, and Distribution Improvement Project, which improved operation, put the City on a zone system by elevation, and extended the water system to serve new growth south and east of the City limits. The communities of McGill and Ruth have completed a wastewater collection system project to replace old, inadequate, and poorly mapped sewer lines that ran through private property rather than the street rights-of-way. This eliminated the constant breakage and potential for contamination due to raw sewage. Ruth faces a serious water shortage and is working to fund the work required to secure its primary and back up water systems. Baker has received funding to extend its water system to serve the National Park and the Lehman Creek residential area but its water applications are junior to the Las Vegas applications and it has not been able to proceed with the project. Lund has completed its feasibility study and the community has turned down funding to put a water system in place.

Sewage Collection and Treatment Facilities: Ely's sewage system has an average flow of 0.9 million gallons per day. The system is in compliance with its discharge permit but has identified the need for a clarifier to accommodate growth.

No records of demand or capacities of the systems in Ruth and McGill have been kept. In 1984, the state's Department of Environmental Protection deemed the McGill Sewer one of the worst

in the state. Inadequate sewage ponds were at capacity and sewage was over flowing into areas where it could contaminate surface water in Steptoe Valley. The McGill Ruth General Improvement District replaced the primary collection system and sewer ponds in McGill, and began correction of the problems with the Ruth sewer system. With the mine in full operation, the community of Ruth needs to increase the capacity of its wastewater treatment facilities to accommodate growth.

The City of Ely had been operating the Regional Land Fill as a Class II facility for the Ely, Ruth, and McGill areas. The daily volume at the landfill forced the City to secure a Class I permit. The City has also applied for a Class III permit to expand the landfill facility for construction waste. The long-term need is to secure and develop a new site for the regional landfill. The outlying areas of Lund, Baker, and Cherry Creek have access to private collection services. White Pine County's 2006 Solid Waste Management Plan Revision was approved by Nevada Division of Environmental Protection in August.

2. Political Geography:

History:

Earliest inhabitants of White Pine County lived about 11,000 years ago. These pre-historic people depended on hunting and gathering until 950 to 750 years ago. At that time, evidence suggests limited horticultural activities mixed with hunting and gathering. Forefathers of the modern Shoshonian inhabitants appeared from 950 to 650 years ago.

The Western Shoshone tribes continued the early Desert Culture way of life until the arrival of white men in the 1840's and 1850's. The Shoshone were nomadic. The arrival of horses in the 1800's made their hunting and gathering lifestyle easier and enabled them to cover more territory to search for food and trade with other tribes.

Jedidiah Strong Smith, the first white man to cross central Nevada, traveled through the area now known as White Pine County in 1827. The earliest settlements were stations for Pony Express riders and military posts to protect prospectors on their way to the Comstock Lode. In 1859, Captain James H. Simpson followed Smith's route across the Great Basin and mapped state and mail routes. Simpson established the first settlement in the county at Shellbourne Station. In 1860 it was used by Pony Express riders and in 1863 it became a telegraph station. During its early history, Schellbourne Station also housed troops to protect travelers.

In 1859, Major Howard Egan located a stage station in Egan Canyon, five miles from Cherry Creek. The station was used by the Pony Express and later by the stage line. In 1864 a five stamp mill was built at Cherry Creek. This was the first milling operation in eastern Nevada. Other pony express stations in White Pine County were at Antelope Springs, Butte Valley, and Ruby Valley. In 1865 the White Pine Mining District was formed. A few settlers came to the area as early as 1867 to farm; however, the limited water and primitive irrigation techniques available meant agricultural development did not flourish.

In 1868, the area became the center of intense mining activity and rapid growth. Rich gold and silver discoveries brought miners by the hundreds. Mining camps and boomtowns sprang up throughout the County. Prospectors eager to strike it rich lived in tents, shacks, and even caves. The mining camps were wild and unruly. Mines showed record profits. Then, one by one, the mines gave out, the miners left, and the boomtowns and camps became ghost towns. The gold and silver boom was over in twenty years. Boomtowns Treasure Hill, Shermantown, Hamilton, Cherry Creek, Osceola, Ward, Taylor, and Mineral City are now ghost towns. Hamilton, the first county seat, had a population of 10,000 between 1869 and 1875. Cherry Creek grew to 6,000 by 1883. Ward and Taylor each housed 1,500 miners. Taylor was the County's center of social activity with seven saloons, three general stores, an opera house and a Wells Fargo office.

In 1869 White Pine County separated from Lander County so miners would not have to travel to Austin to file claims. But, the final boundaries of the county were not settled until 1925. When Hamilton was destroyed by fire in 1875, the County seat was moved to Ely.

Ely grew up in the old Mineral City site. In 1877, John Ely, a speculator and entrepreneur who became a millionaire from mining interests in Pioche loaned \$5,000 to A.J. Underhill. With that money, Underhill bought the land now comprising the Ely townsite and the Selby Smelting Plant. Underhill named the town Ely after his benefactor. Originally Ely was just another of the many gold mining communities in the County. By 1899, the gold mining efforts were recognized as fruitless and the miners turned their attention to copper for the first time. Claims near the present site of the Liberty Pit were purchased and were being mined by Joseph Giroux. In 1900, Edward Gray and David Bartley purchased the Ruth Mine. They proved so successful that M.L. Requa from Oakland, California, invested in the area. He was able to negotiate a merger of the New York and Nevada Copper Company (working the Copper Flat area) and the White Pine Copper Company at Ruth to create Nevada Consolidated Copper. Entrepreneurs from the east purchased the Chainman Consolidated Copper Company in 1906. The Nevada Northern Railway was critical to the copper industry. Under Mark Requa's leadership, Nevada Consolidated Copper Company built a 150-mile track to haul ore from Copper Flat west of Ely to Cobre on the Southern Pacific Railway in 1906. It was this ability to transport ore to copper markets that made it possible for the copper industry to prosper. Between 1906 and 1914 investors shifted the pattern of ownership back and forth until it focused on the two main companies Kennecott Copper and Consolidated Copper Mines. These two reigned for forty-four years until Kennecott Copper purchased all of the Consolidated Copper Mines holding in White Pine County in 1958. During this time, the county also had six tungsten mines in operation and intermittent gold and silver mining activity continued.

The copper boom gave rise to company towns of Ely, Ruth and McGill and smaller communities housed miners at Kimberly, Veteran, Ely City (East Ely), Smeltonville, Reipetown, Ragtown and Steptoe City. Some of these communities had all the earmarks of the mining camps and boom towns of the earlier silver era. However, because Ely, Ruth and McGill were company towns, they managed more orderly growth from the start and had better services than most other mining

communities in the state.

Units of Government:

There are two units of local government in White Pine County, the County and the City of Ely. Additional governing authority rests with the tribal governments, School Board, and general improvement districts. The White Pine School Board, William Bee Ririe Hospital Board, Baker and McGill Ruth Water and Sewer General Improvement Districts, and the White Pine and Baker TV Districts are elected boards. All of them are able to levy fees, incur long-term debt, and operate independently of the City and the County. White Pine County is governed by a five member Board of County Commissioners. The County provides police protection through the County Sheriff's Department, assessment, tax collection, and recording, maintenance of county roads, emergency aid to indigents through the County Social Services Department, and overseeing county facilities such as the County parks and recreation facilities, library, and district court. The County contributes to the Regional Planning Commission and administers the budgets of Ruth, McGill, Lund, Preston, Cherry Creek, and Baker. The six communities are not incorporated and operate through community boards that report to the County Commission. The County employs 125. White Pine County faced potential insolvency at the end of 2005 and came under the supervision of the Nevada Department of Taxation. The threat of insolvency was averted with increased revenues including tax increases allowed under state law to resolve a severe financial condition, a franchise fee imposed by the County, lay offs, and substantial budget reductions. The County and Department of Taxation were able to avoid closure of county services and facilities. The County remains under the supervision of the state and will continue to do so until it is clear that the financial condition has been resolved and the County has policies and procedures in place to support financial health. Ely is the only incorporated city in the county. It operates under a Mayor-Council form of government and employs 33. The City's responsibilities include water and sanitation facilities; fire protection; maintaining the city streets and cemetery and providing city parks. The City and County negotiate an annual cooperative agreement to share costs and responsibilities for fire protection, law enforcement, animal control and operation of the cemetery.

The five member Ely Shoshone Tribal Council governs the Ely Shoshone Reservation, independent of any other local state, or federal entities. The tribal government provides law enforcement, housing, medical and social services, planning and economic development for its members. A portion of the Ibapah Reservation is in the northeastern corner of the County. The tribal government is located in Utah.

The Regional Planning Commission is a six member board with representatives appointed by both the City and the County. The Board is responsible for developing and administering the zoning ordinance and master plan, and conducting public hearings on any requests for variances in application of the zoning ordinance. The 1998 Land Use Plan was the first revision of the County's Master Plan since 1970.

The White Pine County Tourism and Recreation Board is comprised of representatives of the City Council, County Commission, motel and hotel owners, and the business community. The

board administers the County's room tax revenues for recreation and tourism promotion projects.

Land Use and Zoning:

Ninety-three percent of the land in White Pine County is administered by four federal agencies: Bureau of Land Management (4.4 million acres), National Park Services (Great Basin National Park, 77,640 acres), U.S. Forest Service (Humboldt National Forest, 825,592 acres) and the U.S. Fish and Wildlife Service (a portion of the Ruby Lake National Wildlife Refuge, 10,706 acres). The U.S. Forest Service administers three Wilderness Areas for a total of 298,000 acres. The Bureau of Land Management administers 31,850 acres of specially designated areas (Garnet Fields Rockhounding Area, four geological areas, four scenic areas, and five natural areas) and thirteen areas identified for possible wilderness designation. Tribal lands constitute 1.24 percent (70,852 acres) of the County's land area including the Ely Shoshone and Goshute Reservation. State government administers .2 percent of the County's land including the Nevada State Parks Division (Cave Lake and Ward Charcoal Ovens State Parks) the Nevada State Prisons Department (Ely State Maximum Security Prison and the Ely Conservation Camp), University of Nevada (Great Basin College), and Nevada Division of Wildlife (Steptoe Valley Wildlife Management Area, 5,000 acres). Local governmental units including White Pine County, the City of Ely, and the White Pine County School District own approximately .03 percent of the land area in the County. If the White Pine Public Lands Bill passes it will result in several changes in administration of BLM land including: 1) The Ely Shoshone Tribal proposal would deed 3,500 acres to the tribe in two parcels south of Ely and one north of McGill, 2) 545,320 acres of wilderness would be designated in 13 new Wilderness Areas and boundary adjustments to 2 existing Wilderness Areas, 3) over 7,000 acres would be conveyed to the State of Nevada including expansion of state parks and the Steptoe Valley Wildlife Management Area, 4) 1,900 acres would be conveyed to White Pine County for expansion of the Airport and the Industrial Park, and 5) up to 45,000 acres would be made available for land disposals.

Privately owned land in White Pine County totals approximately 5.04 percent. This is divided among urban areas, privately owned industrial and mining developments, and agricultural lands (concentrated in Steptoe, Spring, and Snake Valleys and the Lund-Preston area of White River Valley).

Agricultural lands comprise the majority of private land in the County. According to the 2002 Census of Agriculture, there are a total of 121 farms and ranches in the County accounting for 247,446 acres of farmland with an average size of 2,152 acres each. The County's primary agricultural activities include livestock grazing (cattle and sheep) and alfalfa. The state clearinghouse has not identified any prime or unique farmland within the area reviewed for projects in White Pine County. The Cooperative Extension Service reports alfalfa cropland designated as Class I Agricultural land throughout the County.

The County's zoning ordinance was last revised in 1987 and the zoning maps were last updated in 1989. Since that time, modifications have been made through zone changes, special use permits, and division of large parcels. The ordinance limits light and heavy manufacturing to the County's Industrial Park, the Nevada Northern Railroad Yards, and the Kennecott smelter site in

McGill. Residential and commercial zones are concentrated in the communities of Ely, Ruth, McGill, Baker, Lund, the land along US 93 between Ely and McGill, and a residential area known as Cross Timbers northwest of Ely. The remainder of the County is zoned for agricultural land, open space, and five-area residential property. Since the zoning ordinance was completed, residential and commercial growth both southeast and north of Ely lead to several requests for zone changes. Growth between Ely and McGill resulted in strongly disputed conflicts between developers and rural property owners. From 1998 through 2000, the County completed a revision of the County's Land Use Plan, the City's Master Plan, and developed a Master Plan for the McGill Highway Area. Land use maps were developed for Ely, the Ely/McGill corridor, Baker, Ruth, McGill, Lund/Preston, and the County as a whole. These are the first additions to the County's Comprehensive Master Plan approved in 1970. The planning documents have not been updated since 1999. In 2006, the County began an initiative to bring its basic planning documents up to date. In August 2006, the County completed and approved its Water Resources Plan. The Public Land Users Advisory Board is working with the State Land Use Planning Agency to update the County's Public Land Use Policy. The Regional Planning Commission is working with the Economic Diversification Program to prepare for the revision of the Land Use Plan. The emphasis on land use and natural resources comes from the need to be able to work with the BLM Ely Resource Management Plan, the Public Lands Bill, and the hearings on the Southern Nevada Water Authority applications for water rights in Spring and Snake Valleys.

See Figures 8 through 14, Land Use Maps; Figure 15, Land Ownership Map, Figure 16, Land Ownership by Acres and Percent.

3. Economic History:

Throughout its history, White Pine County's economy has been tied directly to the fortunes of the mining industry. In its early years, the County's population and economic stability were subject to the boom bust cycles that followed gold and silver strikes in the area. With the construction of the railroad the pattern changed in the early 1900's. Copper mining and smelting dominated economic activity in the County. By 1958, Kennecott Copper had purchased all the major copper holdings in the County and became the County's primary employer. The company provided more than jobs. The company operated as a self-contained industry providing transportation, repair, maintenance, and training programs. It also provided housing, operated a dairy, subsidized freight services, and its workers provided the backbone of community organizations and leadership. The net proceeds of mines taxes it generated provided major tax revenues to the area and the state.

In 1978, falling copper prices, the competition from foreign copper producers and increased operating costs due to air quality controls imposed by the EPA forced Kennecott to close the copper mine and cut its smelter workforce drastically. Each year Kennecott cut its workforce even more until it had laid off 1,148 workers by the end of 1982. In 1983, an additional 300 jobs were lost when Kennecott closed the smelter and stopped freight service by the Nevada Northern

Railway. In 1984 and early 1985, Kennecott continued to cut its support services and security forces, laying off an additional 220 from the copper operation and 20 from the Nevada Northern. The official total did not include salaried and managerial staff that elected to take early retirement rather than be laid off or transferred from the area. The loss of Kennecott as the major employer caused continually high unemployment rates, decreasing population, loss of business activity forcing local businesses to close, and loss of tax revenues to meet needs for public services. The loss of net proceeds of mines meant a significant decline in County and state tax revenues. Prior to 1978, Kennecott and White Pine County generated 20 percent of the state's total net proceeds of mines tax. After 1978, that fell to .2 percent. As population dropped so did retail sales. Housing construction and sales stopped and property tax revenues fell. County and City revenues dropped drastically because of the local economy at the same time there were major changes in state tax law limiting growth of revenues.

The area's economy declined steadily from 1983 through 1986. Following the close of Kennecott's smelter, Silver King's Taylor site represented the major mining activity in the County until it was closed January 1, 1985 due to steadily falling silver prices. The only growth occurred through a slight increase in tourist traffic causing growth in tourism related businesses and oil exploration and drilling activity. In late 1986, all local oil exploration and drilling activity stopped following changes in the world oil market. By late 1986, the County began to recover from the economic decline it suffered for almost a decade. Gold exploration and mining began to increase. Safety Industries and Civic Supply located in McGill employing thirty-three workers and representing the County's first manufacturing activity independent from mining. Tourism related industries rebounded with the designation of the National Park and donation of the railroad to the City of Ely. New tourism facilities generated sixty jobs in 1986-87. The state legislature's decision to site the new maximum-security prison near Ely brought new confidence to the area. Real estate sales and inquiries to the County's Economic Diversification Program regarding opportunities for new businesses both increased.

In the late 1980's the County's economy rebounded quickly. Mining activity increased with thirteen active mines and mining employment reaching almost 1,100. The largest mining company in the County, Alta Gold, hired over 600 at its major project, the East Robison site. At the same time, prison construction was completed and the state hired 370 employees to staff Phases I and II. Unemployment rates dropped below 5 percent. The state carried out a nationwide recruitment program to attract new employees to the prison. Local businesses began to expand to provide services for a growing population and the increasing tourist trade. Mining wages averaged \$16 per hour, making it difficult for other sectors of the economy to compete for the available workforce.

There were three impacts from the rapid growth and high wages paid by the mines: 1) wages in services and trade rose slightly as local businesses increased wages to attract workers, 2) Safety Industries and Civic Supply transferred their manufacturing operations to their Missouri site due to work force issues, and 3) labor force availability and wage rates became negative rather than positive aspects in the area's industrial attraction effort.

By 1990-91, the County's mining activity took a downward trend and in turn impacted services and trade. Alta Gold closed several of its projects and AMSELCO carried out its long term plans to close its Alligator Ridge mine by 1990. That project was preserved when AMSELCO sold its interests in the mine to USMX. Alta Gold entered into a joint venture with Magma Copper of Arizona. Magma assumed control of the East Robison site and continued to lay off workers to try to make the operations economical to continue. In 1990, mining employment represented 23 percent of the County's employment and the County represented 6.2 percent of the state's mining employment. The assessed value of mining projects was \$228.7 million as opposed to \$13.5 in 1985. By 1992, the East Robison gold operation was closed. The County lost over 700 mining jobs between 1989 and 1992. The local business community continued to experience 10 to 20 percent declines in taxable sales and expansion plans were put on hold. Throughout 1992 and 1993 the County waited for news that the Magma Nevada Mining Company would proceed with plans to reinstate copper mining at Ruth. Magma anticipated going to construction on its copper mining project in June 1993. With the Sierra Club/Mineral Policy Center challenge on the BLM Environmental Assessment, that time frame was delayed for an additional year. By 1994 unemployment rose to 12.8 percent as unemployed miners stayed in the area hoping for jobs with Magma. The Environmental Impact Statement was approved and Magma began construction in early 1995. The construction at East Robison changed the County's economic picture. The construction workforce peaked in August, 1995 with over 750 temporary workers in the area. Housing and motels were full. The promise of Magma's employment and the seventeen-year projected life of the mine added new confidence. Housing construction increased and a new business district developed along the highway east of the city limits. A major event for the County was the grand opening of the McDonald's Restaurant in August 1995. This was Ely's first major fast food chain outlet, and the lines at the drive up window backed up traffic into the highway for several weeks. The new areas of Ely east and south of the city limits had all the hallmarks of growth, new construction, new business and traffic. At the same time, the downtown district continued to deteriorate and vacancy rates increased. By 1996, the mine was in operation. Broken Hill Properties from Australia bought Magma's holdings and took over the operation of the railroad. BHP employed 450 and represented a major economic force in the community. Alta Gold began a new mining operation in the County and employed sixty. REA Gold closed the Mt Hamilton mine and its employees found jobs at BHP and the Homestake Mine in Eureka. Placer developed new projects to extend the life of their mining properties. Tourism continued to increase and the business community expanded to met the needs of tourists, mining companies, and mining employees. With mining on the increase, the prison found it difficult to recruit employees and reported fifty-five to seventy vacancies on an on-going basis. Industrial development was increasingly difficult with the available infrastructure and work force employed by the mines. The community initiated programs to nurture new small businesses and entrepreneurial activity. New businesses included the Murry Springs Bottling Company, bottling and distributing Elyon Water from the City's water source, Murry Springs. Western Rock and Boulder purchased the waste rock from the Mt. Hamilton Mine and began distributing it throughout the country for landscape rock.

By late 1998, concerns about the stability of the copper market were beginning to surface. And, on June 28, 1999, BHP announced that it was placing the copper mine at East Robison in "Care

and Maintenance” status and was laying off 433 of its 450 employees. BHP employees were given sixty days’ pay for administrative leave and varying amounts of severance pay. At the same time, Alta Gold announced that it filed for bankruptcy and closed the remaining projects in White Pine County as well as the office in Ely. After almost of two decades of growth and decline with the silver and gold industries, the community thought it could look ahead to a period of prosperity and stability. Instead, it braced itself for the second major economic dislocation. Many of the newcomers with the Magma/BHP operation came from their mining projects in Arizona. With the BHP closure impacting all of its North American sites, there were no jobs in Arizona to return to. Employees remained in the Ely area through the summer and into the fall. They stayed long enough to collect their administrative pay, try to sell their homes, and let their children finish the school year. The impact of the BHP closure hit hardest starting in early 2000 and lasted through the summer as families relocated in time for the next school year. The loss of the BHP jobs represented 13 percent of the total labor force and 24 percent of the annual payroll. By early 2000 the total job loss from both direct and indirect employment was over 900 and represented 25 percent of the total labor force at the time the mine closed. School enrollment dropped by 12 percent reducing school revenues and impacting programs offered to students. Businesses suffered as taxable sales declined an average of 37 percent each month from the time the mine closed. Hardest hit were automobile sales, construction, and home furnishings. Housing prices declined sharply. Sixty-five home foreclosures and fifty-six business and personal bankruptcies were filed in Ely between mid-1999 and early 2000. Local governments struggle to deliver programs and maintain facilities in spite of severe losses in revenues. The loss of the assessed valuation of the mine was compounded by the 27 percent decline in residential values for the new home constructed for the BHP workforce. The City of Ely and White Pine County both contended with budgets that could barely cover mandated services and they must make difficult decisions on eliminating non-mandate service like recreation and the library and staff layoffs. Public employment became the largest single employment sector with 42 percent of the labor force and tourism continued to sustain the workforce and business community while the County continues to explore ways to diversify its economy. As housing prices fell, the housing market became more active. Homes were purchased for retirement and second homes, largely by residents of the Clark County area. By 2001-2002, sales and use taxable sales increased in the three sectors related to home improvement and furnishings as new home owners began to remodel. Interest in the area’s potential to host coal fired electrical power plants increased in 2000-2001 due to the energy crisis in southern California. The first wave of interest in Nevada as a site for power generation focused on natural gas. When natural gas prices increased, the attention turned to coal. White Pine County began working with both PG&E and Duke Energy. It signed an agreement for the use of the permitted water rights with PG& E and Duke filed for new water rights after negotiations with Kennecott for use of their water fell through. The Enron issue created significant obstacles for all energy companies, but it was especially difficult for PG & E because their development entity become involved with the bankruptcy proceedings for their utility section. The project did not move forward during the period of the agreement, 2001-2003. By 2002, both Duke and PG&E dropped development plans, new small industries began to express interest in the area due to quality of life and outdoor recreation opportunities; housing prices doubled over the prices in 1999-2000 and realtors complained of the lack of housing stock. In early 2003, the water agreement with PG & E

expired. By the end of the year, LS Power Development of St Louis expressed interest in the County's potential for a coal-fired plant. In February 2004, the County entered into a development agreement with LS Power and the company began to move quickly through the steps required for the development phase. In April 2004, the area's economy began to rebound as Quadra Mining Company purchased the Robinson mine from BHP. By July, the mine was in operation and within a year, it was at full operation with 500 employees. In early 2006, Sierra Pacific Power announced plans to build its own power plant of similar size and location to the LS plant. As housing stock diminished, new homes were built, especially in the urban interface area south of Ely. Economic development activity included a new small aluminum fabrication plant manufacturing exhibit stages, a new small metal fabrication plant manufacturing trailers, and a biomass business planning to manufacture pellets for wood stoves.

See Figure 17, Labor Force Trends, 1972 through 2006, and Figure 18, Mining Employment Trends.

Natural Resource Based Economic Trends:

The County's reliance on its natural resources for its economic strength historically include its mineral wealth and its millions of acres for livestock grazing. In more recent years, the area's scenic beauty, wildlife, and high desert climate provided the basis for tourism and more recently the recreation and leisure residential development for retirement and second homes. The County's substantial water resources have potential as an economic benefit, although the issue of water exportation is extremely controversial.

Between 1906 and 1978, the Kennecott Copper mine was one of the largest open pit copper mines in the world. It produced 5 billion pounds of copper valued at approximately \$53 million per year. Silver production from the Ward and Taylor mine sites has been estimated at 15 million ounces. Estimated silver and gold ore reserves total over 250,000 tons. Other mineral resources mined in White Pine County include 8 million pounds of lead, 14 million pounds of zinc, gravel, sand, and oil. Since 1954, the Railroad Valley Oil Fields have produced 30,610,379 barrels of oil and geologist estimate there are at least 700,000 barrels in existing wells.

The Bureau of Land Management and the U.S. Forest Service report approximately 307,192 AUM's for livestock grazing on the 5,000,000 acres they administer in White Pine County. Agricultural production generates \$13.8 million in annual direct sales according to the 2002 Agricultural Census.

White Pine County's scenery, alpine meadows, lakes and streams, highly decorated caves, ancient bristlecone forests, and wildlife draw visitors to enjoy the Great Basin National Park, Cave Lake State Park, and outdoor recreation on public lands. The County produces trophy elk, antelope, and mule deer and holds the state records for northern pike and German brown trout. Hunting activity includes sage and blue grouse, waterfowl, and small game as well as big game species. An analysis of hunter days and average expenditures shows that hunting and fishing activity in White Pine County generates approximately \$5.4 million per year. The high desert climate offers a welcome retreat from the heat of the southern Nevada desert. The Bureau of

because they have taken jobs below their ordinary skill and income levels to stay in the area.

The local labor market area is White Pine County. There are no major population centers on its boundaries that provide employment or workforce for the local area. State and federal agencies recruit and draw employees nation-wide. In the past, the labor force in rural Nevada has been fluid and moved to where the mines were in operation. Former White Pine County residents maintained their houses in the area while working in mines in elsewhere until jobs were available many returned to Ely when Quadra opened the mine. State agencies, including the Ely State Prison and the Community Mental Health Center report difficulty recruiting and maintaining workforce for Ely, especially for professional positions. The state provides minimal recruitment funding and the community is working with the agencies to provide information on the local area and lifestyle to help with their efforts.

Services to unemployed and under-employed workers include Employment Security Department and Job Opportunities in Nevada services for career counseling, job search, classroom and on-the-job training. The Nevada Bureau of Vocational Rehabilitation provides similar services for the area's disabled population. Employers can use the agencies to help advertise positions, screen and test applicants, and fund on the job training. Many of the services offered are funded by federal programs designed to retrain and relocate to jobs rather than to stay in the area. Federal budget cuts to employment and training programs are impacting the level of services available in White Pine County, especially for youth programs.

See Figure 19, Labor Force, Weekly Wage Rates by Employment Sector, and Figure 20, Characteristics of the White Pine County Labor Force by Sex, Racial and Ethnic Characteristics, Age, and Educational Attainment.

3. Historic Population Trends, Current Population, Population Characteristics:

Since the 1800's the County's population reflected the boom bust cycle of the mining industry. As early as 1868, the population was 10,000 in Hamilton alone. Throughout the 19th Century, gold and silver camps flourished and then became ghost towns overnight. From 1900 to 1910 the opening of the copper mines caused a 279 percent increase in population. The County's population reached a peak of 12,377 in 1940. In the 1950's the major copper holdings were consolidated under the ownership of Kennecott Copper Company. The mergers resulted in substantial mine layoffs and the population fell to 9,424. By 1970 it had risen to 10,150. The mine, and smelter layoffs were responsible for a 21 percent decline in population when the population dropped to 8,167. Following the 1980 Census Kennecott closed the smelter and railroad closed and the University of Nevada's Bureau of Business and Economic Research estimated that the population dropped to 7,640 by 1985. The 1990 Census showed that the population had risen to 9,000 again due to increases from the gold mining industry. Between 1970 and 1980 net out-migration was a 28 percent loss and from 1986 to 1996 it was a 22 percent growth rate. At the same time the state experienced a growth of 53 percent between 1970 and 1980 and a 39 percent growth rate between 1980 and 1990. Population continued to

fluctuate in the early 1990's and rose from 1994 to 1999 with the employment and business activity from the BHP mine. With the closure of Robinson mine, the population dropped to 9,181 (Census) in 2000 and continued to drop until it reach 8,842 in 2003. The population began to increase in 2004 to 8,966 and to 9,275 in 2005. The population estimates reflect an increase of 1.4 percent in 2004 and 3.4 percent in 2005 making White Pine County the fourth fastest growing County in the state and 46th fastest growing County in the country.

Changes in population characteristics also reflected the trends in the local economy and the mining industry. Statistically, the County's population has always been primarily Caucasian. In the early 1900's the County was a true melting pot. Most newcomers were immigrants. French and Spanish Basques worked on the ranches. Slavic, Greek, Italian, Japanese, and Chinese immigrants worked in the mine, smelter, and on the railroad. Language barriers separated neighborhoods and many McGill residents still remember growing up in Greek Town or Slav Town. The rich cultural heritage from the turn of the century has had an important role in the character of the community. In 1980, the county's population was 93 percent Caucasian, which includes 9 percent Hispanic, .4 percent Black, 3 percent Native American, .6 percent Asian and 3 percent other. By 2000, the Census showed that the population was 86 percent Caucasian, 4 percent Black, 3.3 percent Native American, .8 percent Asian, and 3 percent)Other. The change has come from the influx of newcomers with new job opportunities at the mines and the prison as well as the prison inmate population. With 1,000 inmates at the maximum-security prison and 120 inmates at the Ely Conservation Camp, the population characteristics shifted from a nearly equal division between men and women in 1980 to 56 percent men and 44 percent women in 2000.

Between 1970 and 1980 the County's urban population declined while the rural population increased. The population of McGill declined by 34 percent and Ruth by 38 percent. The two communities housed the work force for the smelter and the mine and carried the burden of the Kennecott layoffs. The population of Ely decreased by 21 percent. At the same time the rural population increased by 30 percent and the increase has been attributed to long time county residents returning to ranches and self-employment following the Kennecott closures. By 1990 the trend slowed and increases were seen in all areas of the County.

The County's population density decreased between 1970 and 1980 and then increased from 1980 to 1990 and continued to increase as the population increased through 1990 and 2000. The median age has increased steadily which is consistent with the trend statewide. And, average household size declined to 2.42, which is also consistent with statewide trends.

Population and Population Characteristics: The 2000 Census provides the most recent detailed analysis of the County's population characteristics. The State Demographer's office provides annual estimates of population and population distribution throughout the County and projections for population changes for twenty-year periods.

The 2000 Census data on population characteristics show that the percentage of male and female residents remained roughly the same as the 1990 Census at 43.8 percent female and 56.2 percent

male. Racial composition remains the same as the 1990 Census data, The County wide population is 86 percent Caucasian, 4.1 percent Black, 3.3 percent Native American, .6 percent Asian, 3.1 percent Other, and 2.1 two or more races. The total Hispanic population for all races is 11 percent. The mean age has increased from 33.8 in 1990 to 37.7 in 2000 and reflects trends statewide (33.3 to 35) and nationally (32.9 to 35.3) and the increase in the adult male population because of the inmates housed at Ely State Prison. Population characteristics remained constant from the 1990 Census and the data from both are significantly different from prior Census figures.

According to the 2000 Census, the median household income in White Pine County is \$36,688 and the median family income is \$44,138 (reflecting the large number of Ely State Prison, Ely Conservation Camp, and White Pine Care Center residents who are reported as single family households). In 2000, the Census reported that the per capita income is \$18,309 and 11 percent of the County's population is at or below the poverty level. The state demographer and Employment Security Department show that in 2005 wages and incomes for White Pine County residents are over 80 percent of the statewide total. Average monthly wages for Nevada are \$3,328 while they are \$2,950 in White Pine County (88 percent). The median household income is \$50,000, eighty-three percent of the state median household income of \$59,550 and 76 percent of the national median household income. The per capita income is \$30,306 compared with \$35,883 for the state (84 percent).

Two other significant population characteristics are shown through data available from the 2000 Census and University of Nevada, Center for Economic Development. One, the County has an unusually high number of residents living in institutional settings due to the Ely State Prison and Ely Conservation Camp inmate populations. Second, even with the prison and mining activity, White Pine County has the second highest percent of native Nevadans in the state. The statewide average for Native Nevadans is 21.8 percent, Clark County (Las Vegas) is 15 percent, and in White Pine County it is 40.1 percent, second only to Lincoln County with 41.2 percent.

The Nevada State Demographer's estimates show that the County as a whole decreased from 9,181 in 2000 (Census) to 8,783 in 2001, increased to 8,863 in 2002, decreased to 8,842 in 2003 and then increased to 8,966 in 2004 and 9,275 in 2005. The distribution of population shows that the City of Ely experienced the greatest declines in population following the mine closure with decreases of 10.8 percent in 2000, 8.6 percent in 2001, an increase of 5.2 percent in 2002, a decrease of 1.5 percent in 2003, and increases of 3.5 percent and 5.1 percent in 2004 and 2005. Overall population changes show a decline of population in the Ely city limits from 5,118 to 4,166 while the population in the balance of County increased from 2,200 to 3,606 reflecting the increase in population in the urban interface area north and south of Ely and McGill.

See Figure 21, Historic Population Trends; Figure 22, White Pine County Population Characteristics, 2000 Census; and Figure 23, Population Distribution Patterns.

4. Business Activity and Industrial Sites:

The primary business activity in the County occurs in Ely, as the primary population and service center for the east, central Nevada region. Ely has three distinct business districts, the historic downtown, East Ely, and the Great Basin Boulevard along US 50 on the eastern border of the City.

Downtown Ely encompasses both sides of US 50 as it travels west through town and on to Reno and as it intersects with US 6 coming into Ely from the southwest. Downtown Ely houses several public entities: City Hall, the City Park, the County Courthouse Complex including the Library and County Park, the Ely Senior Center, the U.S. National Guard Armory, two school buildings (one in use and one vacant), and the Employment Security Department offices. Public activities downtown represent a workforce of 150 and school enrollment of 400. The district houses motels. Restaurants, two casinos, the movie theater, two pharmacies (both offer in-store soda fountains), two gift shops, the County museum, Chamber of Commerce office, and the Convention Center, make it a focal point for tourist trade and local social activities. Retail trade includes automobile sales, auto supplies, books, clothing, furniture, and sporting goods. Services include the law offices of local attorneys, both title companies, one bank, and insurance sales. Downtown Ely has been revitalized through two efforts: In 2003, the JC Penneys Corporation announced its plans to close the Ely store. Through community outcry and political pressure from elected officials, the company agreed to leave the store open for one additional year. During that year, the community formed a committee and began to explore the options for replacing the only department and clothing store within a 200-mile radius. After substantial research and a tour of the community owned mercantile in Powell, Wyoming, the group decided to create a community owned corporation of its own. The Garnet Mercantile was incorporated, sold stock needed to initiate operation, entered into a buying agreement with the Merc in Powell, Wyoming, and opened its doors in November, 2004. The Garnet Mercantile is located in the building previously used by Penneys, it is operating at a profit, and it is anchoring the downtown district. The Ely Renaissance Society was formed to reverse the trend of deterioration and vacant buildings in the downtown district. It has added to the downtown area with several murals depicting the area's ethnic heritage, a sculpture park, architectural mural on the west entrance of the district, and the Renaissance Village being developed immediately north of the downtown. As a result of the attention focused on the murals as an element of cultural tourism, new businesses have located in the downtown area selling and promoting artwork. Transportation Enhancement funds have been used to install historic street lights along the main street to create pedestrian corridors. In 2004, the community again faced a critical situation when the U.S. Postal Service announced plans to close the downtown Ely Post Office. In spite of significant complaint from the community, the Post Office was closed at the end of 2004 and all postal service activity was directed through the main Post Office in the Great Basin Boulevard business district. The building was vacant for several months and was eventually sold to the owner of the Hotel Nevada who has converted it to a small convention facility. The downtown district is also subject to periodic flooding because of its location at the confluence of Gleason and Murry Creeks. The Ely Master Plan recommends a Neighborhood Commercial zone overlay to encourage incorporation of the residential property into the commercial zone.

East Ely was a separate community that served the railroad until it merged with Ely in the

1960's. The commercial district occurs along both sides of 11th Street from the Nevada Northern Railroad Depot to the highway and along both sides of US 93 east and west. The businesses in the district include engineering offices, insurance offices, one bank; a grocery store, western and children's wear stores, a gift shop; automobile services, the local newspaper offices, convenience stores, the bowling alley, and building supplies. The medical services for the County are concentrated in the area with the hospital and clinic, care center, and dental offices. With the Nevada Northern Railroad tourist complex located at the center of the East Ely District there is a growing business sector meeting the needs of tourists. The district is spread out over a large area and has parking to accommodate motor homes and travelers. There are areas of vacant land and vacant buildings that detract from the appearance of the area as a business and tourist center. The business district is surrounded by a residential area with older houses and mobile homes. The Master Plan recommends a "Tourist Industrial" zone to make it convenient for Home Grown Jobs participants, smaller arts and crafts businesses, to locate where tourists could tour their operations and purchase their products.

The Great Basin Boulevard is the city's newest business district. It houses the community's fast food restaurants convenience stores and three motels. It began as the center for tourists coming into the community from the east and over the "bypass" from the south. It has grown to include more retail shopping and services for the community. It houses the community's supermarket, a Florist and gardening store/gift shop, four motels, a variety store, one bank, construction contractors, an auto glass center, two churches, a discount store, the State Human Services Department offices, the main Post Office, and a credit union. It also houses the County's high school and the Ely campus of Great Basin College. Most of the buildings in the district are new, there are relatively few vacant buildings, and there is vacant property separating the businesses. Issues identified in the Master Plan process included the need for litter and dust control and the need to make the best use of the property available to address the tourist market.

Business centers in McGill, Ruth, Lund, and Baker are minimal. McGill maintains a small grocery store that is especially beneficial for the senior population in that community. The other businesses in Ruth and McGill are primarily to meet the most immediate needs of residents and travelers. Baker's commercial district caters to the needs of the local population and the visitors to the national park. In recent years, it has grown and attracted new business owners to the area. The addition of a visitors' center for the National Park in Baker and the potential for acquisition and development of Bassett Lake as a recreation area north of McGill may benefit the tourism related business development in both communities.

The White Pine County Economic Diversification Council Business Directory reports that the County offers a full range of professional services needed by businesses including attorneys, insurance, banking, accountants, office machines and supplies, and computer sales and service; a wide range of engineering, surveying, construction contractors, and building supplies; and consumer goods for personal and business use. The County is served by ten motor freight service providers offering routes to and from Salt Lake City, Reno, and Las Vegas. The Nevada Employment Security Department reports 193 non-farm private businesses in White Pine County. White Pine County is served by three banks and one credit union all offering personal

and commercial loan services. The banks are branches of statewide and regional banks and can offer over \$1,000,000 in capital for lending. One bank, Bank of America offers customer services in Ely but lending decisions are made in corporate offices in Las Vegas and Phoenix. One bank is owned locally and the third is based in central Nevada. Lending decisions for both are made locally.

Taxable sales began to respond to concerns that the mine's future was in question with slight decreases throughout early 1999. For the two months following the mine closure, taxable increased slightly. The explanation offered by local merchants is that mine employees delayed purchases of household items while their future was unknown. Once the decision was made and they knew what they would have for their administrative leave and severance pay, they made many of those purchases. Beginning in September 1999, the taxable sales rates began to fall and that trend continues showing an average monthly decline of 37 percent compared to taxable sales in June 1999. Local business reported in the Economic Diversification Council's Business Survey that in addition to declining population and business activity impacting their sales, the increase in Internet purchases have a negative impact on their sales. Local merchants report that their suppliers are in direct competition with them via Internet sales, their contracts with the suppliers prevent them from using the Internet as a tool to compete in a larger market, and they are expected to provide a local service outlet for the company. It is increasingly difficult for them to provide the service outlet when they cannot compete for retail sales. The impact of declining sales was seen in reduced inventories on the shelves and loss of retail and service jobs. By 2003-04 the taxable sales began to increase, especially in the sectors related to home improvement and furnishing due to new homeowners purchasing existing housing stock for summer and second homes and then remodeling them. By 2004-05, the taxable sales had risen to \$127,928,232 with the added activity of putting the mine back into operation and by April 2006, the year-to-date sales were \$145,288,821.

Industrial sites are limited to M1 and M2 zones for light and heavy manufacturing and are concentrated in the County owned and administered Industrial Park, three miles north of Ely on US Highway 93. The developed portion of the park is 174 acres with 16 acres available for sale. The Industrial Park is served by the municipal water and sewer services and has paved streets. There is no available building space in the Park. The County is working with two property owners to develop spec building space in the park, it is in the process of installing new entrance and roster signs to improve the attractiveness of the facility, and has recently applied for grant funding through the State of Nevada to pave the remaining portions of the park to facilitate development in those areas. The County is currently pursuing expansion into the 200 acres east of the developed portion that would allow the park to encompass the Nevada Northern Railroad track. The County is also in the process of developing expansion potential at the County airport across the highway from the park for aviation related industry and it has extended water lines to the airport to provide for commercial and fire protection needs. The expansion is dependent on the development of sewer capacity. Other industrial sites include the Connect smelter site in McGill. The property was identified in the Master Plan as a potential Brownfields site. Industrially zoned property also includes the Kennecott administrative building in McGill that is owned by Safety Industries, property in and around the Nevada Northern Railroad yards, and

locations scattered throughout Ely that were grandfathered as part of the 1987 zoning ordinance. The goal outlined in the Master Plan is to eventually convert these properties to the residential and commercial use that surrounds them.

5. Tax Structure, Revenues:

Nevada State law limits the total tax rate countywide to \$3.66 per \$100 of assessed valuation. Property taxes are levied on 35 percent of the value and are depreciated by .25 percent every year for twenty years. Sales tax rates in White Pine County are 7.375 that includes a one-eighth cent allocation for new school construction and one-fourth cent for operation of a swimming pool. Sales tax revenues are distributed to state, school district, and local governments by formula. Like most of the rural Nevada counties, White Pine County is guaranteed a base rate on sales tax revenues to keep revenues from falling below minimum levels. Primary revenues for the County come from property tax revenues, a portion of sales tax levied on purchases in the County, and Payment in Lieu of Taxes because of the federal lands in the County. The Countywide assessed valuation is \$230,740,743. The County's budget for 2006-07 is \$11.5 million. Total allowable debt is 10 percent of the assessed valuation and the County currently has no debt capacity to borrow for new projects. Total outstanding general obligation debt is \$858,000. Total debt payments due in 2006-07 are \$75,289. Primary revenues for the City of Ely come from property tax revenues, City/County Relief Tax, and Cigarette Tax. The City's Assessed Valuation is \$48,438,897 and the budget for 2006-07 is \$1.8 million. Total debt is 2,080,471, The City's Municipal Utilities Board functions under enterprise funds and levies fees for water, sewer, and landfill services. It can finance system improvements through revenue bonds based on revenue from ratepayers.

A portion of the gasoline tax levied on purchases in the County is allocated to the Regional Transportation Commission to fund road improvement projects for the City and County. Room tax is collected on all hotel, motel, and RV park rentals and is assigned to the Tourism and Recreation Board to promote tourism and develop recreational facilities. The annual room tax revenues average \$756,085 and are used to cover operating costs for the County's Convention Center, tourism promotion, capital improvements, and aid to organizations sponsoring special events.

Tax Revenue Issues:

1. In 1981, the Nevada State Legislature passed legislation to base property taxes on 35 percent of the value with depreciation based on the age of the property rather than fair market value, shifting the primary burden from property to sales tax. The impact was especially difficult for rural communities facing economic decline due to the mining industry. White Pine County lost 24 percent of its tax revenues in 1981 because of the shift. With 50 percent of its housing stock over 50 years old, the depreciated value of residential and commercial property reduces the assessed valuation significantly.

2. State law limits the combined property rate for local revenues and restricts growth of

operating expenses to a level not to exceed the combined growth rate of the consumer price index and the County's population. The School District's expenses are limited to the growth rate for the consumer price index and the certified enrollment. The rules limit the ability of counties facing economic decline to generate revenues to meet on-going needs and provide for development and promotion to strengthen their economies. At the same time, counties facing rapid growth cannot respond with new revenue to address development impacts.

In White Pine County, the limit on tax rate has had a significant impact on the ability of the entities within the County to levy tax rates. Because of the decline in assessed valuation and commitments for long-term debt, the entities in White Pine County have had to negotiate the tax rates they can levy. For the 2006-07, the City of Ely cannot levy any property tax rate. The County levies the rate and through negotiations develops cooperative agreements to provide funding to the City for fire protection, the building department, law enforcement, and operation of the cemetery.

3. Nevada is currently the most urban state in the nation. Almost 90 percent of its population is located in the Las Vegas area (70 percent) and Reno area (17 percent), with less than 14 percent in the rural counties. The rapid growth in southern Nevada creates burdens on public services. There is constant "fair share" pressure to make all of the sales tax revenues generated in the urban areas available to them to address their needs rather than allocating a portion of those revenues to rural counties as a guarantee. If statewide tax revenues should fall, there will be increased pressure to reduce the amount of sales tax revenue generated in the urban areas that is allocated to rural counties.

4. Although the County's economy is rebounding, the public tax revenues lag well behind the current growth and local governments face a severe financial strain to meet current demand for services. The community is anticipating impacts due to construction of one and possibly two power projects and it is working with the proponents of the projects to identify immediate needs for financial assistance to work with impacts to emergency services, law enforcement, and other issues.

5. The County continues to be under the supervision of the Nevada Department of Taxation due to the severe financial condition identified in 2005. The Department has also expressed concerns about the potential that the City could find itself in the same situation due to lack of adequate revenue to meet its statutory requirements. The County's financial condition is improving but it will probably stay under the supervision of Taxation for the next two years.

See Figure 24, White Pine Public Revenues.

6. Infrastructure:

Transportation: White Pine County's location, geography, and transportation facilities have historically impacted its economic development alternatives. Ely is at the junction of three

highways: US 93 provides the major north/south route from the Canadian border through Twin Falls, Idaho, to Ely and then south to Las Vegas and east to Kingman, Arizona, where it connects to US 66 from Los Angeles to Chicago. Access to Salt Lake City is via US 93 that connects to Interstate 80 at Wendover. The east-west route, US 50, runs from San Francisco through Sacramento and Carson City to Ely and east to Delta, Utah, and Denver, Colorado. This route also provides access to Reno through its connections to Interstate 80. A third route, US 6 and State Route 318 provide the most direct route to Las Vegas and access to the southwestern part of the state and California via Tonopah. Truck traffic on State Route 318 has increased dramatically in recent years.

Traffic is sparse on highways through White Pine County and Nevada Department of Transportation figures show that they all have capacity to carry more traffic than currently uses them. Motor freight service is available through ten carriers that provide one- and two-day service to and from Salt Lake City, Reno and Las Vegas. Ely Buss service provides intra- and inter-community service as well as shuttle service to the airport and prison. Ely but may soon lose the private car rental service it currently has available. The closest Interstate Highway is 130 miles away. Access to the Interstate system is one of the key factors requested by companies considering sites for industrial activity and the lack of access is a detriment to the County's efforts to diversify its economy.

The area has not had active rail service since BHP terminated its lease for use of the Nevada Northern Railroad track. The track has been purchased from Los Angeles Department of Water and Power by the City of Ely, the right-of-way was conveyed from the BLM to the City through the 2005 Transportation bill, and funding is in place for the initial track renovation. The rail line from Ely to the connection to the Union Pacific line at Shafter is a Class I track rated for 10 mile and hour speeds. It is in need of renovation before it can be used for substantial freight traffic, heavy loads, or faster speeds. The track renovation is anticipated at full Class I status between Ruth and McGill north to the proposed power project sites and Class III/IV from those sites north to the Shafter connection to the Union Pacific line.

The county's airport (Yelland Field) is located five miles north of Ely on US 93 across the highway from the County's Industrial Park. The main runway is 6000 feet long and the secondary runway is 4,982 feet. The main runway, taxi way and apron are designed for a capacity of 100,000 pounds (Boeing 737) The airport can accommodate larger planes and has room for expansion. The airport area has been connected to the Ely municipal water system but has never had sewer service and relies on a commercial septic system. This limits its potential for development and use of the surrounding property for industrial purposes. The community is dependent on the Essential Air Service subsidy for commercial air service. For the past several years, it has been served by Scenic Airlines with 19 passenger planes providing daily routes to and from North Las Vegas and Elko. Scenic Airlines has elected to curtail its services and Ely will soon be served by Mesa Airlines with routes proposed through Cedar City to Las Vegas. Without the subsidy, the County is 180 miles to the closest Hub airport. The county has charter air service available for fixed wing and helicopter service.

See Attachment 27, Housing Data

Public Utilities.

The City of Ely: Water: The City of Ely's water system is operated by the Municipal Utilities Board. The City currently gets its water from three sources, two wells and Murry Springs. The wells yield 3,950 acre-feet per year, it has certified water rights from the four sources, and it is permitted to take up to 14,476-acre feet year or eleven million gallons per day. Ely has a total storage capacity of 7.5 million gallons in six storage tanks. Storage and distribution systems have been improved to add a one million gallon tank, improve service to the eastern and southern portion of the city, and improve service by reducing dependence on a series of four booster stations. Water is currently treated with chlorine. Residents pay \$19.00 per month for water plus \$.23 per hundred square feet of irrigatable land for unmetered housing units and \$.75 per thousand gallons over 15,000 gallons per month for metered units. Residential, Commercial, and public facilities on the City's water system but outside the City limits pay a 33 percent surcharge on water rates. Industrial and commercial users are metered and rates are \$14.50 for the first 15,000 gallons and .55 per 100 gallons over that. The City's policy is to work toward metering for all users. All new residential construction must install meter boxes and the City installs the boxes when it replaces a service connection.

The City has completed its Wellhead Protection Program plan that has identified the need to develop monitoring wells and a back up well to supplement the water supply in case Murry Springs it has been contaminated. It has also identified the need for replacement of the North Street Well which has been taken out of service due to contamination from a dry cleaning establishment that was located near the well site for many years, the need for a household hazardous waste recycling program, the need to develop contingency plans, a plan for new well sites, a public education program, and zoning provisions to prevent future contamination of the City's water sources. An additional concern with the City's water system is to replace the older sections of water line that have lead joints.

Sewer: The municipal sewer system serves Ely, East Ely, and the county areas adjacent to the city limits including the County's Industrial Park. The original plant was built in 1968 and uses an activated sludge process for treatment with polishing ponds for emergency use. In 1984, the EPA funded a million grant and the city went to a bond issue to raise the additional \$400,000 needed to upgrade the sewage treatment plant. Construction on the project was completed in 1988. In 1998, the City began to have difficulty complying with the limits on its discharge permit. An analysis of the treatment plant and its operation indicates that major renovations were needed to resolve the issues creating non-compliance and allow the system to operate efficiently. A \$3 million project funded through the Economic Development Administration and a loan from USDA Rural Development was completed to allow the City to meet compliance standards for its discharge permit, and improve operating efficiency. The City has identified the need to add a clarifier to the system to accommodate projected growth. The main sewer lines in Ely range from 4 to 21 inches with 4 and 6 inch laterals covering an area of approximately 4.5 square miles. The City estimates twenty residences located within the City limits are still using septic systems. In 2000, new sewer main was constructed on A Street on the northern boundary of Ely to connect homes and the Nevada Northern Railroad yards to the system to eliminate use

of a cess pool constructed in the early 1900's. The collection system has been upgraded in East Ely and areas immediately south of Ely to accommodate improvements in the water system and meet the needs of growth along the southern City limits. In addition, the City continues to work to reduce infiltration of ground water into the system as a means to improve operating efficiency and increase capacity. Ely residents pay 21.00 per month for sewer service. The system currently has an average flow of .9 million gallons per day. The State Division of Environmental Protection permit limits average daily flow to 1.5 million gallons per day.

The storm drain system needs improvement to reduce flooding in downtown and the Central Ely residential area. A new 54-inch pipeline is needed to serve Murry Canyon and the 72 by 44 inch trunk line between 13th street and North Street needs to be replaced. Street improvements such as curbs and gutters are needed to channel the flow and reduce the amount of debris entering the system.

McGill/Ruth General Improvement District:

The McGill and Ruth water systems have been substantially renovated during the past twenty-three years. Until 1983, the two communities depended on water and sewer systems built by Consolidated Copper in the 1920's. The systems were sold to Kennecott when it acquired Consolidated Copper's holdings. They were operated by Kennecott until they were sold to the John W. Galbraith Company in 1962 and in turn were sold to the private, Ruth/McGill Water Company in 1979. Under the succession of private owners the systems received little capital improvement. They were allowed to deteriorate badly and were not upgraded to meet increasingly stringent requirements. In 1983, White Pine County purchased the water and sewer systems, formed the McGill/Ruth General Improvement District, and began the multi-million dollar task of bringing the systems into compliance.

Water: The McGill water system was dependent on use of Kennecott's water brought to the community from Duck Creek via an 8 mile, 37 inch gravity feed pipeline to the smelter. A tap near the smelter allowed the community to divert water for its use. In 1984, Kennecott notified the new General Improvement District that it would cease maintenance of the pipeline by the end of that year. With no capacity to repair the deteriorated pipeline, the community of McGill was presented with the potential that they could lose their only water source at any time. The components of the Ruth water system purchased by the County were the water rights for Ward Springs, the mountain spring collection system, the 6 inch aqueduct, and the "Old Ruth" collection system which included two 1 million gallon tanks and an inoperable gas injection chlorination system, the piping system from Old Ruth tanks to the New Ruth Townsite (which was built when the town was moved to accommodate expansion of the mine), and the 300,000 gallon tank at New Ruth at an elevation of 7,160.

Between 1984 and 1987, the District put together a \$4 million package with HUD, EDA, USDA Rural Development and local funds and renovated the water systems in both communities. The District constructed new wells in each community to secure primary water sources for both of them as well as tanks and water mains. Kennecott continued to use its water rights and the pipeline for irrigation in its reclamation of the tailings west of McGill. As Kennecott is nearing

completion of the reclamation project, and the District has petitioned for use of their water rights in Duck Creek Basin. In 2005-06, the District is installing a back up well and meters in McGill. The most critical issue for the District remains the need to provide an adequate water source for the community of Ruth. The District has completed a preliminary engineering report, which identifies the need to improve the collection facilities at the springs, replace the pipeline, and drill a new well. The total cost is estimated at \$7 million and the District is working to develop funding for the project. The County secured a Community Development Block Grant for \$217,000 to replace the first segment of water line for the backup water system between Murry Springs and Ruth. The pipe is badly deteriorated and results in significant water loss.

Sewer: In 1985, the State's Division of Environmental Protection rated McGill's sewer system as the "worst in the state." Most of the system was built in the 1920's. The lower elevations were constructed in 1968. Most of the sewage went to treatment lagoons belonging to Kennecott and discharged to oxidation ponds located on the tailings next to the smelting ponds. The capacity of the lagoons was unknown. A portion of the sewage went to a septic system, which was poorly maintained, and there was discharge of raw sewage from it. Some of the sewage emptied into drainage ditches, which lead to Kennecott's mill tailings ponds where it was contaminating the surface water in Steptoe Valley. Division of Environmental Protection rated the raw sewage in open drainage ditches in the residential neighborhoods as a critical health hazard and its top priority in the state for C.D.B.G. funds. In 1986, the District filed a compliance schedule and began a complete renovation of the system. The District has constructed new sewer ponds to meet Division of Environmental Protection and Division of Health standards, two lift stations, and 3,000 feet of new sewer main. Ruth's oxidation-percolation and evaporation system served the majority of the community but when the District took control, the sewage from one residential area was still diverted to an open ditch on private property. Phase I of the Ruth Sewer project was to construct sewer lines to connect those homes to the main sewer system. Phase II was the construction of new sewer ponds.

Both Ruth and McGill had serious problems with their collection lines. Portions of the systems are eighty years old. McGill had 4-inch lines, which were not adequately mapped and constructed at shallow depths. The lines ran through private property, sometimes under structures or through basements. Some had no manholes or clean outs. Residents frequently reported raw sewage in their alleys. The broken sewer lines in McGill required constant repair and presented an immediate health hazard. In 2001, the state Health Department rated the repairs to McGill's collection system as its top priority in rural Nevada. The District received WRDA grants, USDA loans and grants, and CDBG grants for the three-phase project and raised its sewer rates to finance the USDA loans. The project was completed between 2003 and 2005 at a total cost of \$7 million. It replaced most the sewer lines in McGill and Ruth, renovated a lift station and eliminated two of the lift stations in McGill. The District has applied for additional WRDA funding to improve the sewer ponds in Ruth including lining them. The District is working with Quadra Mining Company on the need to expand sewer capacity to accommodate new housing the company plans to build for its workforce.

Water and Sewer Rates for Ruth and McGill are \$53 per month.

Baker General Improvement District:

The community of Baker was served by individual wells and septic systems until 1994. With the combination of very low income levels for community residents and designation of the Great Basin National Park in 1987, the community was able to develop the majority of funding through grant sources and Congressional appropriations for the Park to cover most of the cost of a water and sewer system. It formed a General Improvement District and constructed a \$1.8 million water and sewer system. The combined water and sewer rates for Baker residents are \$36 per month. The operating budgets for the Baker systems were based on the development plan for the National Park which included construction of housing, administrative offices and a visitor's center in Baker as well as the assumption that the commercial center would develop to meet the needs of park visitors. Neither occurred making it extremely difficult for the District to operate the systems on the revenue generated by the small number of users in Baker. The District has received funding to expand the system to encompass seventeen more homes and a potential of twenty-three additional lots that can be developed but its water rights applications are junior to the applications filed by Southern Nevada Water Authority and it has not been able to progress with the project.

Lund/Preston: The communities of Lund and Preston are served by wells and septic systems. The property is zoned for one-acre residential parcels, but the growth pattern in the two communities often results in more than one housing unit on each one-acre lot. There has been concern about water quality because housing is becoming increasingly concentrated and there is the potential for nitrate contamination in wells from septic systems and surrounding agricultural use. Commercial development in the area that is a primary corridor for truck and tourist travel has been slowed because of the lack of a water system. The County completed a feasibility study that did not show contamination in area wells. The County had developed initial funding for a water system that was turned down by community residents who balked at paying a monthly water bill and were reluctant to give up their wells for irrigation and livestock on their one-acre parcels.

Remainder of the County: a small private water company with individual septic systems serves the community of *Cherry Creek*. All other areas of the County are served by individual wells and septic systems. Percolation rates and treatment appear to be satisfactory.

Regional Landfill: The City of Ely, Municipal Utilities Board operates the Regional Landfill on the northwestern boundary of the City. The outlying communities are provided with transfer stations. A private disposal company provides pick-up service countywide. The Landfill has been awarded a Class I permit through the State's Division of Environmental Protection and it has submitted an application for a Class III permit for construction waste. The landfill is using its available capacity at a rate faster than anticipated and the Division of Environmental Protection has expressed concerns about the detection of solvents in ground water in the vicinity of the landfill. The long-term need is to identify and begin to develop an alternative landfill site

to accommodate future needs of the White Pine County population. Landfill rates are \$7.50 per month for residential and varying rates for commercial depending on the size and type of business. White Pine County's 2006 Revision to its Solid Waste Management Plan has been accepted by the state Division of Environmental Protection.

Other Utilities: Mt. Wheeler Power, a rural electric cooperative, serves 4,569 customers in White Pine County which is 120 percent of the number of customers served in 2001. Eighty percent of the customers (3,656) are residential. The company has no generation of its own but has all user requirement contracts that should meet current and future demands for power. The major substations and transmission lines are adequate to handle anticipate future loads. Power supplies are from a mix of hydroelectric power and coal. As a rural electric cooperative, Mt. Wheeler Power is exempt from Nevada's de-regulation policy. Deseret Generation and Transmission, its major supply source, has excess generation capacity through its Bonanza plant in Utah.

Approximately 36 percent of the housing units are heated with propane or heating oil. The County is served by two propane dealers, five heating oil dealers and one coal dealer. There is no natural gas service in White Pine County.

A T & T provides telephone service for the County. There is a 10,000 line capacity of which approximately 4,400 access lines are in use. The vast majority of the lines are digitally switched. Although the County does not have access to high speed fiber optic lines, improvements in telecommunications services include access to DSL services and wireless Internet access via microwave and satellite.

Law Enforcement and Judicial Services: White Pine County is served by 15 patrol officers, 5 dispatchers, 5 jailers, and 1 part time deputies in Baker and Lund through the White Pine County Sheriff's Office. The County's law enforcement officers are supplemented by the Nevada Division of Investigation based in Ely to serve the northeastern part of the state and Nevada Highway Patrol officers. During 2000, the White Pine Sheriff's Office made 276 misdemeanor and felony arrests (138 percent of the 2001 level) and investigated 203 accidents. The Sheriff's Department's activities include investigations, court time, miscellaneous security checks and activity, serving court papers, juvenile referrals, and answering citizens complaints. Patrol distances increase financial burdens on the County in requirements for patrol cars, staff time, and fuel. In 2005, the average miles per shift by deputies was 85.5. Under the cooperative agreement between the City and County, the Sheriff also serves as Ely's Chief of Police and the Department provides the law enforcement within the City of Ely. The Ely Shoshone Tribal Council provides law enforcement and judicial services on tribal lands.

In addition to law enforcement the Sheriff's office is assigned responsibility in White Pine County for the jail, civil processes, county wide emergency communications through 911, and shares the ambulance service with the Emergency Management Services office. The jail has capacity for 32 male and 8 female inmates. The average inmate population in 2005 was 17.4 compared to 14 in 2001.

The District Court system based on in Ely serves White Pine, Lincoln, and Eureka Counties. The County is served by two District Court Judges, a Justice of the Peace in Ely, a municipal court with one judge in Ely, and a County Court with a Justice of the Peace in Lund. The County has provided the second courtroom, office space and staff to support the second District Court. Increased demand on the judicial system due to prison activity places a severe burden on space and staff capacity for the District Attorney's Office and County Clerk's office. Security remains a concern, especially when conducting jury trials for maximum-security inmates.

The County juvenile probation office supervise juveniles on probation and handles juvenile court hearings on traffic violations, custody, and child neglect. The juvenile detention facilities are in such disrepair that they do not provide adequate security to be used. Juveniles requiring protective custody are transported to facilities in Elko and Lincoln Counties. The juvenile probation offices are understaffed and do not provide sufficient resources for the full range of juvenile law enforcement from patrol and apprehension to sentencing and restitution.

Fire Protection: Fire Protection in White Pine County is provided by the City of Ely Fire Department and a County Fire District with Volunteer Departments in McGill, Ruth, Lund, Baker, Cherry Creek, Cross Timbers, and Cold Creek.

Ely has 5 full time fire fighters supplemented by 28 volunteers. In 2006 the Fire Station moved to its new facility on US Highway 50 on the southeastern border of the City near the Public Safety Building. The new location provides faster response time; better communications; eliminates the uphill run to respond to most emergencies; puts the fire station closer to the major of the City's residential areas; and resolves safety concerns of emergency vehicles trying to get through downtown streets, traffic, and school zones.

The City's fire rating is 5 indicating that the department can meet the needs within the City. The Ely Fire Department Personnel have received training in handling hazardous materials. Ely contracts with the County to supplement county fire protection on an on-call basis. The current maximum response time is 5 to 15 minutes to serve the airport. The water system is adequate to meet demands for fire fighting with two exceptions: 1) the residential property on the southeastern portion of Ely is at risk because there is no back up water system that can reach the

homes and schools if the pumps on the booster stations are out of operation and 2) the Fire Chief has expressed concerns about inadequate water lines and fire hydrants in various neighborhoods in the City.

The City purchased a new fire truck in 1997. It also operates a 1986 truck purchased with Community Development Block Grant funds, and maintains 1974 and 1969 trucks for back up. The City identifies the need for an additional truck for back up because they cannot find parts for the older vehicles. The County provides a dry chemical and two water and foam trucks at the airport. The trucks are old, it is difficult to find parts for repairs, and they need to be replaced.

The County recently purchased a newer model used truck for the airport from Washoe County and in 2005 it purchased an Airport Advanced Fire Rescue truck through an FAA grant.

The County Fire District employs one full time Battalion Chief and works in conjunction with Nevada Division of Forestry and the minimum security Conservation Camp to provide and maintain fire-fighting vehicles in its volunteer departments. The County has responsibility to provide facilities to house the departments. Grant funding has helped to improve training opportunities for the volunteer departments.

The Bureau of Land Management and U.S. Forest Service have responsibility for control of wild fires on public lands and cooperative agreements with the City and County for urban interface.

Emergency Medical Services: Emergency Medical Services are provided through volunteer Emergency Medical Technicians and Fire-Med Services throughout the County. Prior to 1992, the County depended on grants to upgrade its ambulances and it was difficult to maintain and supply equipment. A voter approved public safety tax over ride provides funds for the County-wide Emergency Medical Technicians Association to upgrade ambulances on a rotating basis and has enabled the EMS to provide adequate emergency equipment throughout the County. The County has upgraded ambulance facilities in Ely and in all of the outlying communities. It is developing funding to put restroom and shower facilities in outlying ambulance sheds to provide volunteers with facilities to clean up after working with oil, gas, and hazardous materials from highway accidents before returning to their homes. Dispatch services are provided through the Sheriff's Office and Fire Departments (as first responders) provide back up for ambulance runs to assist with rescue operations and lifting patients. The Sheriff is working with four other rural Nevada counties to develop funding to purchase equipment needed for interoperability of the communications system. Volunteer EMT's pay for the costs of travel and per diem for training. A significant portion of EMT time is developed to serving the prison and transporting patients between the hospital and the airport for life flights as well as the cost of recertification in order to keep their state licenses current.

A serious concern for both Fire and EMT services is the difficulty in recruiting and retaining the volunteer forces. The demands for additional training and the burden of maintaining services with reduced population increases the time each volunteer must devote to the programs. Issues such as hazardous materials involved in accidents increases concerns for personal safety.

Public Buildings: With the exception of the Sheriff's office, the White Pine County offices are housed in the County Courthouse Complex in downtown Ely. The complex includes the Courthouse Annex, built in 1906, which at one time served as the Courthouse and later as the County Hospital, the Courthouse, built in 1908; the Library, which was constructed in 1970, and the County Park. The Library and Public Safety Building heating and cooling systems and the fire alarm systems in the Library, Jail, and Courthouse have been upgraded; and the County has used Community Development Block Grants to bring all of its facilities including its parks into ADA compliance. The County completed an energy efficiency program to replace the heating system in the Courthouse. The antiquated steam heat system was extremely inefficient and

costly to operate; it was damaging the building because of the moisture from the steam; and it was creating health concerns because of the mold it generates. The assessment of Annex building is that it cannot be brought up to safe and efficient operating conditions with a reasonable expenditure and should be closed. The County has no funds to rent or renovate a facility and the offices will stay in the Annex for the foreseeable future. The Public Safety Building was constructed in 1976 and is located on the outskirts of Ely. It houses the Sheriff's Department, Jail, and Municipal Court.

The Ely City Hall was built in 1928. It is crowded and has no room for expansion. The City moved its Council meetings to the Volunteer Fire Hall and modified the entrance to meet ADA requirements. The City is exploring potential to use the "old" fire station to provide more for City operations.

Public meeting rooms available in Ely include the White Pine County Commissioners' Room, the Library Conference Room, school district facilities, Great Basin College, Bristlecone Convention Center, Mt. Wheeler Power's conference room, the William Bee Ririe Training rooms, Ely Senior Center, Volunteer Fire Hall, the Bureau of Land Management Conference Room, Nevada Division of Wildlife Conference Room, St. Lawrence Hall (Sacred Heart Catholic Church), and National Guard Armory. Some of the facilities are available free of charge and others charge for their use. School, Senior Center, and Community Center facilities are available in the outlying communities. The Great Basin College and School District facilities provide access to T1 lines and compressed video systems compatible with the State's NevadaNet program. The Convention Center has wireless compressed video to assist videoconference but cannot access NevadaNet.

Education: The White Pine County School District served an enrollment of 1,370 students in 2005-06. The enrollment has dropped from 1,944 students prior to 1998 when BHP closed the mine and is well below peak enrollment of 2,300 in the 1970's. The District has a high school, middle school, elementary school, and an alternative high school facility in Ely; elementary schools in McGill and Baker; an elementary, junior high, and high school in Lund and it operates a high school program for Ely State Prison. The District employs 271 full and part-time certified personnel and six administrators. The program includes academic course work, physical education, music, art, vocational training, and extra-curricular activities. The average class size in the District is 18 students and the District has a drop out rate of 2.4 percent compared to the statewide rate of 6.4 percent. White Pine School District has a 96 percent graduation rate, the highest graduation requirements in the state, students exceed the state average for the percentage of seniors taking the ACT and SAT, and their test scores exceed the national average. In 2006, all of the schools in the district met the goals for Adequate Yearly Progress, three schools (David E. Norman, Lund Elementary School, and Lund Junior/Senior High School) were among the seventy-nine high achieving schools in the state, and White Pine High School was one of the seventeen Exemplary schools in the state. The total budget for 2005-06 was \$12.9 million. District wide, the per pupil expenditure was \$4,786 compared to the state average of \$3,751.

Maintenance, renovation, and new school construction are constant needs within the District.

Most of the District's facilities have been in use for over fifty years. The David E. Norman Elementary School in Ely was constructed in 1909, the Middle School was built in 1913, and McGill Grade School was built in 1962. All of them face critical needs with ADA compliance, asbestos, lead based paint, major repairs, and renovation to meet safety standards and allow efficient and up-to-date operation. The District constructed a new elementary school in Baker in 1993 and a new high school in Ely in 1995. The bonds for that construction exhausted the County's bonding capacity. Legislation passed in the 1999 session provided new school construction funds for Districts that did not have the revenue sources to address critical needs. White Pine County was allocated funds to construct a school at Pleasant Valley for unhoused students, a new high school at Lund, and initial studies on renovation or replacement of the Middle School. Construction of the high school at Lund has been completed. Because of a significant drop in population, the school at Pleasant Valley was cancelled. The Middle School is located in downtown Ely on US Highway 50 has been allocated funds to meet the most critical health and safety needs. The District is working with White Pine County to implement a \$250,000 grant from E.D.A. to initiate construction on the Regional Recreation Center, which will also provide athletic fields and physical education space to meet the needs of students as well as the citizens of White Pine county. The District sold the Ely Grade School in downtown Ely but still maintains three vacant school buildings in the District, the Ruth Elementary School (1962), the High School building in McGill (1930), and the Murry Street School (1959). The Ruth School is one of the newer structures in the District but the eight-room building has had severe damage to the roof and from water damage due to the leaking roof. Renovation to put the three schools in service would be extremely expensive.

Adult education programs offered by White Pine School District include daytime and evening programs to finish GED programs, access to the alternative high school, a computer based alternative education and enrichment program, and the Mountain High GED program at Ely State Prison.

Early Childhood Education is provided through the Magic Carpet Cooperative preschool in Ely which can accommodate fifty 3 and 4 year olds, McGill Pre-school which can serve twenty children, and Little People's Headstart which can serve fifty-three children from low income households.

The Ely Branch campus of Great Basin College is the center of higher education in eastern central Nevada. Started in the 1970's as an evening program offered in local school facilities, the college came into its own with the construction of the vocational center built in part through an EDA grant. The campus is a source of great community pride because its construction was made possible through local contributions of over \$1 million at a time when the area's economy was at a low ebb and it has become a focal point for educational programs in White Pine County serving over 500 students. The Ely Branch Campus is a member of the Nevada System of Higher Education (NSHE) and is fully accredited by the Northwest Commission on Colleges and Universities. The branch campus offers personal enrichment programs, job training, vocational certificates, Associate of Arts, Science, General Studies, and Applied Science Degrees, Baccalaureate degrees include Bachelor of Arts in Elementary and Secondary Education,

Bachelor of Arts in Integrative and Professional Studies, Bachelor of Arts in Integrative and Professional Studies, Bachelor of Applied Science and a 3 + 1 collaborative agreement with University of Nevada Reno for a Bachelor of Social Work. Students are able to complete prerequisites for AAS-RN and Bachelor of Science in Nursing and Radiology Technology programs at the Ely Campus. Key to Great Basin College's ability to offer expanded curriculum in the availability of distance learning through compressed video that links all of the campuses within Great Basin College to the University system. Four interactive video rooms recently added in the computer lab. The Ely Campus employs two full time professors and over thirty adjunct instructors, 80 percent of them having advanced degrees. In addition to the college programs offered, the Ely Campus offers adult basic education and has a cooperative agreement to provide advanced course work for White Pine High School students with a wide variety of dual credit courses. Every semester distance education (IAV and Internet) courses are offered to high school students at a reduced rate. Financial aid, scholarships, counseling, and student services are available.

See Figure 28, Enrollment by School.

Health Care:

The health care needs of White Pine County residents are served by six physicians, three general practitioners, one general surgeon, and two family practitioners. The community has one optometrists and two dentists. There is one public health nurse. A private, non-profit corporation, Nevada Home Health, provides in-home nursing care.

Facilities include William Bee Ririe Hospital, a 40 bed short stay facility, the Hospital's out-patient clinic, and the White Pine Care Center (98 bed skilled nursing facility) The hospital provides primary care, obstetrical services, surgical services, some pediatric and cardiovascular services, and physical and respiratory therapy. The hospital has two operating rooms, three intensive care rooms, two security rooms for inmate health care, and seven obstetrical beds. Visiting physicians include a radiologist, orthopedist, urologist, and two cardiologists. Patients needing additional specialized care are referred to larger hospitals in Reno, Salt Lake, and Las Vegas. The hospital also has nurse practitioner and physician's assistant programs in place. Emergency room services are available twenty-four hours a day at William Bee Ririe Hospital and life flight is available to major hospitals and specialized care with one hour flight time to Salt Lake City and one and a half hour flight time to Reno and Las Vegas.

The Ely Mental Health Center is part of the state's rural clinics program and serves White Pine, Lincoln and Eureka Counties. Services include individual and family counseling, psychiatric evaluation, family and group therapy, substance abuse counseling in conjunction with other mental health diagnoses as well as twenty-four hour a day on-call emergency services. The Center is staffed by two counselors, four support personnel, and a nurse every other week as well as visits at least once a month by the consulting psychiatrist.

The utilization rate at William Bee Ririe Hospital is 16 percent and the occupancy rate at the White Pine Care Center is 75 percent. During 2005 the Public Health Nurse served 2,679

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The primary health care issues facing White Pine County are: 1) the high turnover of medical professionals (Recruitment and retention of physicians are constant efforts. Allied medical professionals including laboratory technicians and nurses are also a constant demand) and 2) the economic difficulty of maintaining adequate long term care options for White Pine County residents.

Social Services:

Social services are provided by a variety of state and county agencies as well as by private, voluntary groups.

Emergency financial assistance is available through the County Social Services Department and Salvation Army. It consists of emergency food and shelter, transportation, rental deposit assistance, medical and burial assistance. Food stamps are available through the Nevada Department of Human Resources, Food Stamps and Welfare Divisions. The Women and Infant Children Supplemental Foods Programs provides nutrition education and assistance in purchasing certain types of food for low-income families with infants and pre-school children. Support, Inc., a private, non-profit corporation, provides assistance and counseling to victims of domestic violence.

The County has a senior population of 1, 562, ages 60 and over, 17 percent of the County's total population. Meals, transportation, and recreation are available to seniors through the White Pine Nutrition Programs in Ely and McGill. The program also provides meals and social services to homebound seniors. The Baker Center was closed because of the inability to find qualified staff to run the nutrition program. The senior volunteer program, RSVP provides daily contact and services to elderly shut-ins.

The White Pine Rehabilitation and Training Center provides recreation, day treatment, training and basic education, community living and social adjustment skills, pre-vocational and some basic vocational skills for the County's adult developmentally disabled.

Childcare service is provided by Little People's Headstart, which offers services for low-income families; and licensed day care providers who care for children in their homes.

White Pine County has several church congregations including Assembly of God, Baptist, Catholic, Christian Science Society, Church of Jesus Christ of Latter Day Saints, Episcopalian, Greek Orthodox, Jehovah's Witness, Lutheran, Methodist, and Church of the Nazarene. Churches and local organizations help to complete the network of social service by assisting

families, providing aid to individuals in emergencies, providing community education and recreation programs, and helping to maintain community facilities.

Social service needs include the need for child care at night and on weekends to serve families employed at the prison and other shift work, day treatment and service for low income elderly who may not need to live at the Care Center but who cannot live alone, and increased funding to provide services for the wide range of social issues in the community.

Recreation:

Recreational opportunities serve three on-going needs of the community: 1) community based recreation, 2) outdoor recreation areas and opportunities, and 3) special events.

Community Based Recreation:

Public facilities available for community recreation in White Pine County include play lots and play grounds, neighborhood and community parks, basketball courts, the football field in Ely, baseball diamonds and soccer fields in Ely and McGill, ice skating areas, a shooting range for rifle and archery, a natural warm springs fed outdoor swimming pool in McGill, and an 18 hole golf course. The Tribal Council maintains an indoor recreation/gymnasium at its colony building and the Bristlecone Bowmen maintain indoor archery ranges in McGill and Ely. In 1982 a three-field softball complex was built to accommodate increased interest in the sport. Both Ely and McGill maintain community corrals for horses and 4-H animals and Ely and Lund both maintain fairgrounds. The County fairgrounds north of Ely have a rodeo arena and a racetrack. Improvements to the racetrack area provide a picnic area and allow for more fall and spring events. Private community recreation facilities include a movie theater, bowling alley, and a motor sports racetrack.

In 1984, the County's indoor swimming pool in the County Park downtown Ely was closed because the floor cracked. Further study showed that the location was not suitable for a pool and if repaired it would eventually crack again. For several years, the boarded up swimming pool was an eyesore in the downtown district. After years of debate, the pool building was demolished in August 1998. The County park was enlarged and improved and is now an asset to the appearance and activities in the downtown area. The only public swimming pool available to the residents of the County is the pond in the McGill Community Park that is open four months of the year. In 2003 the County secured permission from the voters and the state legislation to increase local sales tax rates to provide a fund for operation of a swimming pool, the Lodging Tax rate was increased to provide a fund to assist with the construction of a pool, and the County continues to work to identify grant funding that will enable it to construct a pool to meet the needs of White Pine County's residents. The most critical recreation priority for the community is replacement of the swimming pool.

The Golf Course has been converted to an Enterprise Fund and is working toward the goal of self-sufficiency. The County and Tourism and Recreation Board entered into a cooperative agreement to meet the needs for maintenance and improvement and operation of Camp Success, a former Boy Scout Camp located in Duck Creek Basin north of McGill. The camp is used to

meet the needs of area residents as well as renting it for summer camps to groups from urban areas. The Job Opportunities in Nevada Program administers a Youth Recreation Program each summer. Matching funds and staffing for the program is becoming more difficult to secure due to the loss of funding for the Summer Youth Employment Program. Other services for youth include Girl Scouts, Boy Scouts, 4-H, Little League Baseball, Girls Softball, Basketball, soccer, the White Pine Civil Air Patrol Squadron, and various youth groups.

Outdoor Recreation Opportunities:

The 8,635 square miles of publicly administered lands in White Pine County offer a wealth of recreational opportunities to county residents and tourists.

Much of the land is undeveloped backcountry area with recreational opportunities in a natural setting. Portions of the Ely and Wells Ranger Districts of the Humboldt-Toiyabe National Forest are in White Pine County. The U.S. Forest Service maintains five campgrounds with individual campsites and picnic areas and seven group picnic areas. The State Parks Department provides campsites and picnic areas in Cave Lake State Park and Ward Charcoal Ovens State Park. The State Parks Department reports 80,000 visitors per year to the Cave Lake and Ward Charcoal Ovens facilities and over 50 percent of that use comes from Clark County residents. The U.S. Fish and Wildlife Service administers the Ruby Lakes National Wildlife Area, the southern portion of which is in White Pine County. Great Basin National Park has campgrounds up to the 10,000-foot level adjacent to hiking trails to alpine lakes, the Bristlecone interpretive trail, the Mt Wheeler ice field, and the Mt. Wheeler Summit trail. The Great Basin National Park Development Plan has never been implemented because of lack of funding. The need for additional campgrounds is identified in the Development Plan and are essential to expand the visitorship at the park. The Park reports 80,000 visitors per year and an economic impact of \$4.12 million. The Bureau of Land Management and U.S. Forest Service administer several campgrounds, recreation sites, and watchable wildlife areas in the County.

The Nevada Department of Wildlife administers the Steptoe Valley Wildlife Management Area seven miles southeast of Ely on US 50. The property includes Comins Lake, a small reservoir that routinely produces 5 and 6-pound Rainbow trout and it hosts local elk, mule deer, and antelope populations. The water and grazing allotments support wildlife for observation, hunting, and fishing and provide outdoor recreation opportunities and the Department has recently completed an extensive wetland restoration project to improve waterfowl habitat. Nevada Department of Wildlife reports that over seventy percent of the use of Comins Lake is by Clark County residents. The property also includes the ranch buildings, which the community hopes to develop as an interpretive center on the natural history and the history of ranching in eastern Nevada. The County has received state "Question One" Conservation Bond funds and matching fund commitment through the Rocky Mountain Elk Foundation to purchase the Bassett Lake area north of McGill consisting of 6,000 acres and 53 cfs of water rights from Kennecott to create a Steptoe Valley Wildlife Management Area, north. The acquisition will be completed as soon as the terms of the purchase agreement have been agreed to by Kennecott and the State Lands Division.

Much of the public land in the County has unofficial roads cut by miners, ranchers, and recreational use on four wheelers. Efforts are being made to curtail creation of new "roads" and to develop signed trail systems for hiking and backpacking, cross country skiing, mountain bikes, equestrian use, and motorized vehicles. The majority of the trail development is in the Ward Mountain Recreation Area six miles south of Ely. It is used year round for hiking and cross-country skiing. The development has been done through the combined efforts of state and federal agencies and volunteers. The annual National Public Lands Day events partner the agencies, the Chamber of Commerce, local business, and private citizens. Each event brings an average of 200 volunteers to help construct trails, install trailheads and signs, build warming huts, and clean up the area. The goal is to eventually establish a system of multi-use trails originating in Ely and providing direct access to the surrounding recreational areas including Ward Mountain, Ward Charcoal Ovens, and the Gleason Creek/Egan Crest Trail System.

Fishing and hunting provide opportunities for local and out of town recreationists. Fishing includes bass, brown trout, and rainbow trout in local reservoirs, streams and ponds. The state record brown trout have come from Cave Lake in recent years. Most of the upland game bird hunters reported that they hunted for sage and blue grouse and are primarily from White Pine and Clark Counties. Additional small game hunting activity reported by local hunters includes doves, cottontail rabbits and waterfowl. Big game and trophy hunting include mule deer, elk, antelope, and mountain lion.

The State-wide Outdoor Comprehensive Recreation Plan reports that increasing numbers of Clark County residents are coming to White Pine, Lincoln, and Eureka Counties to enjoy uncrowded conditions and cool climates for their outdoor recreation activities.

Funding for completion of the development plans for the Great Basin National Park, Steptoe Valley Wildlife Management Area, purchase of the Bassett Lake area, expanded campground facilities, and trail systems are community priorities for recreational development on public lands.

Special Events:

The White Pine County Fairgrounds, Bristlecone Convention Center, Marich Softball Complex, and Golf Course provide the County with facilities for special events that provide activities and entertainment for residents and tourists. The County's Tourism and Recreation Board spends about one-third of its budget to help community groups fund a variety of special events. These include horse shows, the county fair, annual 4-wheeler rally, golf tournaments, softball tournaments, motorcycle races, and Arts in the Park. Twice a year, the area hosts the Silver State Classic, the longest open road races in North America, along State Route 318. The Nevada Northern Historic Railroad Museum and tourist train ride operates throughout the summer, providing train rides, excursions, and special events.

Libraries and Cultural Facilities and Programs:

White Pine County's Library is located in Ely. Its programs include collections of fiction and

non-fiction for general circulation, a reference section, children's programs, inter-library loan, Nevada Media Co-op, books by mail for outlying areas, a small collection of art reproductions and music, and computers for public use including to access Internet. The library has a total collection of 37,500 volumes, 70 percent of which is for its adult patrons and 30 percent is for children. In the past two years, budget constraints have forced the Library to eliminate its acquisitions program and to close in the evenings and on weekends. The White Pine County School District has four libraries with a total of 15,000 volumes.

The Ely Renaissance Society began a public arts program in 1999 to develop a series of murals depicting their theme, "Where the World Met and Became One," based on rich cultural diversity and heritage of the area. Murals depict the ethnic backgrounds of the miners who came to work in the copper pit, the ranching heritage, the Scandinavian settlers, the ethnic backgrounds of downtown Ely businesses, the Basque influence in the area, the role communications played on the development of the area, the Shoshone heritage, the role the children played in bringing to community of immigrants together as they went to school and learned to speak English, and Italian heritage. Downtown projects currently underway include a mural to depict the Greek influence, completion of the sculpture park, and completion of the Atlantic Richfield architectural mural. The Ely Renaissance Society completed the architectural mural depicting shopping during Ely's heyday as a company town to provide the façade improvements for the "Penneys" building when it was converted to the community owned Garnet Mercantile. The Renaissance Society presents a theatrical "Living Mural" performance each summer during the 4th of July/High School Reunion Celebrations. The Society has purchased property with nine historic homes located immediately north of the downtown district and has developed the Renaissance Village to provide facilities where artists can work and display their work as well as a place to hold community events and a stop for the Tourist Train Ride. The Renaissance Society program is benefiting the community through improved the area's appearance, strengthening community pride and helping to revitalize Ely's business districts.

A variety of volunteer groups work to provide performing and fine arts in the community. The Bristlecone Arts Association sponsors the annual Arts in the park that brings artists from throughout the West to the area for an annual weekend festival. The Community Choir performs concerts throughout the year and is working to preserve and restore the historic Stake Center as a performing arts facility. The community has two historic theaters, one of which is in use as the movie theater and represents one of the last art deco theaters in the state. Efforts are being made to ensure that the theaters are available for use in the future.

Music and dance instruction is available locally with private instructors. The County school district supports music and art programs from elementary through high school. The high school has active band and thespian groups that perform throughout the year. The Shoshone Tribal Council has initiated a program to encourage development and appreciation of Native American art.

The White Pine Public museum in downtown Ely has exhibits of the County's natural history, Native American history, railroad equipment, mining equipment and history, the Hesselgessr

Doll Collection, and the exhibit of the Cave Bear, a major paleontological discovery in Spring Valley. The Nevada State Museum and the White Pine Historical Railroad Foundation are developing the resources of the Nevada Northern passenger depot, freight barn, round house, historic rolling stock, and rail yards. The Nevada Northern facility is one of the best preserved short line railroads in the country with the original depot, rolling stock, and track in place. The community of Lund has a small museum depicting history of the ranching and Ruth, located at the copper mine is working to develop a mining history museum.

SECTION C. ANALYSIS:

1. Regional and External Economic Factors:

White Pine County's economic background is similar to that of the surrounding counties based on mining and ranching with more recent efforts turning to tourism. With the exception of the communities surrounding the two urban centers in the state, rural Nevada works to develop manufacturing and industrial activity independent of mining. Many communities throughout rural Nevada struggle with the same issues of distance from urban areas, sparse population, and the difficulty in developing their infrastructure through an orderly, planned process.

The 1999 mine closure in White Pine County was part of the loss of gold and copper mining in the state and the inter-mountain West. Throughout the region, communities are dealing with loss of jobs, loss of population, and loss of revenue. Mine workers who lost jobs in the copper industry could not commute to gold mines in neighboring counties because they were laying off workers too. Business activity diminished on a regional basis. In a similar way, issues with the agricultural industry are regional in nature. Surrounding areas deal with the same market conditions and public lands issues. Tourism, on the other hand, benefits from the activity in the surrounding region. Travelers to Las Vegas generate traffic on area highways. Rural tourism opportunities fare best when marketed as a package to encourage travelers to take US 93 or US 50 and visit all of the attractions along the way. Currently, White Pine County is facing many of the same issues as other communities in the Northern Nevada region, growth, workforce and contractor shortages, increasing costs for construction and housing. Because the growth is occurring throughout the region, it is even more difficult for White Pine County to recruit workers, secure construction bids for public projects, and offer affordable housing.

White Pine County and the regional economy are subject to worldwide changes in market, policy, and technology. New mining technology impacts the level of mining activity that is economical at any given time. Changes in policies impacting the price and use of minerals processed outside the United States determine the markets for gold and copper produced in northeastern Nevada. Markets control the economic trends in mining and ranching. Las Vegas tourism patterns are subject to trends in the national and world economy. To the extent rural areas piggy-back on the Las Vegas tourist market, if travel decreases because the economy declines or the spread of legalized gaming throughout the country decreases visitors to Las Vegas, it is much more difficult for White Pine County and the other rural communities to attract

visitors. Growth patterns in the southwest indicate an increase in population in the region of 15 million by 2025. The increased population provides a potential market for White Pine County as a place to visit, live, and work. That is being realized with the increased growth due to Clark County residents purchasing White Pine County homes and property for retirement and second homes to escape heat, crowded conditions, traffic, and other factors. The continued growth in Clark County is fueling the demand for water from Spring Valley and Snake Valley with the anticipation that if the pipeline is built, future demands will be placed on other basins and impact other Counties.

See Figure 29, Southwest Regional Growth Trends.

2. Analysis: Strengths, Weaknesses, Opportunities, and Threats:

White Pine County's Strengths, Weaknesses, Opportunities and Threats in its Natural Resources, Human Resources, Capital Resources, and Infrastructure help to shape its economy future.

Natural Resources:

Location, Land, Water, Mineral, Timber, Climate, Scenery, and Wildlife all offer potential for economic development, some on both the positive and negative side of the issue.

Location: White Pine County is either "centrally located" in the Inter-Mountain West or its "in the middle of nowhere." The distances of over 250 miles to the closest urban centers in any direction impact economic development efforts. Industrial activity is restricted to those activities that are not dependent on being close to an urban market. Ely cannot expect to benefit from neighboring urban sprawl for industrial activity, business development, or residential growth. On the other hand, Ely is located at the cross roads of US 50 and US 93 and the north south route has had increased traffic for both tourism and industrial development since the NAFTA Treaty. It is equi-distant from Salt Lake City and Las Vegas and Hill and Nellis Air Force Bases offering opportunities for support services and products for the regional economies and Defense Department contracts. White Pine has the potential draw "lone eagles" that want a rural life style in the mountains while staying reasonably close to major airports and business centers.

Land: With 8,900 square miles, White Pine County has plenty of land for development and expansion. With 93 percent of the land administered by public agencies, that resource can be more time consuming and difficult to access for projects than developers would like. Both the Bureau of Land Management and U.S. Forest Service planning processes, on-going Environmental Impact Statements on proposed projects, and the proposed Public Lands Bill have the potential to provide lands for disposal for private development as well as additional lands set aside as Wilderness Areas. The wide-open spaces appeal to travelers, especially tourists from Europe and the Pacific Rim. It also makes it difficult for County government and resources to provide adequate infrastructure and emergency services for residents, businesses, and travelers.

Water: White Pine County's water is one of its most precious resources. The abundance and quality of its water have always been a benefit for mining and ranching activities. As those two

industries decline, the water opens the door for development; major water intensive projects like a power plant; and support of an environment rich with riparian areas, wildlife, and beautiful mountain scenery that attracts tourists and recreationists. Nevada water law says that the water belongs to the people of the state and municipal and industrial are the highest and best uses. As Las Vegas leads the southwest and the nation in growth, it will need to identify water resources to help support its development. The hearings are underway on the state Engineer's hearings regarding the Southern Nevada Water Authority applications for the water from Spring and Snake Valleys and private water companies are working to purchase other land and water rights. White Pine County has limited resources to support the technical and legal expertise needed to manage and develop its water resources for the benefit for the people and environment in White Pine County.

Minerals: Mining has been White Pine County's economic mainstay and will always be a part of the County's economic picture. The County has gold, silver, and copper; building materials including gravel, sand, and decorative stone; and oil resources. When they are developed depends on price and the cost of developing the resource. While the county enjoys the economic benefit of mining when it is active, it has learned that it cannot rely on mining to provide economic stability.

Timber: White Pine County's timber resources have traditionally had minimal economic impact and have been limited to fire wood, Christmas trees, fence posts, and pine nuts. Current efforts focus on reduction of fire danger and especially concerns of urban interface because of thick and encroaching pinyon juniper stands near development as well as the need to restore the range conditions to support wildlife and livestock grazing. The volume is too great to address with controlled burns. The by-product of mechanical treatment is waste wood, which must either be disposed of or used. The community is working with federal agencies to identify and pursue economic activity from the pinyon juniper biomass including "green" power generation and other products. The County has approved sale of Industrial Park property and a Revolving Loan Fund loan for a company planning to use waste wood from fuels reduction projects on federal lands to manufacture pellets for wood stoves. The timber resources will generate jobs and private sector investment.

Climate: In the spring and fall, Ely, Nevada, occasionally appears on national news as the coldest spot in the nation. Sitting on the edge of the major western storm patterns and the high altitude makes weather unpredictable. The semi-arid conditions with a 9-inch annual rainfall and short growing season limit the options available for agricultural activity. But, White Pine County does not contend with catastrophic weather conditions. It has four distinct seasons. And, its dry, high desert climate with cool summer temperatures contribute to its attractiveness as a tourist destination and site for second homes.

Scenery and Wildlife: During the years when copper mining provided a prosperous and stable economy, White Pine County's basin and range topography; mountain scenery; and, elk, deer, and antelope herds were its best-kept secrets. As mining declined, tourism and recreation became focal points of economic development strategies. The area's scenery, outdoor recreation

opportunities, and wildlife have become assets. Some fear that success with tourism will result in crowded conditions and diminish their own enjoyment of their favorite places.

Human Resources:

Workforce: White Pine County's unemployment rate is at or below the statewide and national levels. White Pine County is facing a critical issue of workforce availability and especially workforce skills. The workforce in rural Nevada is fluid and tends to go where the jobs are. Because it is not close to urban centers with opportunities in several industrial sectors, employees tend to stay in jobs as long as they are available rather than going from one job to another. The lower turnover reduces operating costs. Local businesses and public entities report that students need a stronger work ethic and better skills in math, reading and writing, and customer service and the community is working to combine efforts of employers and educators to help create programs to provide both College and High School students to develop the skills required by local employers.

Volunteerism: White Pine County has always functioned on a high level of volunteer support. There is a pool of dedicated volunteers who devote their time and energy to programs and projects to benefit the community. Some of the County's primary services like fire protection, emergency medical services, and recreation programs depend heavily on volunteers. Increasing demands on time for training and to provide the service for the community with a reduced number of volunteers is discouraging and is impacting the ability to recruit and retain volunteers. Participation as a volunteer strengthens the sense of community and incorporate newcomers. Even if the County had funds to pay for all of the service now provided by volunteers, it would lose the social benefits of the volunteer tradition. The community needs to develop ways to reduce the impact of volunteering on an individual's time and family life and to show its appreciation for their efforts.

Community Attitude and Leadership: The attitudes of White Pine County's residents are strength and a weakness, an opportunity and a threat. On the one hand, County residents are proud of its heritage and its diversity. People have strong ties to the area. They are independent and have a "can do" attitude from decades as an isolated outpost that had to meet all of its needs on its own. On the other hand, some long time residents don't want change and some newcomers don't know or appreciate the area and its history. The negative attitude expressed by some in the community can hurt business and tourism efforts because it produces poor customer service. This is an issue targeted by the Chamber of Commerce. Negativism can drain local elected and volunteer leaders of their enthusiasm and commitment. Local governments need to be especially aware of the impact it can have on the willingness of people to volunteer and to run for office, and they need to take steps to support their advisory boards, volunteers, and elected officials. Much like community attitude, leadership is an issue that can impact the County both positively and negatively. The community has strong leaders who have had years of experience

and know and understand public processes. However, it is becoming increasingly difficult to get qualified candidates to run for office or volunteer for positions on advisory boards. Again, the community needs to provide strong recruitment and retention programs for its elected and appointed leadership.

3. Capital Resources:

The community has limited capital resources from both the public and private sectors. The limits make it difficult to secure funding for business development and to maintain local infrastructure and programs.

Private Capital: A declining mining economy, small population base, and bank mergers combine to make it difficult to access private capital for new business projects. There are several public loan programs available but they all require some level of private sector participation. A review of the private and public sector resources available shows that good business projects in the \$100,000 to \$200,000 range can find financing. Larger projects, \$1 million or larger, and very small projects have limited resources. Existing loan programs could be modified to offer micro-loans but the community has limited staff to provide the high level of client services needed to successfully nurture new, very small business start up activity. Bank mergers and moving the decision making further from the rural communities limits local business access to capital.

Public Capital: The most critical issue facing the local governments is the critical financial situation faced by White Pine County government. The County is working with the Department of Taxation to overcome the critical financial issues, avoid insolvency, and development systems that will enable the County to move forward with sound fiscal policy. Budget cuts have already had an impact on the school programs that can be offered to White Pine County students. The County is supported by the fact that it is guaranteed a base rate so some revenues will not decline further. However, it must increase its tax base to provide the residents with the programs they want and need. Almost all rural Nevada communities face the same issues and tax structure reform has been recommended for several years. A unified approach to the legislature might help to encourage that reform.

4. Infra-Structure:

Across all the categories of infrastructure the Strengths, Weaknesses, Opportunist, and Threats are relatively similar. The community's strength is that it has infrastructure developed during the "boom" portion of the mining industry cycle. The weakness is that it lacks the funding and stability of its revenue sources to operate, maintain, expand, and improve the infrastructure in an orderly way. The poor condition of much of the infrastructure interferes with the ability to operate efficiently. The community's lack of staff capacity to pursue funding alternatives limits its ability to seek creative solutions to some of the issues it faces. The inability to provide amenities that many now consider basic needs impacts the community's ability to attract new businesses. In all areas of infrastructure the community has opportunities to develop new funding sources and improve its situation. The critical need is to focus on a workable action plan and set priorities for those activities that can be accomplished. The threat is that failure to

WHITE PINE COUNTY, REGIONAL MAP

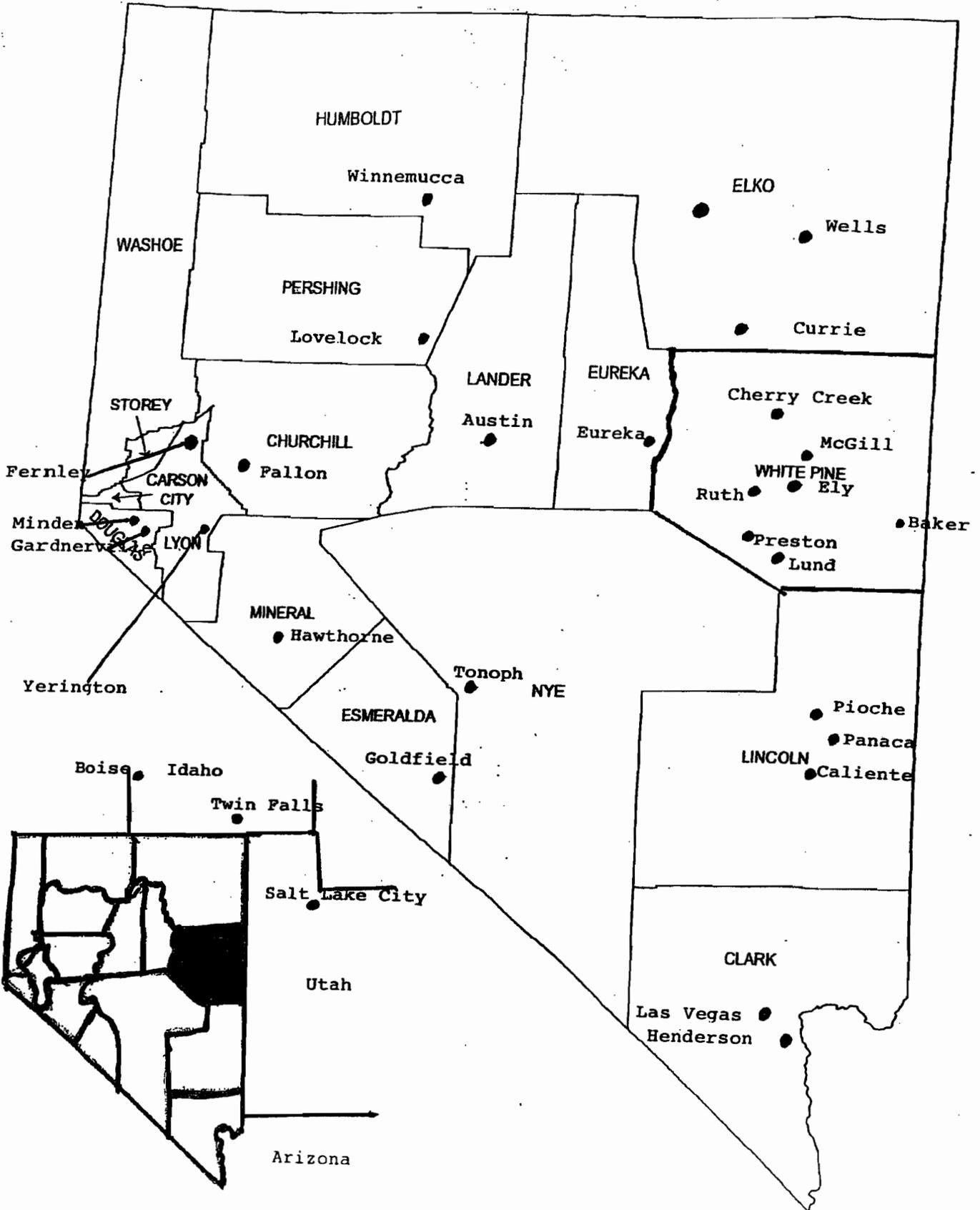


FIGURE 1

Annual Climate Normal
(Ely Yelland Field)

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Maximum Temperature	41.0	42.3	48.8	55.4	65.6	74.5	92.0	84.6	75.0	63.7	52.6	42.1
Minimum Temperature	10.4	15.7	21.9	26.4	33.4	40.6	47.4	46.4	37.5	27.8	18.2	10.6
Average Temperature	30.2	31.8	35.5	41.2	50.8	57.4	70.3	66.0	55.6	46.5	37.8	29.0
Precipitation	1.08	1.03	1.29	1.97	2.45	.19	.24	1.75	.72	.79	.83	.65
Snowfall July 05 - June 06	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.9	9.2
Snow Depth July 05 - June 06	0.5	-	-	-	-	-	0.0	0.0	0.0	0.0	.03	.04

Figure 2

White Pine County Geographic Features

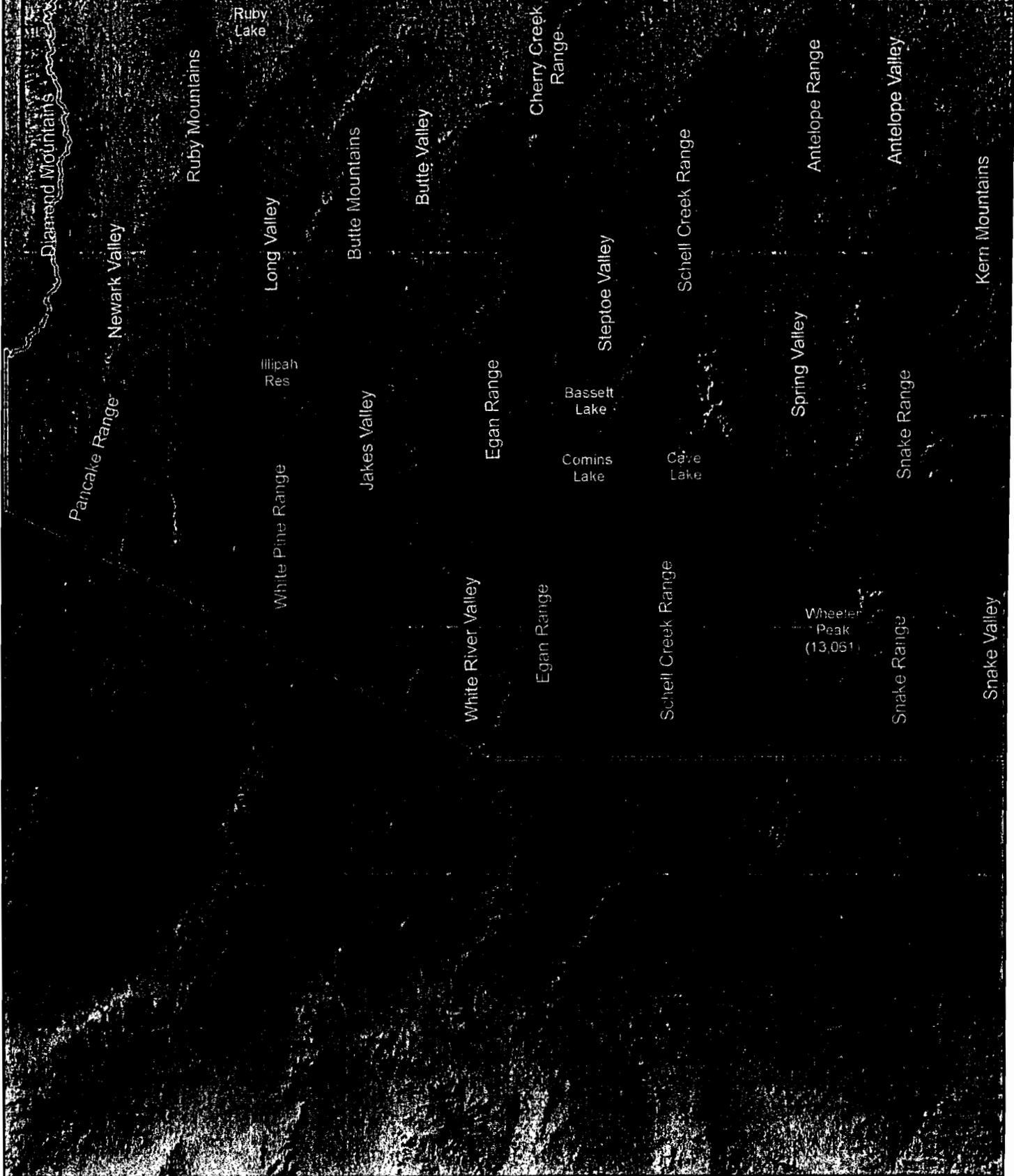
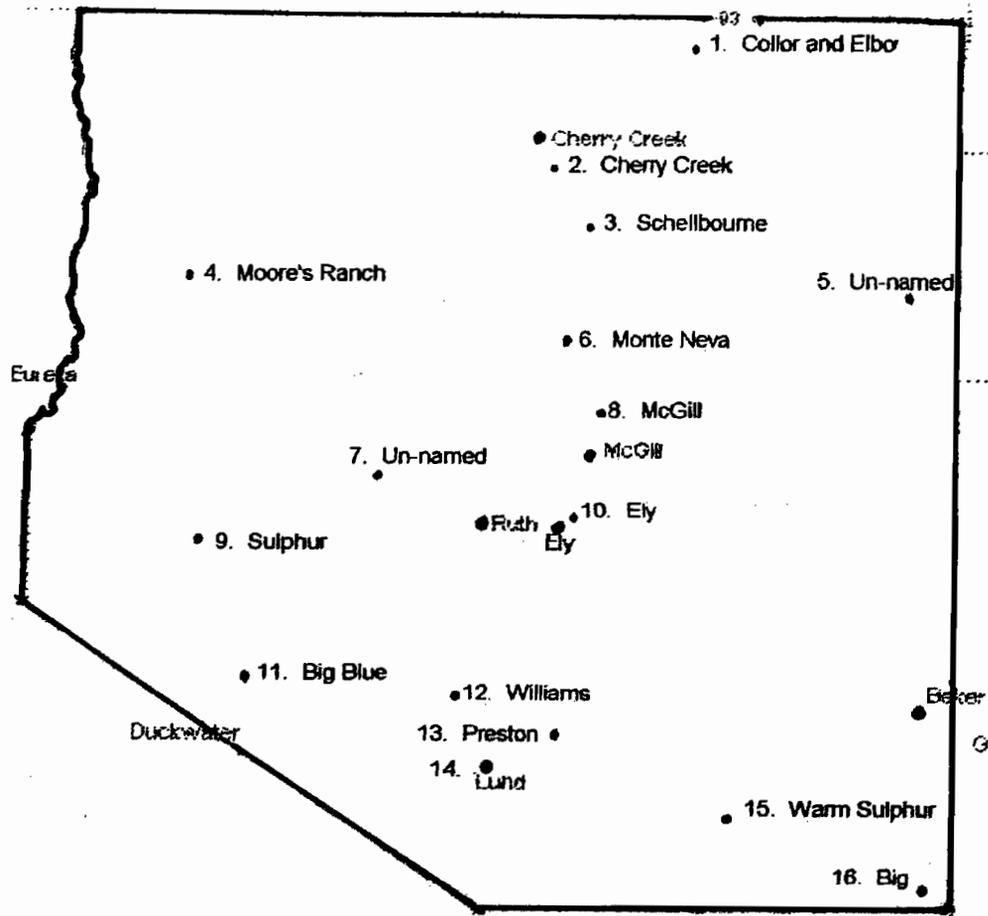


Figure 3

GEOTHERMAL RESOURCES IN WHITE PINE COUNTY



(*Nevada State Land Use Planning Agency, "Natural Resource Potentials for White Pine County, 1977)

<u>Name of Spring</u>	<u>Temperature</u>	<u>Flow (Gal. Per min.)</u>
1. Collor and Elbow	92	20
2. Cherry Creek	118-135	40
3. Schellbourne	124-135	-
4. Moore's Ranch	65-70	200
5. Un-named	Warm	-
6. Monte Neva	173-193	625
7. Un-named	58-76	200
8. McGill	-	450
9. Sulphur	---	---
10. Ely	85	23
11. Big Blue	Warm	--
12. Williams	124-128	185
13. Preston	72	5,700
14. Lund	66	2,400
15. Warm Sulphur	Warm	972
16. Big	64	8,000

FIGURE 4

HYDROGRAPHIC REGIONS IN WHITE PINE COUNTY

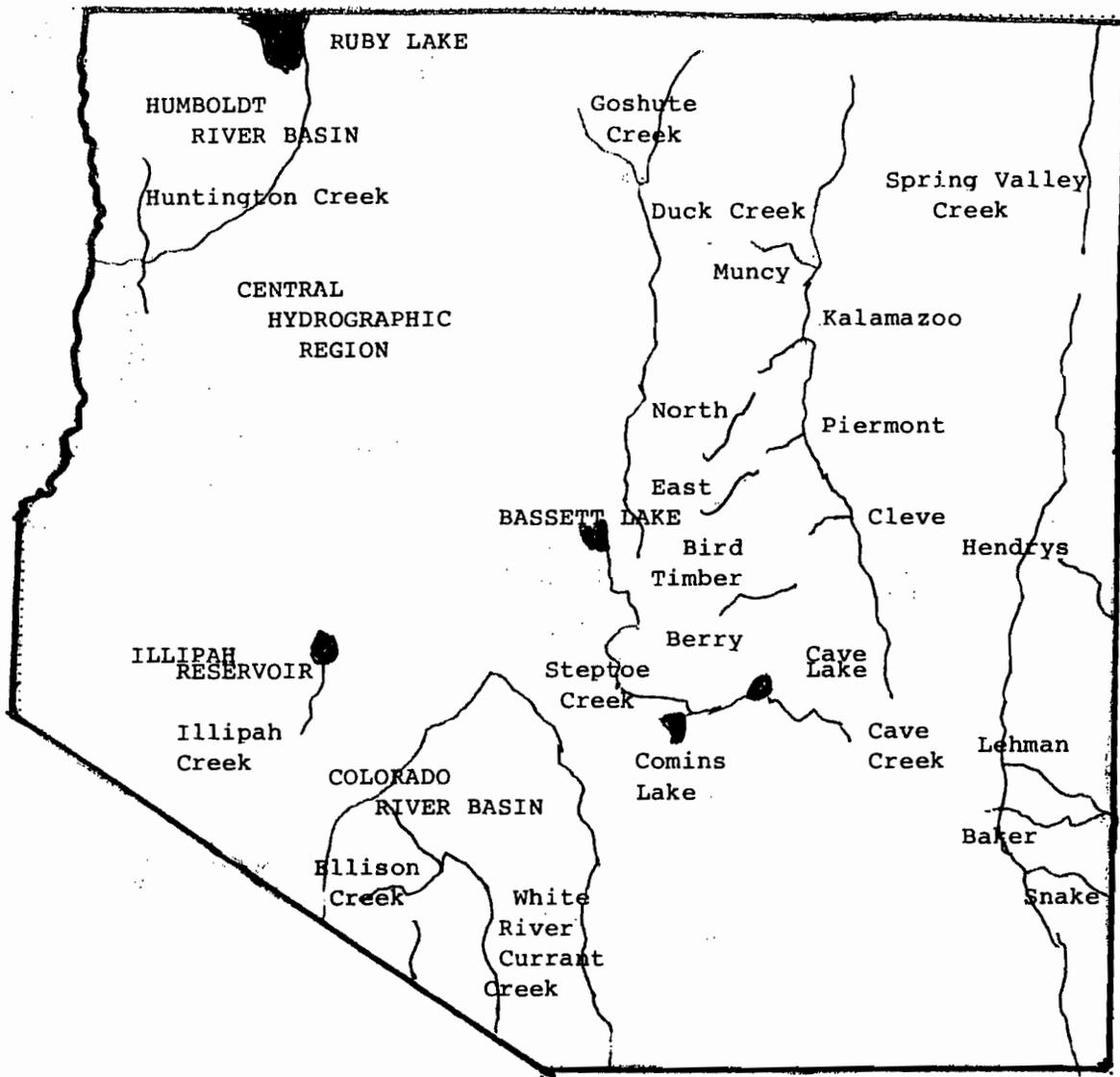
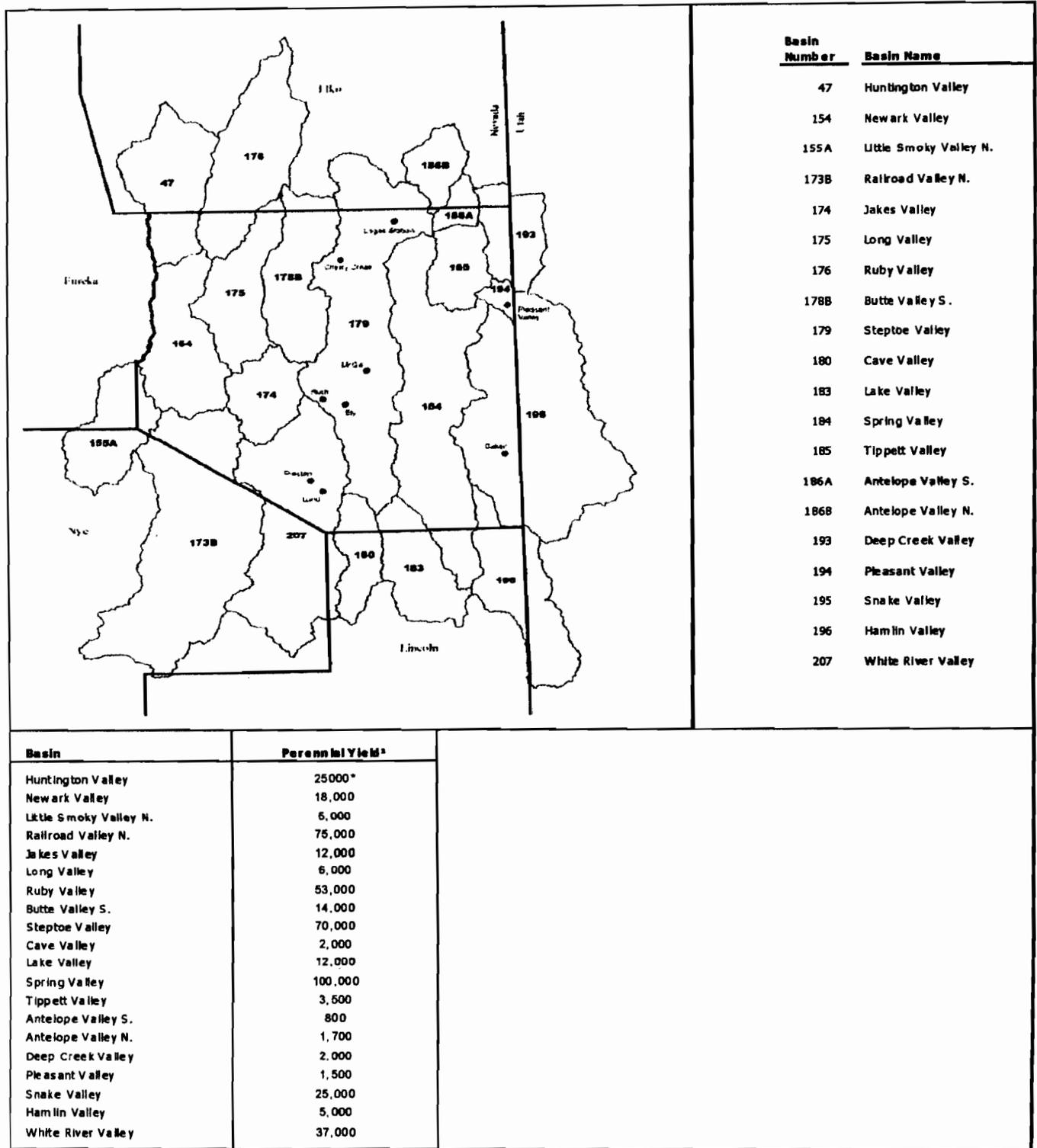


FIGURE 5

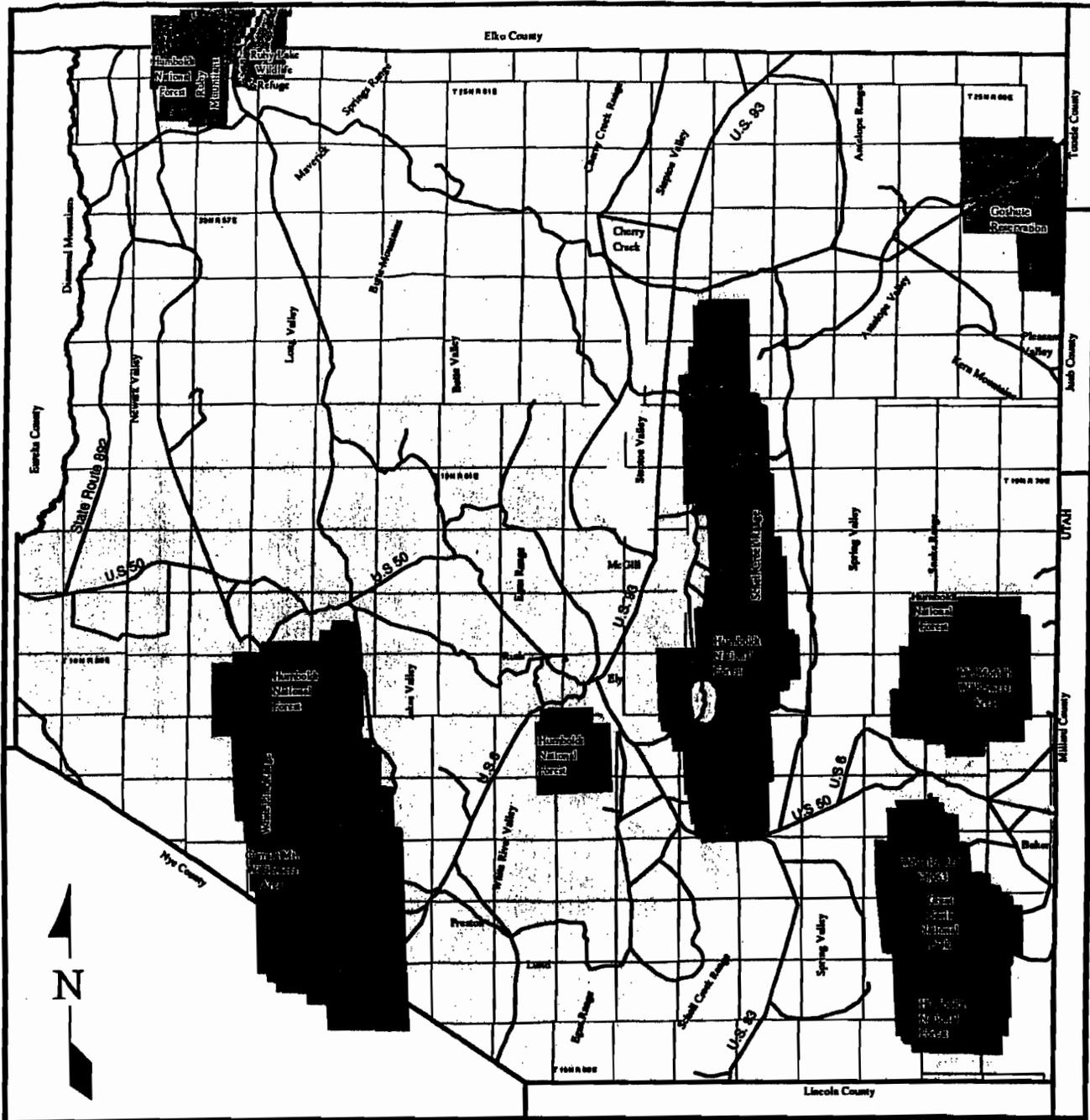
White Pine County Water Resources Plan



* Combined yield for basins 46, 47, and 48

¹ Perennial Yields per Division of Water Resources Hydrographic Basin Summaries

Figure 6



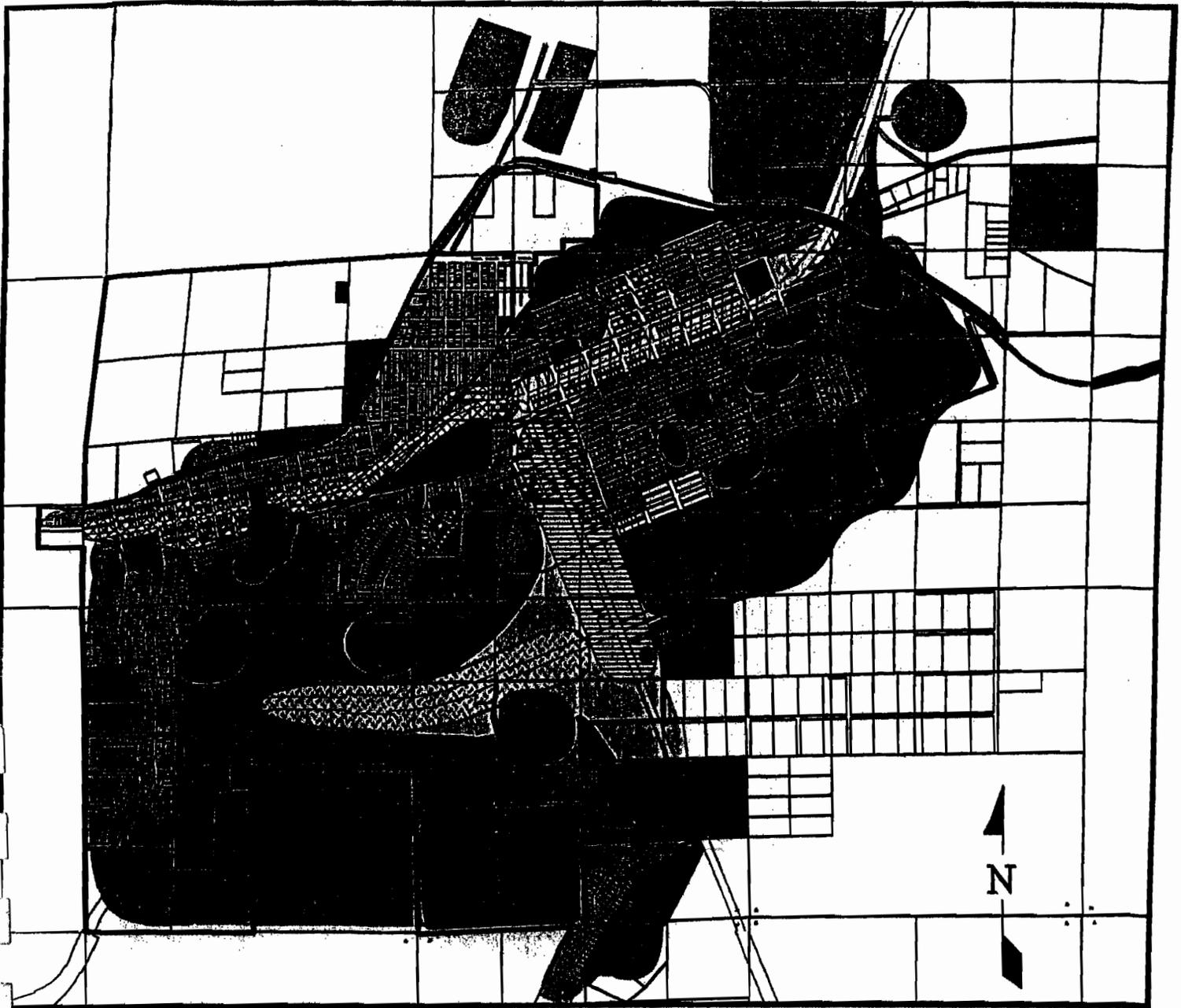
Land Use Plan White Pine County, Nevada December 1997

Intertech Services Corp.
Planning, Economics, Program Management
P.O. Box 2008
Carson City, Nevada (702) 883-2051

Lumos and Associates, Inc.
Civil Engineering, Planning, Surveying and Materials Testing
5401B Longley Lane #13
Reno, Nevada 89511 (702) 827-6111

Land Use	
□	Open Range
□	Commercial
□	Low Density Residential
■	Federal Reserve
□	Recreation Residential

FIGURE 8



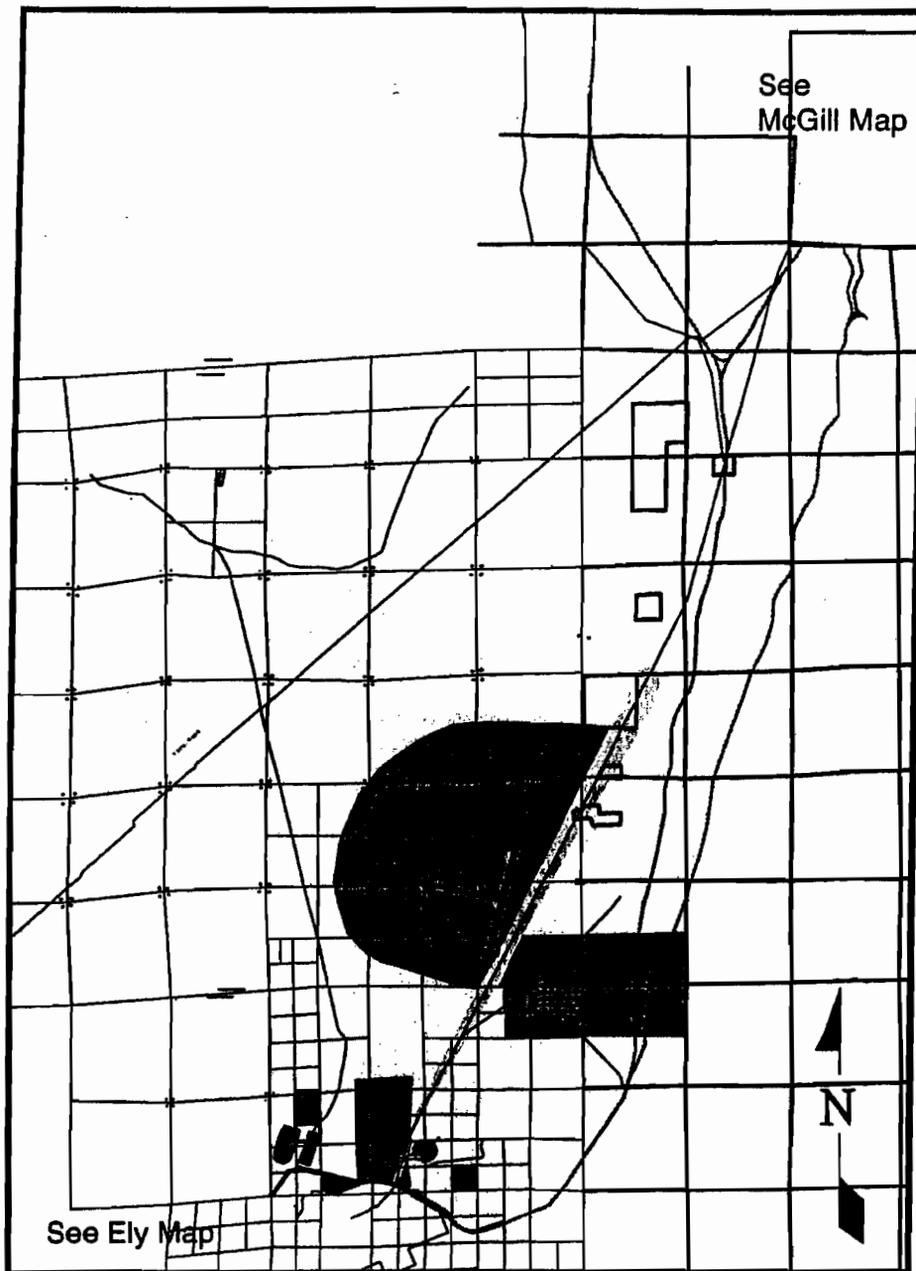
**Land Use Plan City of Ely
White Pine County, Nevada
December 1997**

InterTech Services Corp.
Planning, Economics, Program Management
P.O. Box 2008
Ely, Nevada (702) 883-2051

Thomas and Associates, Inc.
Civil Engineering, Planning, Surveying and Materials Testing
101B Longley Lane #13
Ely, Nevada 89511 (702) 827-6111

List:
Lwor (workspace layout)

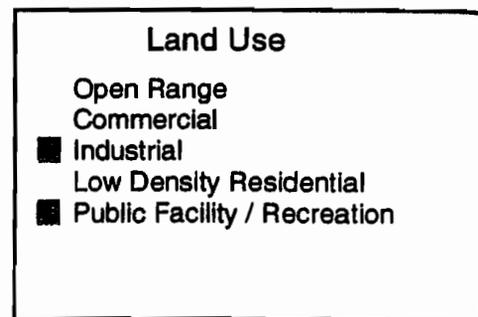
Business Districts	
	Downtown
	Service Business
	Retail Business
	Commercial Business
	Historic Railroad
Land Use	
	Open Range
	Commercial
	Industrial
	High Density Residential
	Medium Density Residential
	Low Density Residential
	Mobile Home
	Public Facility / Recreation
	Federal Reserve



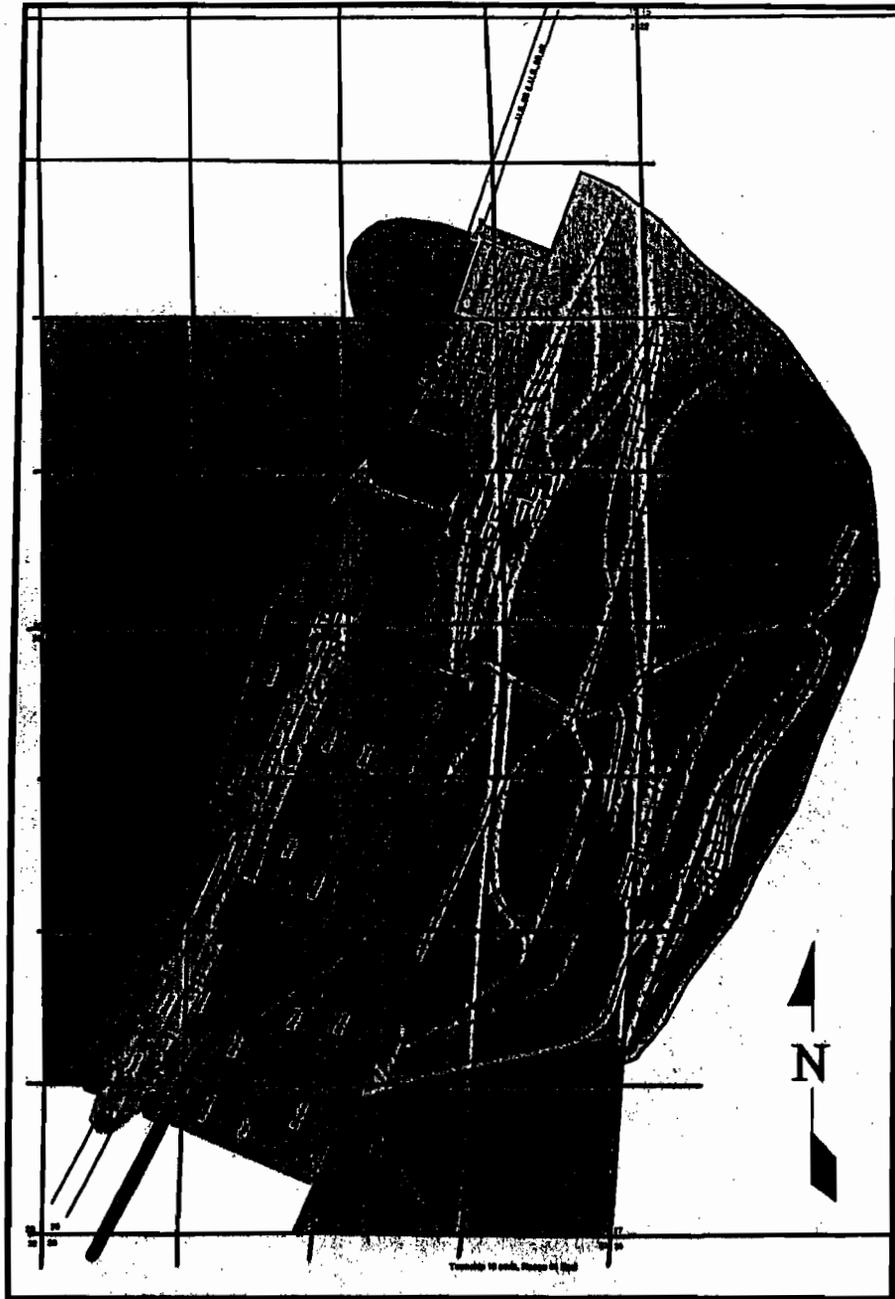
**Land Use Plan
Ely-McGill, White Pine County, Nevada
December 1997**

Intertech Services Corp.
Planning, Economics, Program Management
P.O. Box 2008
Carson City, Nevada (702) 883-2051

Lumos and Associates, Inc.
Civil Engineering, Planning, Surveying and Materials Testing
5401B Longley Lane #13
Reno, Nevada 89511 (702) 827-6111



File List:
ety_mcgill.wor (workspace layout)



**Land Use Plan
McGill
White Pine County, Nevada
December 1997**

Intertech Services Corp.
Planning, Economics, Program Management
P.O. Box 2008
Carson City, Nevada (702) 883-2051

Lumos and Associates, Inc.
Civil Engineering, Planning, Surveying and Materials Testing
5401B Longley Lane #13
Reno, Nevada 89511 (702) 827-6111

File List:
McGill.wor (workspace layout)

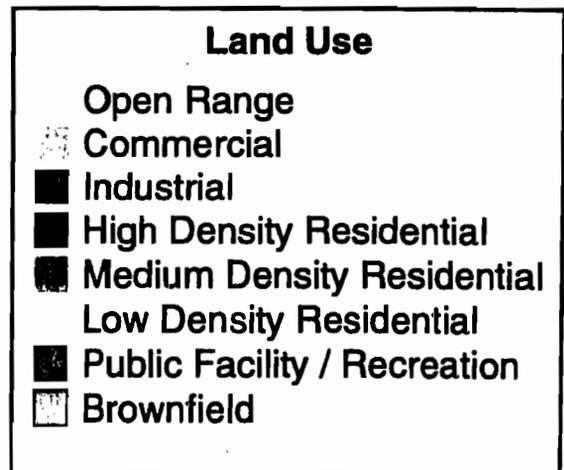
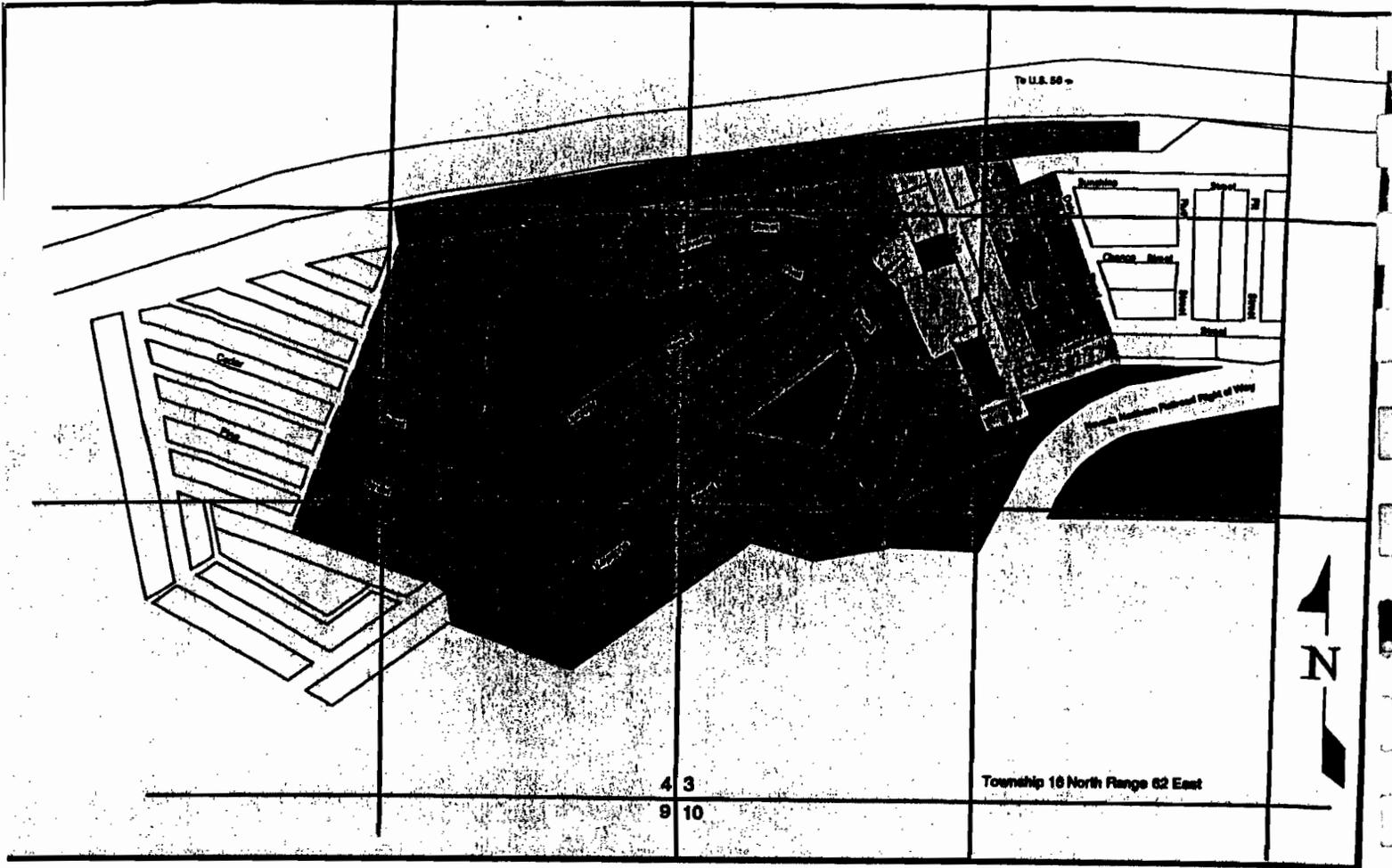


FIGURE 11



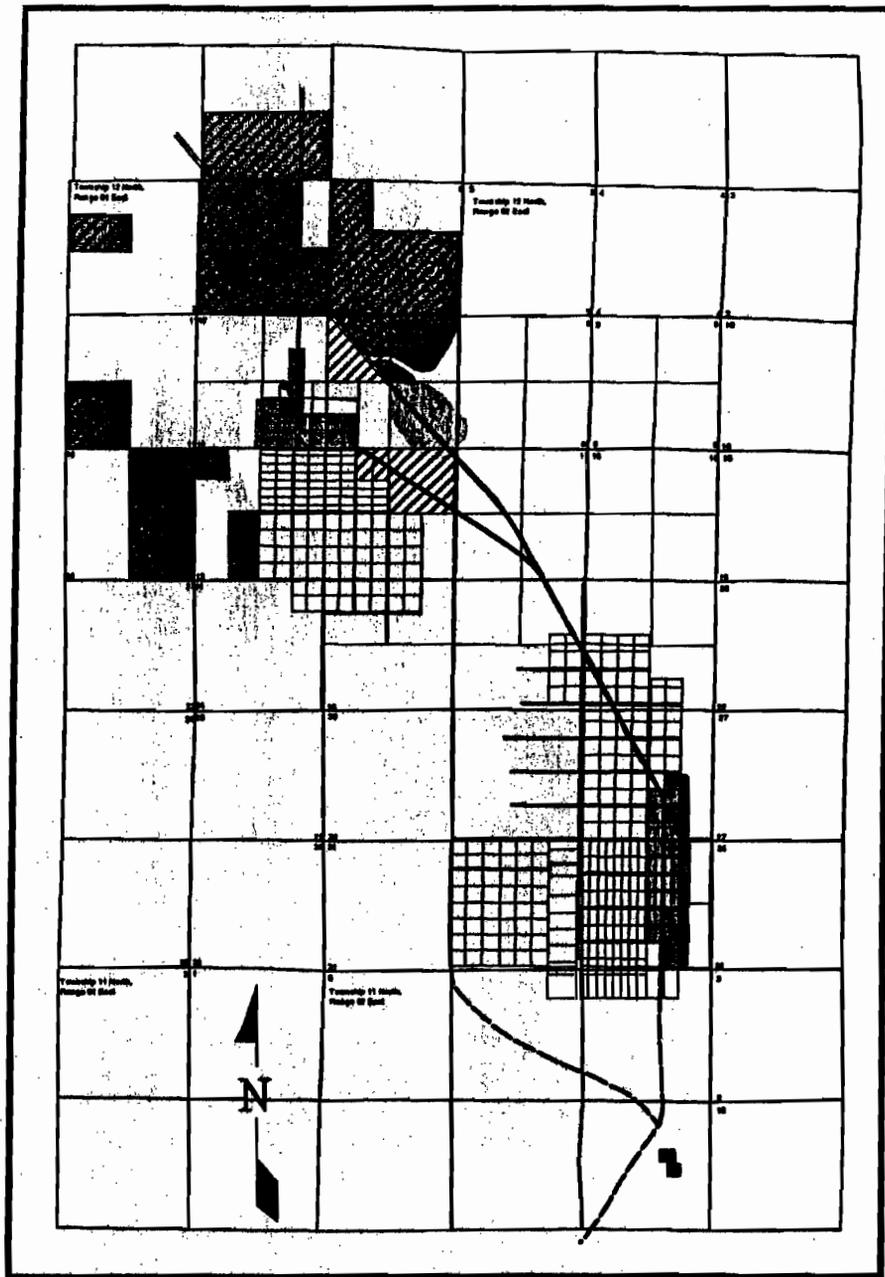
**Land Use Plan
Ruth
White Pine County, Nevada
December 1997**

Intertech Services Corp.
Planning, Economics, Program Management
P.O. Box 2008
Carson City, Nevada (702) 883-2051

Lumos and Associates, Inc.
Civil Engineering, Planning, Surveying and Materials Testing
5401B Longley Lane #13
Reno, Nevada 89511 (702) 827-6111

Land Use	
	Open Range
	Commercial
■	Industrial
■	Medium Density Residential
■	Public Facility / Recreation

File List:
Ruth.wor (workspace layout)
Ruth.tab (blue line image)
Street_names.tab
Twmng.tab (Township & Range)
Ruth_parcel.tab
Ruth_landuse.tab



**Land Use Plan
Preston and Lund
White Pine County, Nevada
December 1997**

InterTech Services Corp.
Planning, Economics, Program Management
Box 2008
Benton City, Nevada (702) 883-2051

Stevens and Associates, Inc.
Engineering, Planning, Surveying and Materials Testing
118 Longley Lane #13
Benton City, Nevada 89511 (702) 827-6111

Scale:
1 inch = 1 mile (workspace layout)

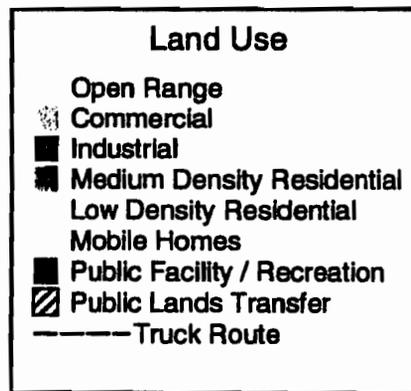
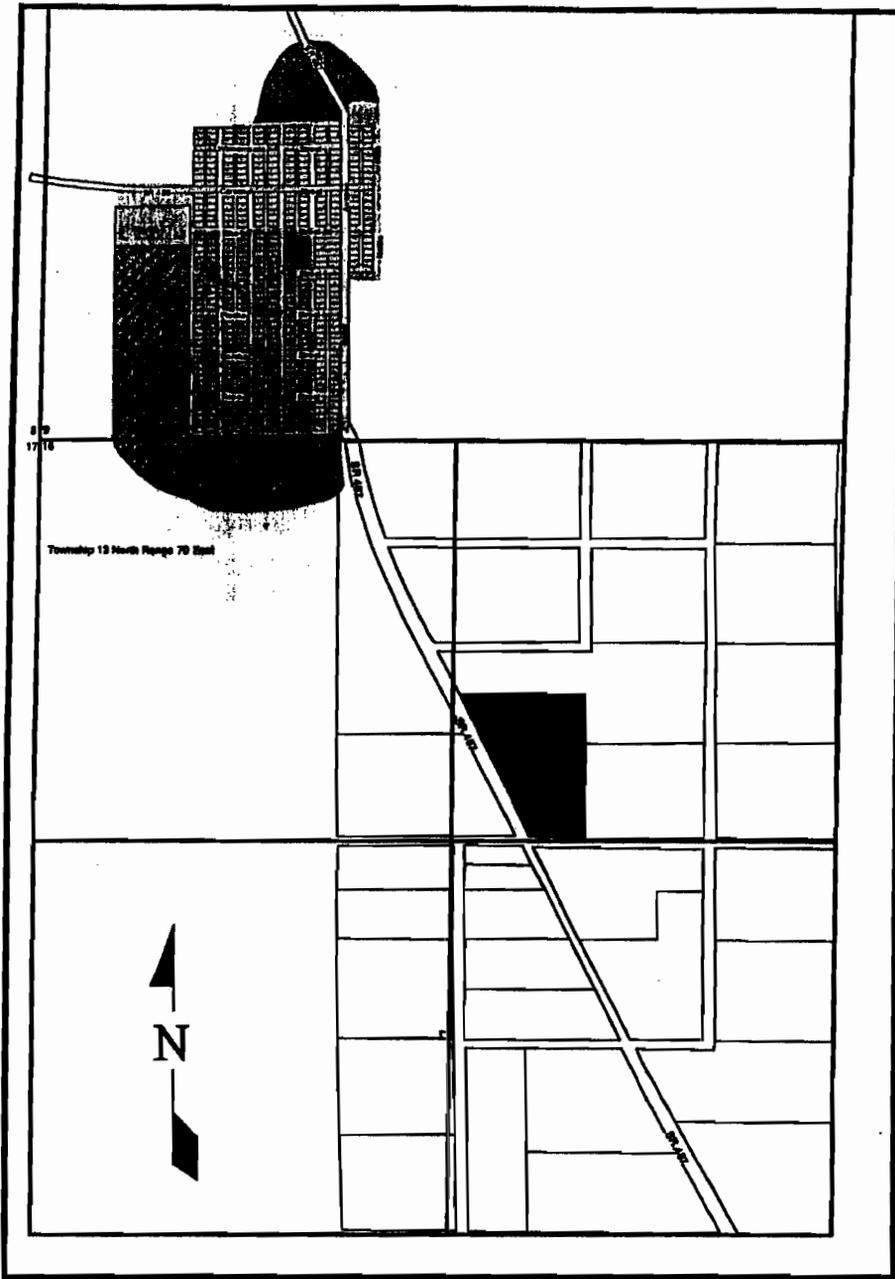


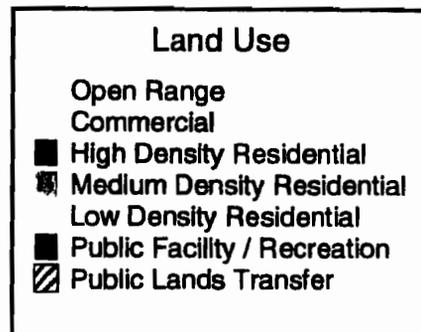
FIGURE 12



Land Use Plan Baker, White Pine County, Nevada December 1997

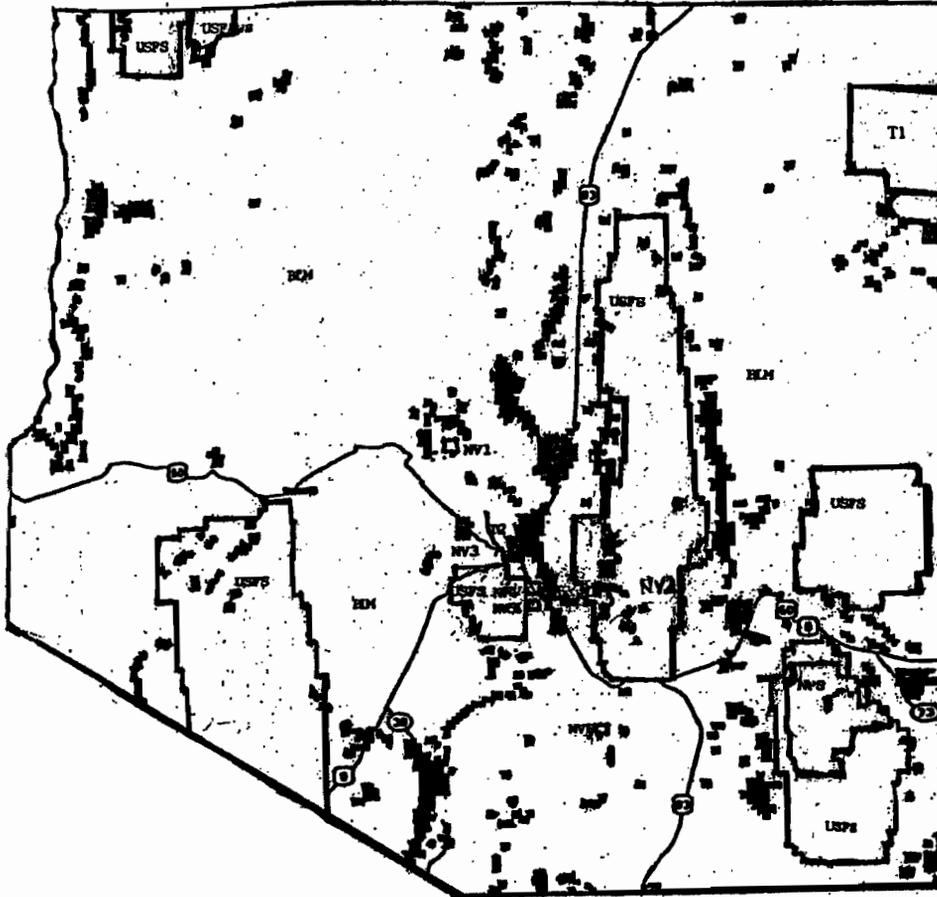
Intertech Services Corp.
Planning, Economics, Program Management
P.O. Box 2008
Carson City, Nevada (702) 883-2051

Lumos and Associates, Inc.
Civil Engineering, Planning, Surveying and Materials Testing
5401B Longley Lane #13
Reno, Nevada 89511 (702) 827-6111



File List:
Baker3.wor (workspace layout)
Baker.tab (blue line image)
Baker_Street_names.tab
landgrid.tab (Township & Range)
Baker_parcel.tab
Baker_landuse.tab

WHITE PINE COUNTY LAND OWNERSHIP



FEDERAL:

BLM: Bureau of Land Management
USFS U.S. Forest Service, Humboldt/Toiyabe National Forest
USF&WS US Fish and Wildlife Service, Ruby Marshes
 National Wildlife Refuge
NPS National Park Service, Great Basin National Park

STATE OF NEVADA

NV1 Ely State Prison
NV2 Cave Lake State Park
NV3 Great Basin College
NV4 Steptoe Valley Wildlife
 Management Area
NV5 Ward Charcoal Ovens State Park
NV6 Ely Conservation Camp

TRIBAL

T1 Goshute Reservation
T2 Ely Shoshone Tribal Lands

■ **LOCAL GOVERNMENT AND PRIVATE LAND.**

FIGURE 15

**Federal, State, Local Government and
Private Sector Lands in
White Pine County, 2000**

Categories	Acreage	Share of Total (%)
Federal Agencies:		
Bureau of Land Management	4,417,431	76.3%
Forest Service	900,000	15.5%
Other Federal Agencies	87,647	1.54%
Total Federal Lands	5,423,033	93.53%
Native American Reservations	70,852	1.24%
State Government Lands	9,060	0.2%
Local Government and Private Sector Lands	288,754	5.07%
TOTAL	5,791,699	100.0%

White Pine County Property Tax Rates
FY 05-06

Local Government Taxing Unit	Assessed Valuation	Est. Net Proceeds of Mines	Total Assessed Valuation	Combined Tax Rate (col9, part B)	County Tax Rate	Combined		School Tax Rate	State Tax Rate	Total Property Tax Rate
						Special District Tax Rate	School Tax Rate			
White Pine County	1,275,808	5,000,000	131,851,808	1.6705		0.54	1.1310	0.1500	3.66	
White Pine County School District	127,851,808	5,000,000	131,851,808	0.0000	1.6705	0.54	1.1310	0.1500	3.66	
Ely	48,438,897	-	48,438,897	0.0000	1.6705	0.54	1.1310	0.1500	3.66	
Lund Town	1,382,897	-	1,382,897	0.0000	1.6705	0.54	1.1310	0.1500	3.66	
McGill Town	5,401,214	-	5,401,214	0.0000	1.6705	0.54	1.1310	0.1500	3.66	
Ruth Town	1,909,089	-	1,909,089	0.5400	1.6705	0.54	1.1310	0.1500	3.66	
Baker Water & Sewer District										
McGill-Ruth Water & Sanitation District										
White Pine County Hospital District	127,851,808	5,000,000	132,851,808							
White Pine County Television District	127,851,808	5,000,000	132,851,808							

CONSOLIDATED TAX DISTRIBUTION
REVENUE SUMMARY BY COUNTY
FISCAL YEAR 2005-06

COUNTY	BCCRT	SCCRT	CIGARETTE	LIQUOR	RPTT	MVPT	TOTAL
White Pine County	763,867.42	2,816,688.00	59,184.86	11,318.75	793,432.75	765,035.42	5,209,527.20

White Pine County Educational Attainment

	Total		Not a High School Graduate		High School Grad.		Some College/ A.A.		Bachelors		Grad./Professional	
	W.P. Co	Nevada	W.P. Co	Nevada	W.P. Co	Nevada	W.P. Co	Nevada	W.P. Co	Nevada	W.P. Co	Nevada
Male	45.0%	55.0%	10.6%	10.9%	15.0%	15.6%	14.7%	18.2%	4.6%	6.9%	3.9%	3.4%
Female	44.2%	45.0%	5.8%	7.3%	9.5%	12.8%	20.3%	16.8%	4.3%	5.6%	1.1%	2.6%
Total	89.2%	100.0%	16.3%	18.3%	28.7%	28.4%	35.0%	34.9%	8.9%	12.5%	4.4%	6.0%

Work Force Age - White Pine County

14 - 18	197	5.6%
19 - 21	153	4.4%
22 - 24	136	3.8%
25 - 34	628	18.0%
35 - 44	722	22.0%
45 - 54	906	26.0%
55 - 64	545	15.5%
65 - 69	167	4.7%
Total	3504	100.0%

WHITE PINE COUNTY, NEVADA

Total Labor Force-Two Year / Quarterly Comparison			
	1st QTR-2005	1st QTR-2004	2nd QTR-2006
TOTAL LABOR FORCE	3,734	4,245	4,270
UNEMPLOYMENT	167.00	189.00	147.00
UNEMPLOYMENT RATE	4.50%	4.50%	3.4%
TOTAL EMPLOYMENT	3,567	4,056	4,123
Note: Unemployment rates are not seasonally adjusted.			
These estimates may not be strictly comparable with estimates reported before 02/94			

Industrial Employment and Wage Data

	Jun-05	4th QTR-200	
		Average Weekly Wages	
	Employment	White Pine Co.	Nevada
MINING	628.00	\$ 1,040.00	\$ 1,206.00
CONSTRUCTION	152.00	\$ 488.00	\$ 814.00
MANUFACTURING	30.00	\$ 331.00	\$ 596.00
TCPU	150.00	\$ 852.00	\$ 609.00
TRADE	520.00	\$ 960.00	\$ 1,032.00
FIRE	120.00	\$ 1,049.00	\$ 1,813.00
SERVICES	590.00	\$ 417.00	\$ 551.00
GOVT	1,474	\$ 845.00	\$ 932.00
TOTAL ALL INDUSTRIES	3,664	\$ 5,982.00	\$ 7,553.00

TCPU=Transportation, Communications & Public Utilities

Trade=Wholesale & Retail Trade

FIRE-Finance, Insurance & Real Estate

Total Labor Force - Two Year/Quarterly Comparison			
	1st QTR-2005	1st QTR-2004	2nd QTR-2006
TOTAL LABOR FORCE	3,734	4,245	4,270
UNEMPLOYMENT	167.00	189.00	147.00
UNEMPLOYMENT RATE	4.5%	4.5%	3.4%
TOTAL EMPLOYMENT	3,567	4,056	4,123
Note: Unemployment rates are not seasonally adjusted			
These estimates may not be strictly comparable with estimates reported before 02/94.			

**White Pine County
Labor Force
Characteristics**

	MALE		FEMALE		TOTAL	
	White Pine Co. Per Cent	Nevada Per Cent	White Pine Co. Per Cent	Nevada Per Cent	White Pine Co. Per Cent	Nevada Per Cent
Caucasian	1,624	83.4%	68.8%	1,400	86.1%	69.6%
Hispanic	239	14.3%	18.1%	109	6.7%	14.3%
Black	8	0.8%	5.5%	4	0.2%	6.4%
Asian	4	0.2%	4.0%	23	1.4%	5.5%
Native Hawaiian - Pacific Islander	0	0.0%	0.4%	0	0.0%	0.4%
American Indian	53	2.7%	1.0%	78	4.8%	1.2%
Black & White	0	0.0%	0.1%	4	0.2%	0.2%
Asian & White	0	0.0%	0.4%	0	0.0%	0.6%
American Indian & White	19	1.0%	0.5%	4	0.2%	0.6%
American Indian & Black	0	0.0%	0.1%	0	0.0%	0.1%
Other	0	0.0%	1.2%	4	0.2%	1.2%
	3,024	84.2%	69.1%	3,024	84.2%	69.1%
	348	8.7%	16.4%	348	8.7%	16.4%
	12	0.3%	5.9%	12	0.3%	5.9%
	27	0.8%	4.7%	27	0.8%	4.7%
	0	0.0%	0.4%	0	0.0%	0.4%
	131	3.6%	1.1%	131	3.6%	1.1%
	4	0.1%	0.1%	4	0.1%	0.1%
	0	0.0%	0.5%	0	0.0%	0.5%
	23	0.8%	0.6%	23	0.8%	0.6%
	0	0.0%	0.1%	0	0.0%	0.1%
	4	0.1%	1.2%	4	0.1%	1.2%

FIGURE 20 (a)

**2001 White Pine County
Housing Census**

	Single Family Detached	Single Family Attached	Mobile Homes	Apartments	Total
Ely (East Ely, Parca, Cross Timbers, Gate of Hercules)	1693	28	327	310	2358
McGill	539	4	50	16	609
Ruth	169	0	39	4	212
Lund / Preston	75	0	35	0	110
Baker	11	0	27	0	38
Cherry Creek	21	0	16	0	37
Other (General Co., Ranches / Mines)	<u>577</u>	<u>0</u>	<u>436</u>	<u>4</u>	<u>1017</u>
Total	3,085	32	930	334	4,381
Housing Occupancy					
Occupied Housing	73.9%				
Vacant	26.1%				
Recreational Use	4.5%				
Home owners vacancy rate	67%				
Rental vacancy rate	23.80%				
Average Household size	2.42				
Average Family size	2.62				
Owner occupied	2.45				
Rental	2.30	Overall	2.42		

PROFILE OF GENERAL DEMOGRAPHIC CHARACTERISTICS: 2000

Sex and Age	Number	Percent
Male.....	5,164	
Female.....	4,017	
Under 5 years.....	550	
5 to 9 years.....	604	
10 to 14 years.....	682	
15 to 19 years.....	590	
20 to 24 years.....	509	
26 to 34 years.....	1,270	
36 to 44 years.....	1,477	
45 to 54 years.....	1,371	
55 to 59 years.....	481	
60 to 64 years.....	426	
65 to 74 years.....	682	
75 to 84 years.....	435	
85 years and over.....	121	
Median age (years).....	37.7	
18 years and over.....	6961	
Male.....	4042	
Female.....	2919	
21 years and over.....	6690	
62 years and over.....	1472	
65 years and over.....	1239	
Male.....	567	
Female.....	672	
RACE		
One race.....	8959	
White.....	7925	
Black or African American.....	380	
American Indian and Alaska Native.....	302	
Asian.....	72	
Asian Indian.....	8	
Chinese.....	9	
Filipino.....	10	
Japanese.....	13	
Korean.....	9	
Vietnamese.....	2	
Other Asian.....	21	
Native Hawaiian and Other Pacific Islander.....	22	
Native Hawaiian.....	4	
Guamanian or Chamorro.....	1	
Samoan.....	11	
Other Pacific Islander(2).....	6	
Some Other Race.....	284	
Two or more races.....	193	

FIGURE 22

TRENDS IN POPULATION DISTRIBUTION IN THE COUNTY

	1940	1950	1960	1970	1980	1990	2000	2005
City of Ely	4,140	3,558	5,814	6,168	4,882	5,000	5,118	4,166
McGill	NA	2,297	2,195	2,164	1,419	1,712	1,384	1,109
Rurth	NA	1,244	NA	731	456	391	469	394
County Balance		2,325	1,799	1,987	1,410	2,161	2,210	3,606
County Total	12,377	9,424	9,808	11,050	8,167	9,264	9,181	9,275

**White Pine Power Project Impact Statement, Socio-economic
Baseline Technical Report, 1990 and 2000 Census Data**

**White Pine County Property Tax Rates
FY 05-06**

Local Government Taxing Unit	Assessed Valuation	Est. Net Proceeds of Mines	Total Assessed Valuation	Combined Tax Rate (col9, part B)	Combined			State Tax Rate	Total Property Tax Rate
					Special District Tax Rate	School Tax Rate	County Tax Rate		
White Pine County	1,275,808	5,000,000	131,851,808	1.6705	0.54	1.1310	0.1500	3.66	
White Pine County School District	127,851,808	5,000,000	131,851,808	1.2795					
Ely	48,438,897	-	48,438,897	0.0000	0.54	1.1310	0.1500	3.66	
Lund Town	1,382,897	-	1,382,897	0.0000	0.54	1.1310	0.1500	3.66	
McGill Town	5,401,214	-	5,401,214	0.0000	0.54	1.1310	0.1500	3.66	
Ruth Town	1,909,089	-	1,909,089	0.0000	0.54	1.1310	0.1500	3.66	
Baker Water & Sewer District				0.5400					
McGill-Ruth Water & Sanitation District									
White Pine County Hospital District	127,851,808	5,000,000	132,851,808						
White Pine County Television District	127,851,808	5,000,000	132,851,808						

**CONSOLIDATED TAX DISTRIBUTION
REVENUE SUMMARY BY COUNTY
FISCAL YEAR 2005-06**

COUNTY	BCCRT	SCCRT	CIGARETTE	LIQUOR	RPTT	MVPT	TOTAL
White Pine County	763,867.42	2,816,688.00	59,184.86	11,318.75	793,432.75	765,035.42	5,209,527.20

Figure 24

Regional Transportation Routes

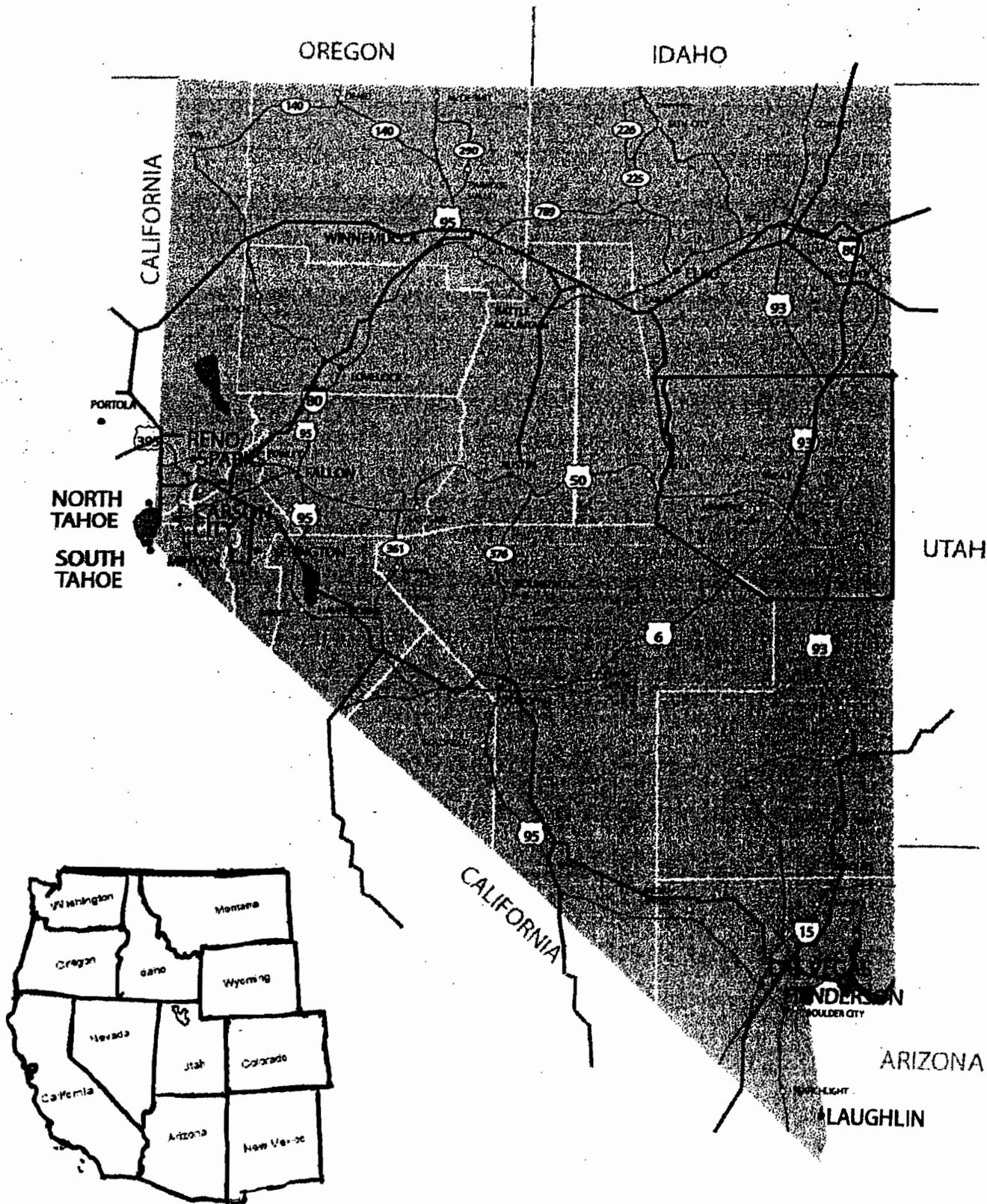


FIGURE 25

Highway Traffic Counts

	1987	1989	1991	1993	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	Capacity
To Kimberly and Ruth															
Ruth-Kimberly Rd -Station 11	685	790	725	915	2290	1500	1300	900	700	680	700	700	700	1600	16000
Kimberly Branch Rd -Station 13	-	-	-	-	750	740	710	180	90	120	120	70	70	960	130000
Station 23															
East Ely	10200	12600	11650	11270	13100	12300	12300	10500	11300	10000	10000*	11300	11100	11000	13000
Station 25															
US 50/93, Avenue F East Ely	5490	6190	5850	5800	6760	7200	7750	7650	7500	7500*	7500*	8200	8450	9500*	13000
Station 29															
US 93, Spring Valley	2201	2500	2550	2950	3250	3100	310	-	80	80	80	50	50	70	13000
Station 47															
US 93, McGill	2400	2970	2900	2795	3070	3100	2900	2900	2850	3100	2800	3150	3100	2950	13000
Station 74 (Sunnyside to NYE Co. Line)															
SR 318 to Las Vegas	560	705	760	675	740	900	960	1000	1000	910	1050	1050	1050	1050	13000

FIGURE 26

**2005-2006
Enrollment by School
White Pine County**

<u>Community / School</u>	<u>Grade Level</u>	<u>Enrollment</u>
<u>Ely:</u>		
David E. Norman	K through 5	380
White Pine Middle School	6 Through 8	323
White Pine High School	9 Through 12	396
<u>McGill:</u>		
McGill Elementary School	K Through 5	138
<u>Baker:</u>		
Baker Elementary	1 Through 8	21
<u>Lund:</u>		
Lund Junior	K Through 5	46
Lund Senior High School	7 Through 12	66
	Total Enrollment	1370
Average Class Room Size	19	
Average expenditure per pupil	5386	

FIGURE 28

REGIONAL POPULATION FORECASTS

(thousands)

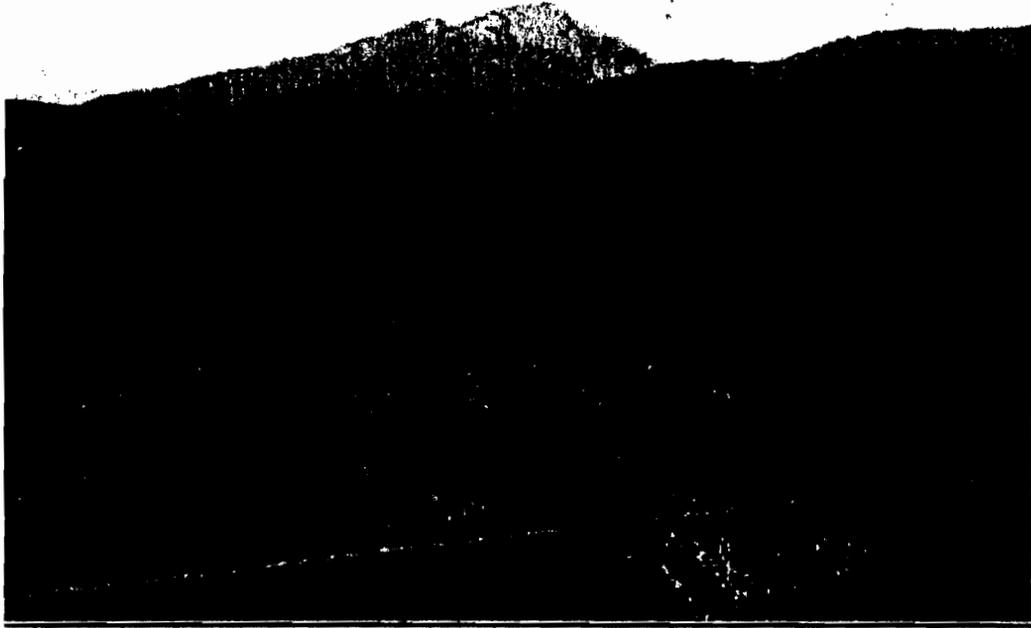
STATE	7/1/2000	7/1/2005	7/1/2015	7/1/2025
Nevada	1,863	2,130	2,547	2,854
California	32,423	33,511	36,838	41,480
Arizona	4,838	5,432	6,620	7,729
Idaho	1,332	1,489	1,775	2,008
Utah	2,216	2,477	2,995	3,487
Oregon	3,397	3,625	4,036	4,361
Regional Total	46,069	48,664	54,811	61,919

Source: Census Bureau, Series B Forecasts, www.census.gov/population/projections/state/stpjpop.txt

***WHITE PINE COUNTY
LAND USE PLAN***

ATTACHMENT 3

***2006 White Pine County Water Resource
Plan, Basin-by-Basin Analysis***



***WHITE PINE COUNTY
WATER RESOURCES PLAN***

***WHITE PINE COUNTY COMMISSION
WHITE PINE COUNTY REGIONAL PLANNING COMMISSION
WHITE PINE COUNTY WATER ADVISORY COMMITTEE***

AUGUST, 2006

including second homes, retirement homes, and assisted living facilities; commercial development; tourism and travel facilities including motels, restaurants, microbrewery/winery development, and convention facilities. The Ely Campus of Great Basin College is one of the fastest growing segments of the college and provides the opportunity for future expansion of educational activity. The draft White Pine Public Lands Bill proposes a feasibility study on an Agricultural Research Center that can provide additional opportunities for development of educational facilities and economic activity. The Ely State Prison has land for additional expansion. Steptoe Valley can support expansion of traditional economic sectors including mining and agriculture.

Steptoe Valley is a closed basin and future development to meet the needs of White Pine County residents may depend on water resources available. The County's goal is to maintain the balance of development, agriculture, and outdoor recreation in the Valley and it has identified the possibility that in the future it will need to consider importation of water from adjacent basins to help support the growth and development opportunities in Steptoe Valley. The primary basins that could export water to Steptoe Valley are Spring, Butte, and Cave Valleys.

Spring Valley:

Spring Valley is located in eastern White Pine County and is bordered on the west by the Schell Creek Range and Steptoe Valley, on the north by Antelope Valley, on the east by the Snake Range and Snake Valley, on the southwest by Lake Valley, and it extends south into Lincoln County. Spring Valley has 43,538 acres of private land, 40,406 acres taxed as agricultural land and 3,132 acres taxed in categories related to single family housing.

Water Resources:

The State Division of Water Resources estimates the perennial yield in Spring Valley is 224,858 acre feet per year. The water commitments (in acre feet annually) include:

Status	Surface Water	Ground Water	Total
Certificated	48,257	10,286	58,543
Permitted	862	9,725	10,587
Vested*	173,882	0	173,882
Reserved	461	0	461
Decreed	1,396	0	1,396
Applications	0	1,280	1,280
Dom. Well Logs	0	32	32
RFA/RFP	13,342	253,835	267,176
TOTAL	238,199	275,158	513,357

*Unverified

Committed water rights include: 252,538 afa, irrigation, 97.5 percent; 4,226 afa, mining, 2 percent; 883 afa, stock watering, .3 percent; 467 afa, Other, .2 percent; 82 afa, quasi-municipal uses, 32 afa, domestic well logs (without appropriative rights), 20 afa, wildlife, and 1 afa, domestic uses, all less than one-tenth of a percent. Spring Valley represents the most active basin for applications denied, ready for action, and vested water rights in White Pine County. Of the 74 applications Ready for Action, nineteen are for exportation to southern Nevada for municipal uses, one is for power, one for stock

watering, one for quasi-municipal uses, one for mining activity, and fifty-one are for irrigation. (Based on the information filed with the Hydrographic Abstract, the applications would support 19,552 acres of irrigated crop land and at 3.4 acre feet per acre would represent 66,476 acre feet of water annually). Over two hundred applications have been denied in the White Pine County portion of Spring Valley since 1960. Of these, seven were for mining activity, eight were for stock watering, eight were for power, and two hundred twelve were for irrigation. The Division of Water Resources hydrographic Abstract lists ninety-four vested water rights, three for mining activity, thirty-one for stock watering, and the remainder for irrigation.

Historical and Current Economic Activity:

While there are no communities in Spring Valley, it houses several ranches and single-family homes. Historically, Spring Valley has supported agriculture including alfalfa and livestock production and mining. According to the County Assessor's records, there are 40,406 acres of private land taxed as agricultural property in Spring Valley. Based on the Census of Agriculture and the Natural Resource Conservation Service records, Spring Valley represents 38 percent of the County's alfalfa production and generates \$2.6 million per year through direct sales. In addition, according to the Bureau of Land Management and reports of individual ranchers, Spring Valley represents approximately 20 percent of the County's cattle production and 60 percent of its sheep production for a total direct sales of \$1.6 million. Based on the University of Nevada, Reno, Cooperative Extension Service report on the impact of cattle ranching and farming, the total contribution of livestock production in Spring Valley is \$2.8 million in total output and thirty-eight jobs.

There are known mineral deposits and historical mining activity for gold, silver, lead, zinc, tungsten, and copper; there is a small active gold mine; and there has been limited oil exploration activity; and Spring Valley is identified by the Bureau of Mines and Geology as having moderate potential for oil production.

Recreational activity includes big game (mule deer, elk, and antelope) and bird hunting, fishing in the streams, and camping and hiking in the Cleve Creek Recreational site and the Mt. Moriah Wilderness Area. Based on a review of Nevada Department of Wildlife's Big Game Status Book, Upland and Migratory Bird harvest data, and Angler Census data as well as visitor data from Great Basin National Park, U.S. Forest Service, and Bureau of Land Management, Spring Valley supports approximately \$5.3 million in recreational expenditures in the County each year.

Spring Valley has been selected for development by the Long Now Foundation and they have purchased property in south Spring Valley at Mt. Washington for their Millennium Clock project with the potential for future development in the Valley. Spring Valley is beginning to attract investment for second and retirement homes and according to the County Assessor, there are over 3,000 acres of private land in Spring Valley that are currently taxed for single family residences.

Potential Economic Development:

Two major transportation routes cross Spring Valley, east/west on US Highway 50 and north/south on US Highway 93. It is also crossed by two 230 Kv transmission lines. The state's Renewable Energy Task Force has identified Spring Valley as an area with wind

energy development potential and there are wind energy companies exploring the potential of development in that area. Spring Valley is the only location in White Pine County with potential for wind energy development in the valley floor rather than ridge tops. New activity can include renewed mining activity based on market and technology; expanded agricultural activity for traditional and new crops including seed oils, native seeds for revegetation projects, orchards, hops, or vineyard development; feed lots, and processing plants based on the agricultural produce. Water resources could be used for a bottled water plant. According to the Department of Agriculture, the trout farming industry is growing at a rate of 5 percent per year and cold-water aquaculture would be compatible with existing ranching activity. Spring Valley has the potential to attract new residential development in South Spring Valley from southern Utah and Nevada, and in the north from Steptoe Valley. There has been a proposal for a condominium project in north Spring Valley, and the area could support tourism development through lodge or motel development, guide services, and historic ranches. Energy development could include wind, solar ponds and/or pumped storage projects, and biomass projects using the pinyon juniper resources.

Spring Valley has been identified as a potential source of additional water for Steptoe Valley if development of industrial and municipal projects creates a shortage of water resources.

Snake Valley:

Snake Valley is on the eastern border of White Pine County and houses the community of Baker and Great Basin National Park. The Valley is bordered on the north by Pleasant And Tippet Valleys, on the South by Hamlin Valley, and on the West by Spring Valley. Snake Valley has 16,641 acres of private land excluding the community of Baker. Of that 12,551 acres are agricultural, 1012 are taxed as single family residential uses, and 78 are classified as commercial.

Water Resources:

The Division of Water Resources estimates the perennial yield in Snake Valley at 25,000 acre feet per year. Total water commitments include:

Status	Surface Water	Ground Water	Total
Certificated	11,141	3,212	14,353
Permitted	800	7,200	8,000
Vested*	3,294	--	3,294
Applications	638	--	638
Dom Well Logs	--	81	81
RFA/FRP	12,670	56,513	69,183
Total	44,888	67,006	111,894

*Unverified

Committed water rights include 24,489 afa for irrigation, 56 percent; 5,430 afa, power, 12.5 percent; 5,792 afa for wildlife, 13.3 percent; 7,266 afa for other, 16.7 percent; 244 afa for stock water, .5 percent; 70 afa for quasi-municipal uses, 110 afa for recreation, 2 afa for domestic uses, and 81 afa for domestic wells (without appropriative

rights). Three fourths (32,991 afa/43,484) of the committed resources are surface water. A substantial portion of the basin extends into Utah on the east. There are 11,899 afa allocated by decree. There are nineteen applications Ready for Action or Ready for Action with protest. Of those, eight are for irrigation, two are for municipal and quasi-municipal uses for the Baker Water and Sewer General Improvement District; and nine were filed for municipal uses by the Las Vegas Valley Water District. Of the applications denied since 1960, seven were for mining activity; two were for quasi-municipal activity; one was for stock watering; and fort-eight were for irrigation and based on those applications where the database specified acres, they would have supported at least 7,800 acres of irrigated crops. Earlier water rights applications denied by the state engineer (prior to 1960) were primarily for mining and power generation. Vested water rights in Snake Valley are primarily for stock watering and irrigation.

Current and Historical Economic Activity:

Historically economic activity has been based on agriculture, services to travelers and tourists, and mining. Agricultural uses have included alfalfa production and livestock. In the past there was an apple orchard near Baker. The area also supports commercial pine nut collection. There are known mineral deposits of gold, lead, silver, copper, and tungsten; there have been some oil exploration wells drilled in the valley, and there has been limited production of its substantial resources for crushed and dimensional stone production. The Great Basin National Park draws almost 90,000 visitors per year, primarily in the summer months. The Park has never had the funding to develop additional facilities as outlined in the development plan. With increased visitor accommodations, the Park would increase in visitation. Additional tourist activity includes big game and bird hunting and the Mt. Moriah and Marble Canyon Wilderness areas. According to the Nevada Department of Wildlife, the Snake Valley area is responsible for 4,000 hunter days and fishing activity includes Silver Creek Reservoir as well as numerous creeks. The valley supports the business community at Baker including two restaurants, a food market, two convenience stores, two motels, a campground, arcade, art and antique store, and a service station; the Border Inn motel, service station, convenience store, restaurant and bar, gift shop, and meeting facilities; and the Hidden Canyon Ranch resort, space, convention facilities, campground, and native trout restoration facility. Residential development is active and growing in Snake Valley due to services available and the National Park. Industrial activity includes the Horns-a-Plenty and D-Bar-X production of antler art and wrought iron decorative products as well as several home based business producing a variety of arts and crafts.

Potential Economic Development:

Snake Valley has the resources to support a wide range of dispersed recreation including rock climbing, mountain biking, hiking and backpacking, and cross-country skiing. The area has the potential for continued residential development from both southern Utah and southern Nevada. Washington County, Utah is one of the fastest growing counties in the United States and Snake Valley offers a cooler climate and mountain scenery for retirement and summer homes. Potential tourism development includes lodge/motel developments, guide services and historic ranches. The community of Baker has available land and capacity to support additional commercial development on its water and sewer system. New motel and restaurant services are proposed in the Valley and as the National Park continues to increase its visitorship, there will be the demand for services. There is a strong potential for development of stone quarries and production of

crushed and dimensional stone for building materials. Potential for economic development includes alternative crops including seed oils for biodiesel fuels, biomass, orchard development, and food processing based on agricultural production. Water resources could be used for cold-water aquaculture, trout farming, which would be compatible with existing ranching activity. The area could also support a bottled water plant and in conjunction with agricultural production and tourism development, possibly a winery and/or microbrewery. Mining exploration and development will depend on market conditions. Two critical aspects to Snake Valley's development and its use of water resources are the developments in the Utah portion of the basin and the natural transportation of water into and out of the basin.

Butte Valley:

Butte Valley is located west of Steptoe Valley and extends south to US 50 and north into Elko County. It is bordered by Long Valley on the west, the Egan Range on the east and Jake's Valley on the south. Butte Valley is included in the primary basins because of the potential for residential development and the proximity to Steptoe Valley. Butte Valley has 4,056 acres of private land (in White Pine County) of which 3,736 are taxed as agricultural and 320 are classified for single family homes.

Water Resources:

The Division of Water Resources estimates the perennial yield in Butte Valley at 14,000 acre feet a year. Total water commitments include:

Status	Surface Water	Ground Water	Total
Certified	1,315	284	1,599
Permitted	2,803	.4	2,803.4
Vested*	1,035		1,035
Applications		15,204	15,204
RFA/RFP	3	26,064	29,064
Total	5,156	41,552	46,708

***Unverified**

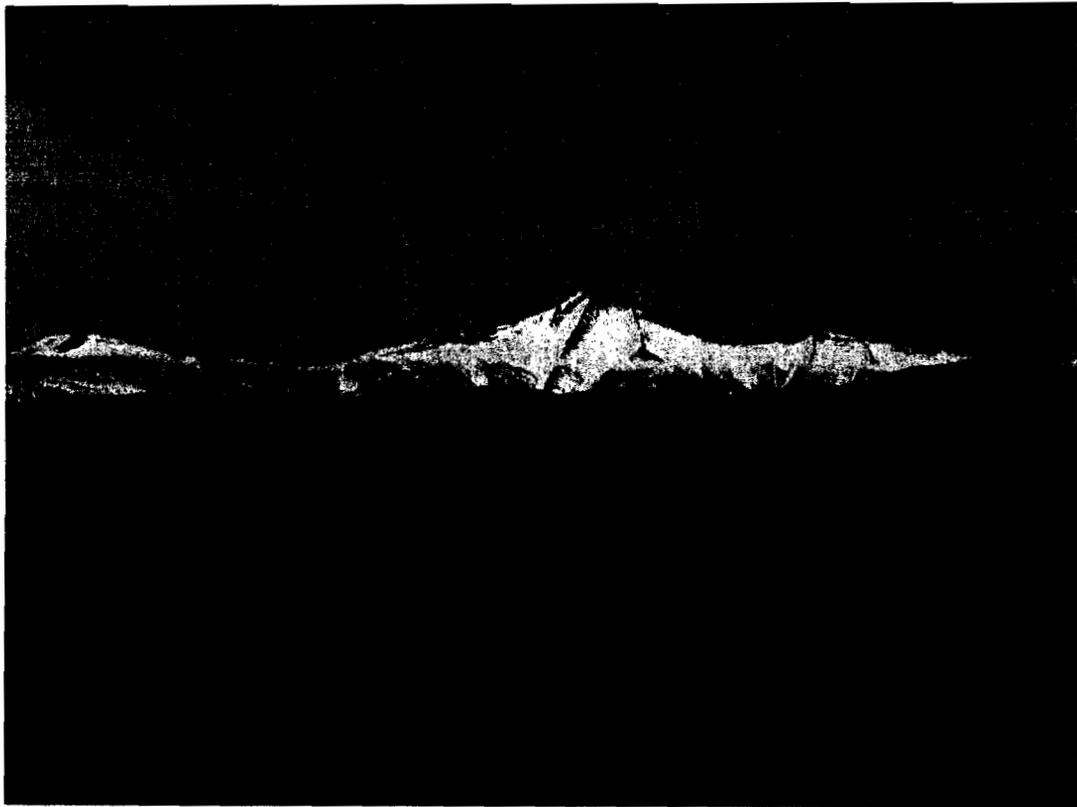
Committed water rights include 4,971 for irrigation, 91.3 percent; 294 acre feet annually for stock, 5.5 percent; 172 acre feet annually for mining, 3.3 percent; and 3 acre feet annually for quasi-municipal. The primary use for applications ready for action is industrial/power generation by White Pine County and Nevada Power Company/Sierra Pacific Power Company. Applications that have been denied in the recent past include applications to support 520 acres of irrigated cropland, denied in 1961 and an application for stock water denied to the BLM in 1994. Early history shows eight applications denied for stock water, 1 for irrigating 320 acres in 1921, and one denied for mining in 1906. Vested rights include surface water for stock and 1,035 acre feet annually of surface water to irrigate 481.52 acres of cropland.

Current and Historical Economic Activity:

While Butte Valley does not house any communities, it is included in the group of Primary Basins because it has experienced some activity sub-dividing land for residential development. Historic uses have been ranching, particularly livestock, cattle and sheep.

***WHITE PINE COUNTY
LAND USE PLAN***

***ATTACHMENT 4
2008 White Pine County
Public Land Use Policy***



White Pine County Public Lands Policy Plan

DRAFT

April, 2007

2007 White Pine County Public Lands Policy Plan

DRAFT

Prepared by:

The White Pine County Public Land Users Advisory Committee

Curt Leet, Chair

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Bill Davidson

Don Wallis

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Martin Trout

Dana Johnson

With special thanks to former members:

Phil Carter

Mark Weaver

**Adopted by the White Pine County Public Land Users Advisory Committee:
Month day, 2007**

**Adopted by the White Pine County Regional Planning Commission:
Month day, 2007**

**Adopted by the White Pine County Board of County Commissioners:
Month day, 2007**

2007
DRAFT White Pine County
Public Lands Policy Plan

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I. PLAN BACKGROUND

The initial White Pine County Public Lands Policy Plan (Plan) was developed between 1983 and 1984 as part of a state-wide effort resulting from the passage of Senate Bill 40. Under SB40, the State Land Use Planning Agency section of the Nevada Division of State Lands (SLUPA) was directed by the 1983 State Legislature to:

- **"Prepare, in cooperation with appropriate state agencies and local governments throughout the state, plans or policy statements concerning the use of lands in Nevada which are under federal management."**

The 2007 Plan represents a review of existing and emerging public lands issues that are of importance to White Pine County as it works with federal agencies under the National Environmental Policy Act (NEPA) and other public processes.

II. PLAN PURPOSE

The purpose of the Plan is to:

- **Detail White Pine County's vision and strong policy voice concerning public lands.**
- **Define White Pine County's public land-related issues and needs.**
- **Provide locally developed land management policies that enable the federal land management agencies to better understand and respond in a positive fashion to the concerns and needs of White Pine County in a collaborative process.**
- **Increase the role White Pine County has in determining the management of the federal lands.**
- **Provide an opportunity to positively address federal land use management issues directly and thereby offer a proactive alternative rather than an after-the-fact response.**
- **Encourage public comment and involvement.**

Within the Plan are descriptions of issues and opportunities relating to public lands and how best to work collaboratively with the federal planning partners,

most notably Bureau of Land Management (BLM), US Forest Service (USFS), Reclamation, Fish and Wildlife Service and the Bureau of Indian Affairs.

- The Plan enables the federal land management agencies to better understand and respond to the concerns and needs of White Pine County.
- Planning, effective communication and coordination by Nevada's governments, in concert with its citizens, can establish a set of policies for the proper use of these lands and to take advantage of the "consistency" language in Section 202(c)(9) of the Federal Land Policy and Management Act (FLPMA).
- Section 202(c)(9) governs BLM Planning and directs the BLM to give consideration to appropriate state, local, and tribal lands in the development of land use plans for federal lands.
- The BLM is to provide for meaningful public involvement of state and local government officials in the development of land use plans, regulations and decisions for federal lands.
- The BLM will review each Resource Management Plan (RMP) and proposed federal action for consistency with the White Pine County Public Lands Policy Plan and will attempt to make the RMPs and proposed actions compatible with the Plan to the extent that the Secretary of the Interior finds consistent with federal law and the purpose of FLPMA.

Forest Service Regulations for Land Management Planning and for implementing the National Environmental Policy Act (NEPA) requires that the Forest Service determine the consistency of any project proposal with state and/or local laws and plans.

- The agency is required to describe any inconsistencies and the extent to which the agency would reconcile its proposal with the state/local laws and plans. This consistency review is also provided for by the Council of Environmental Quality (CEQ) regulations (40 CFR 1506.2(d)) developed to implement NEPA.

III. PROCESS

The following is a summary of the process followed to adopt the 2007 Plan:

- The White Pine County Public Land Users Advisory Committee (PLUAC) reviewed existing policies and issues with the assistance of the State Land

Use Planning Agency in 2006 and early 2007 during publicly noticed meetings in Ely.

- The final Draft Plan was presented at the April 3, 2007 PLUAC meeting in Ely. The PLUAC held an official public review meeting on May 8, 2007 and recommended approval of the Plan.
- The Regional Planning Commission held a public hearing on **Month day**, 2007 and recommended approval of the Plan to the White Pine County Board of Commissioners.
- The White Pine County Board of Commissioners held a public hearing on **Month day**, 2007 and adopted the 2007 Plan.

IV. ENVIRONMENT

Geology

White Pine County is made up of the elongate north-trending mountain ranges and generally flat-bottomed valleys that typify the Basin and Range physiographic province. The dominant rock types found within the County include quartzite, limestone, dolomite, sandstone, siltstone, and shale.

The area was affected by two major tectonic events; the younger of the two produced the elongate fault-block mountain ranges and flat-bottomed valleys that characterize the region today. The older event produced a variety of structural features including high-angle faults and low-angle faults, and large amplitude folds (Hose, Richard K. and Blake M.C. Junior).

The geologic units of White Pine County may be grouped into seven categories: 1) the valley-fill deposits, comprising mixtures of gravel, sand, silt and clay that include the alluvial and playa deposits; 2) younger volcanic rocks, comprising ash-flow tuff and basalt; 3) older volcanic rocks, comprising dacite, latite, andesite, and tuffs; 4) Triassic sediments, comprising freshwater limestone, conglomerate, sandstone, siltstone, and tuff; 5) intrusive rocks, comprising granitic plutons; 6) upper Paleozoic carbonate rocks, comprising predominantly limestone and dolomite, but with inter-bedded shale and siltstone aquitards; and 7) lower Paleozoic and older rocks, comprising predominately clastic rocks including shale and quartzite, but with some interbedded carbonate units (Intertech Services Corporation and Buqo, Thomas S.).¹

¹ For a more detailed description of the geologic units present refer to Nevada Bureau of Mines and Geology, Bulletin 85, Geology and Mineral Resources of White Pine County, Nevada Part 1 Geology, 1976, by Richard Hose and M.C. Blake.

Climate

White Pine County has a semi-arid climate and the Basin and Range topography results in a cold desert climate with seasonal shifting of the sub-tropical highs influential less than six months of the year. Interior locations are dry because of their distance from moisture sources or their locations in rain shadow areas on the lee side of mountain ranges. This combination of interior location and rain shadow positioning produces the cold desert. The dryness, generally clear skies, and sparse vegetation lead to high heat loss and cool evenings (Intertech Services Corporation and Buqo, Thomas S.).

White Pine County's average annual precipitation is 9 inches, the average for the state of Nevada (which is the driest in the nation). The average annual precipitation increases with altitude: between 5,000 and 6,000 feet, it is less than 8 inches per year, between 6,000 and 7,000 feet it is 8 to 12 inches, between 7,000 and 8,000 feet, 12 to 15 inches, between 8,000 and 9,000 feet, 15 to 20 inches, and above 9,000 feet, more than 20 inches (Hose, Richard K. and Blake M.C. Junior). At higher elevations snow accumulates to considerable depths. Much of the snowmelt irrigates nearby valleys. Drought is common and expected. Historically, critical water sources in the County respond to drought conditions and climate changes with approximately four years lag time (Intertech Services Corporation and Buqo, Thomas S.).

In White Pine County's mid-latitude climate the average potential evaporation rate exceeds the average annual precipitation, with actual average evaporation ranging from 45 to 51 inches. On an annual basis, as much as 90 to 95 percent of the total annual precipitation is lost through evaporation and transpiration; only an estimated 5 to 10 percent recharges the ground water regime (Intertech Services Corporation and Buqo, Thomas S.).

In western White Pine County, summers are hot, especially at the lower elevations and winters are cold. The length of the growing season ranges from about 100 to 120 days with the shorter season in the western part of the County. The mean annual temperature in Ely is 44 degrees. The lowest temperature on record for Ely is -30 on February 6th, 1989, and the highest recorded temperature was recorded in Ely on July 5th, 1988 at 100 degrees (Intertech Services Corporation and Buqo, Thomas S.).

Hydrology

The majority of White Pine County is located within the Great Basin, meaning that the water within this physiographic region does not flow to the ocean; instead it is deposited entirely in underground aquifers. Hydrology of the area

can be described in the surface water resources and the ground water resources, the latter of which less information is known.

- **Surface Water Resources**

Although White Pine County has no major lakes, reservoirs, or rivers, there are important surface water resources in many locations. Surface water flows are important sources of irrigation water in the agricultural areas in the major valleys of the county. Groundwater that discharges to the surface at springs is also an important surface water resource. Many springs in White Pine County have been developed for irrigation, livestock watering, municipal and domestic water supplies, and the mining industry. The surface water resources of White Pine County are also extensively used for recreational purposes including, fishing, hunting, boating and skiing, swimming, camping, picnicking, and relaxation. Wildlife cannot thrive without a dependable source of water and the many springs, streams, and lakes in White Pine County support the habitat for many desirable species (Intertech Services Corporation and Buqo, Thomas S.).

- **Ground Water Resources**

In addition to their surface water resources, White Pine County has considerable groundwater resources. Groundwater occurs at various depths under the entire county and has been developed for municipal, agricultural, and mining supplies as well as for other purposes. In recent years, the demand on the groundwater resources has grown significantly, in part reflecting the growth of the various economic sectors of the County, and in part reflecting the interest in exporting water from White Pine County through large-scale interbasin transfers of water. Because most of the surface water resources of White Pine County have already been appropriated, the groundwater resources represent the only remaining source of water that is available to support the future water supply of the County, through diversification and expansion of the economy making the county highly dependent upon this water source (Intertech Services Corporation and Buqo, Thomas S.).²

Vegetation

The type of vegetation varies widely with amount of rainfall and temperature and hence with altitude. Shrubs and grasses dominate the valley floors while in the foothills and on slopes at intermediate altitudes, there are many juniper and pinon trees. Between 8,500 feet and timberline, the most abundant tree species are limber pine, bristlecone pine, and white fir (Hose, Richard K. and Blake M.C. Junior).

² For more information regarding the water resources of White Pine County refer to the White Pine County Nevada, Water Resources Plan, July 1999.

Wildlife

The expansive amount of public land in White Pine County provides vast amounts of habitat for a variety of wildlife including big game species such as elk, mule deer, bighorn sheep and antelope, a variety of bird species, both migratory and resident, including sage grouse, as well as a variety of reptile, small mammal, and fish species.

It was estimated by Nevada Department of Wildlife that as of spring 2005 there are 3,300 elk, 14,000 mule deer, and 3,000 antelope that populate White Pine County. These numbers reflect some of the largest big game herds in the State of Nevada making White Pine County one of Nevada's premier hunting and wildlife viewing destinations. These animals require large amounts of contiguous unfragmented land, which includes the seasonal habitats required for their survival.

In addition to impressive big game resources White Pine County is also known for being one of the key fishing areas of the state. The lakes and streams of the county provide habitat for four species of trout (rainbow, brook, brown, and cutthroat) and largemouth bass that are highly sought after by recreational anglers. The counties streams and lakes also provide habitat for a number of native fish species as well, such as the Relict Dace, White River Mountain sucker, the White River Speckled Dace, the White River Springfish, Bonneville cutthroat trout, Newark Valley tui chub, and the Duckwater Creek Tui Chub (Intertech Services Corporation and Buqo, Thomas S.).

The counties lakes, streams, and wetland areas also provide nesting habitat for a variety of shorebird, wading bird, and waterfowl species including the Black Tern, American avocet, eared grebe, common loon, and Long-billed Curlew and a number of important raptors including the Bald Eagle, Peregrine Falcon, Northern Goshawk, Golden Eagle, Prairie Falcon, American Kestrel, and several species of owls. The water sources of the county are also important stopping off points for a variety of migratory bird species that travel through the area (Intertech Services Corporation and Buqo, Thomas S.).

Sage grouse are also an important bird species that inhabit White Pine County. This chicken size grouse is a barometer of the health of sage brush plant communities and was nearly federally listed as threatened or endangered, which would have added special protections on the extensive seasonal habitats required by this bird.

V. CULTURE AND HISTORY

White Pine County and the surrounding areas have at least 10,000 years of continuous human occupation and can be seen through thousands of recorded cultural resource sites. Some of the earliest cultural sites include several substantial finds of the Paleo-Indian tradition, the earliest prehistoric peoples known in North America. More abundant pre-historic sites are related to the hunter-gatherers of the Desert Archaic tradition and the more recent Shoshone and Southern Paiute groups. Sites from the Fremont culture, a horticulturally based group, can be found in the eastern part of White Pine County. The various remains of these pre-historic cultures are found in a variety of site types including campsites, rock art, artifact scatters, rockshelters, isolated finds, and structural sites (Bureau of Land Management, *Proposed Egan Resource Management Plan*).

Historic use of the area began with early exploration efforts during the first half of the nineteenth century by the likes of Jedediah Smith, John C. Fremont, and Kit Carson. These early explorations led to the establishment of the Pony Express route traveling through this area in 1860-1861 and later to the discovery of silver and subsequently expansive mining efforts comprised of boom towns and mining camps (Bureau of Land Management, *Archeology in the Ely BLM District*). All of this mining effort led White Pine County, throughout its history, to produce more mineral wealth than any other county in Nevada through the mid twentieth century (Hose, Richard K. and Blake M.C. Junior). In the early 1900's copper mining and the establishment of the Nevada Northern Railroad also came to the area along with agriculture and livestock grazing. The evidence of this development and history can be found in historic trails, mining buildings and structures (there are 37 mining districts in White Pine County), homesteads, and cemeteries (Bureau of Land Management, *Proposed Egan Resource Management Plan*).

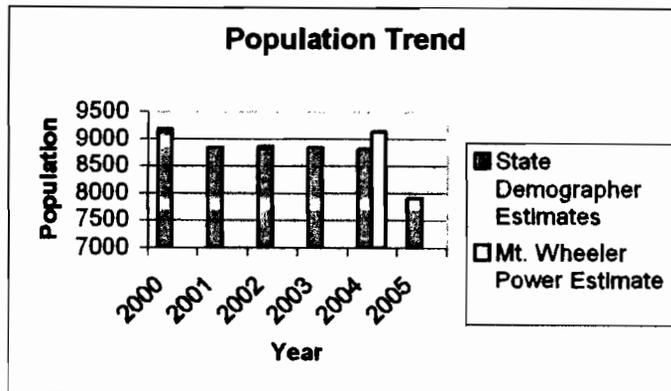
Recreation

The majority of the recreation in the area is based upon Public Lands and the resources that they offer. The major recreational pursuits include hunting, fishing, camping, hiking, horseback riding, along with off highway vehicles and motorcycles. As recreation interest in the region grows other forms of recreation in the area are seeing a slight increase as well such as mountain biking, rock climbing, skiing, and snowmobiling.

Economic, Housing, and Population Trends

Population

According to the Nevada State Demographer's Office, the County experienced a slight decrease in population from 2003 (8,842) to 8,804 in 2004. However, based on utility billing for residential electrical service connections, the population in the County is as high as 9,131. This indicates the number of newcomers from other urban areas moving to the community for retirement and second homes. The 2000 census data shows that the County's senior population accounts for 13.5 percent compared to 11 percent for Nevada and 9.5 percent for the national average. At the same time School enrollments dropped significantly from 1,446 in 2003 to 1,380 in 2004. With a possibly increasing population and an above average senior population combined with a dropping in school enrollment it is reasonable to assume that there is a shift to a senior and retirement population while young families move from the area to find better job opportunities (*White Pine County, 2004 Comprehensive Economic Development Strategy*). This shift could also indicate an increase in the number of second home purchases and retirees moving into the area. The demographics of this type of population increase would be an older generation that would not have children attending local schools.³



Economics

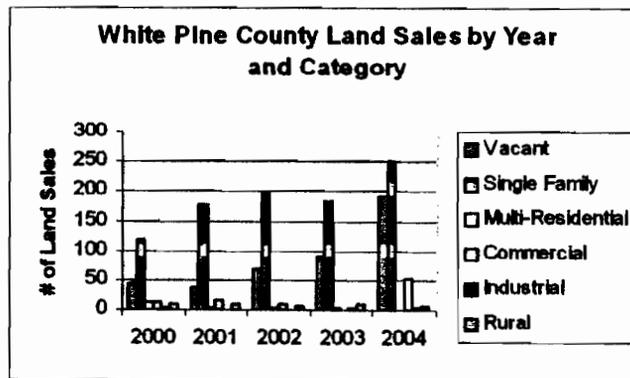
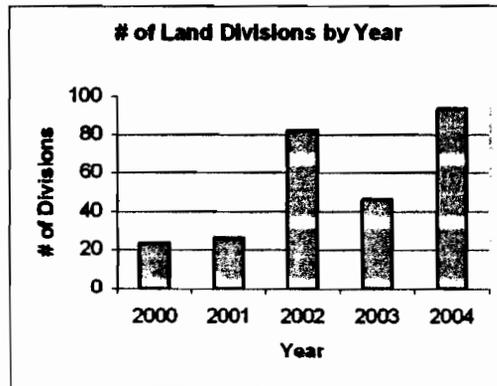
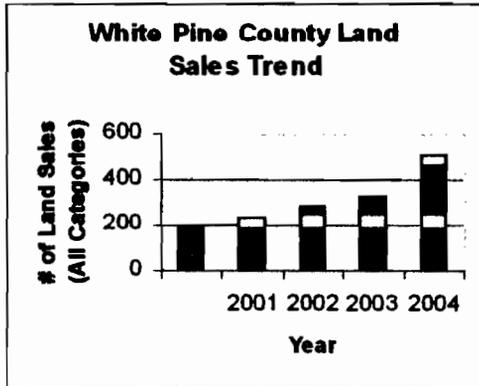
The total number of firms doing business increased from 216 firms in 2003 to 241 in 2004 representing a 13 percent increase. The majority of the firms doing business in the County are small, owner operated firms with 78 percent of the companies reporting less than 20 employees. Taxable sales appear to be increasing slightly with an increase from \$68.4 million in 2003 to \$77 million in 2004. Room tax revenues experienced an increase from 2003 to 2004 which is a

³ Population data and figures were taken from the 2004 Community Economic Development Strategy.

good indicator for an increase in tourism activity (White Pine County, 2004 *Comprehensive Economic Development Strategy*).

Housing

Any increase in housing construction or development is a common indicator of growth for an area. In Ely, analysis of new construction you would show little signs of growth in the area, since there are so few new home construction projects. Instead, looking at the trend in the number of home sales in the area and looking at the number of land divisions one can start to see a pattern for growth, especially in 2004. When compared to declining population estimates for the area, this increase in sales and land divisions could indicate an increase in the purchase of homes and lots by people living outside of the area as indicated in the population section. This data also indicates that there is an increase in the dividing of large parcels into smaller 2.5 and 5 acre parcels for single family homes, having a significant impact on existing open space.⁴



Land Sales and Subdivision Data based on County Assessor data.

⁴ Data used to analyze land sales and subdivision trends was taken from the County Assessors office.

LAND OWNERSHIP MAP AND STATISTICS GOES HERE. (Need assistance from BLM, awaiting response.)

Land Area	Acres	Land Area in Percent
Lands Administered by Federal Agencies BLM Forest Service Fish and Wildlife Service Department of Defense	5,439,707	95.4
Tribal		
State		
Local Government/Private		
Total Acres	5,699,200	100.0

VI: POLICIES

This section is organized by major public land issue topic and describes White Pine County's policies and action items related to each issue. The action items are intended to help resolve the State's public land issues and implement the policies in collaboration with the federal planning partners.

1. Plan Implementation, Agency Coordination and Local Voice

Agency coordination of planning is mandated by federal laws.

- The Federal Land Policy and Management Act, 43 U.S. § 1701, declared the National Policy to be that "the national interest will be best realized if the public lands and their resources are periodically and systematically inventoried and their present and future use is projected through a land use planning process coordinated with other federal and state planning efforts." See 43 USC §1701 (a) (2).
- 43 U.S.C. § 1712 (c) sets forth the "criteria for development and revision of land use plans." Section 1712 (c) (9) refers to the coordinate status of a county which is engaging in land use planning, and requires that the "Secretary [of interior] shall" "coordinate the land use inventory, planning, and management activities... with the land use planning and management programs of other federal departments and agencies and of the State and local governments within which the lands are located." This provision gives preference to those counties which are engaging in a land use planning program over the general public, special interest groups of citizens, and even counties not engaging in a land use planning program.

The White Pine County Code Section 2.88 creates the White Pine County Public Land Users Advisory Committee (PLUAC) to review and make recommendations to the County Commission on the following:

- a. Requests for comments on NEPA processes
- b. Requests for public land disposals for private development, public land transfers through Recreation and Public Purposes (R & PP) procedures, rights-of-way, withdrawals, and special designations
- c. General public land use and natural resource issues
- d. In conjunction with the Regional Planning Commission, reviews the goals in the County's Land Use Plan, reports to the County Commission on the County's progress in meeting those goals, and makes recommendations revisions to the Land Use Plan.

- e. At least once every five years, reviews the County's Public Land Use Policy, reports to the County Commission on recommendations for revision.

The PLUAC is a nine-member board appointed by the County Commission with an effort to maintain representation of the wide range of public land use interests.

The PLUAC conducts its meetings under the provisions of the Nevada State Open Meeting Law and provides an open forum for public land users, White Pine County citizens, and representatives of federal, state, and local public agencies to discuss public land use issues.

Federal land management policies and procedures, land transactions, and compatibility with the local Land Use goals are of critical importance to the County's residents. As outlined in County Code Section 2.88.100, White Pine County's Board of County Commissioners supports a policy of multiple uses of public lands that are in the best interests of the residents of the County including recreational activities, production of revenue and other public purposes. The White Pine County Commission is an active participant in reviewing proposed land transactions and public land policies, seeks status as a cooperating agency in NEPA processes, and makes every effort to continually review and update its local planning documents to reflect the need for access to and uses of public lands.

Policy 1-1: All proposed actions on public lands should be brought to the attention of the PLUAC for purposes of review to determine if the federal program is in conformance with this Plan pursuant to NEPA requirements. The PLUAC's role is to recommend to the Board of County Commissioners appropriate action concerning such proposals.

Policy 1-2: White Pine County will participate with federal agencies on actions that affect public lands within the county. The PLUAC will serve in an advisory capacity only, and act as liaison between the White Pine County Commission and the federal land management agencies. Studies concerning impacts of proposed actions affecting public lands should be conducted by professionals. The PLUAC requests the commission be notified by the federal agencies before any studies sponsored by the federal land management agencies are initiated. Copies of resource studies should be provided to the PLUAC as soon as available.

Policy 1-3: The PLUAC emphasizes consistency between this Plan and all federal land use plans which apply to White Pine County.

Policy 1-4: The PLUAC requests inclusion as a recipient of the BLM Northeastern Great Basin Resource Advisory Council (RAC) and Mojave Southern Great Basin RAC meeting minutes and agendas. The PLUAC will reciprocate by forwarding agendas and minutes to the RACs.

2. Management of Public Lands

Policy 2-1: Support the concept of Multiple Use Management as an overriding philosophy for management of the public lands based on multiple use and sustainable yield concepts, and in a way that will conserve natural resources.

Pursuant to County Code Section 288.100, "multiple use" means and includes:

1. The management of public lands and their various resources so that they are used in the combination which will best meet the needs of the residents of the County.
2. The use of public lands and some or all of their resources or related services in areas large enough to allow for periodic adjustments in the use of the lands to conform to changing needs and conditions.
3. The use of certain public lands for less than all of their available resources.
4. A balanced and diverse use of resources which takes into account the long term needs of the residents of the County for renewable and non-renewable resources including but not limited to recreational areas, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historic areas.
5. The harmonious and coordinated management of public lands and their various resources without the permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will produce the greatest yield or economic return for each parcel of land.

Pursuant to County Code Section 288.100, "sustained yield" means the maintenance of the high-level annual or other periodic yield

from the various renewable resources of public lands consistent with multiple use.

Policy 2-2: Protect and preserve the quality of the environment, and economic, cultural, ecological, scenic, historical and archeological values; protect and preserve wildlife habitat values compatible with economic opportunities needed to provide for long term benefits for the people of White Pine County now, and future generations.

Policy 2-3: Support coordination of public land use policies and actions with all appropriate federal, state, and local entities and the components of the County's Comprehensive Master Plan.

3. Federal Land Transactions

The following are policies developed by White Pine County relating to the federal land program. Appendix A provides a list of parcels generally identified by the County in both the BLM's Ely Resource Management Plan and the White Pine County Conservation, Recreation and Development Act of 2006 for local public purposes and for community expansion and economic development. The list and the map provide a general description of the lands identified for acquisition and are intended to be used as a guide for more detailed studies. Each parcel will need to be further reviewed at the time a specific realty action is proposed.

The lands identified in Appendix A represent the latest efforts by the BLM and County in developing an overall plan for transferring some public lands to the county or private sector. This is an on-going process and changes in the list should be expected as new information or needs develop in the future. Approximately 45,000 acres have been identified for disposal to the County and private sectors. This could increase the non-federal land base of White Pine County by 17.3%.

White Pine County has a total land base of 5,699,200 acres. Federally managed public lands amount to 5,439,707 acres and this number represents 95.4% of the county's total land base. Most of the public lands within and adjacent to the communities are administrated by the BLM and US Forest Service. Lands identified for disposal are shown in the Ely Resource Management Plan. Appendix A of this plan cross references the Ely RMP.

White Pine County recognizes that many of the policies described below are currently part of the BLM procedures for land transactions. However, the County believes the basic policies on land tenure need to be clearly expressed in this Plan to communicate county policies not only to the federal agencies, but to the citizens of White Pine County as well.

White Pine County has identified many parcels for public purposes and for economic development. The specific land transaction program is to be guided by the following policies:

Policy 3-1: White Pine County recognizes and will weigh carefully the value of public lands for recreation, sight-seeing, hunting, fishing, grazing, hiking, mining, and a wealth of other multiple use activities when supporting or recommending specific land transactions or designations. Disposals of these lands must be carefully weighed against their loss for any perceived short term gains for the County or to the beneficiaries of such disposals.

Policy 3-2: Evaluate federal land disposals for private development utilizing the following criteria and priorities and policies:

Criteria:

1. Compliance with the zoning designations, land use recommendations in the County's Comprehensive Master Plan, priorities for economic and community developed identified in the annual Comprehensive Economic Development Strategy and other community planning efforts; cost of County services including water, sewer, roads, utilities, fire and police protection, weed control, and other infrastructure; and impact to existing commercial, residential, and industrial activities.
2. Adequate assurance of public access to and through disposed lands and to adjacent public lands for recreation and other multiple uses (through the recordation of an easement and deed restriction). If alternative routes of access are required they should be acquired and guaranteed prior to the disposal and loss of any existing access should be of equal value and public benefit.
3. Impacts to existing uses including important wildlife habitat, key seasonal grazing rights, mineral resources, municipal watersheds, flood prone areas, visual values, access, and recreational use of the lands.
4. Availability of water resources to support the proposed use.
5. Compliance with the policies contained in this Public Lands Policy Plan.

Priorities:

1. Isolated tracts of public lands.
2. Any public lands in-holdings within existing private land should receive a high priority for sale or exchange.
3. Land sales and exchanges that make private lands more manageable.

4. Public lands should be transferred to the private sector when suitable for intensive agricultural operations through the Desert Land Act or the sale authority provided by FLMPMA, the BACA Bill, and the White Pine County Conservation, Recreation, and Development Act of 2006.
5. At the request of local governmental entities, public lands within the municipal service areas of Ely, McGill, Baker, Lund, Ruth, Preston and Cherry Creek should be made available for urban expansion.

Policies:

1. Disposals for private residential and commercial development should be structured so that local residents have a reasonable opportunity to acquire parcels on a competitive basis.
2. As appropriate, and at the request of adjacent land owners and users, encourage preference for direct sale or preferential bid.
3. Encourage disposals including direct sale and preferential bid for land disposals based on a Record of Decision following completion of Environmental Impact Statement (EIS) and Environmental Assessment (EA) processes where the public has had substantial opportunity to review and comment on the proposed project.
4. When land disposals result in loss of AUM's or range improvements, encourage full compensation and alternatives allowed under the law.

Policy 3-3: Rights-of-Way: Support designation of corridors for the future transmission of energy, communications, and transportation when they are planned for in harmony with other multiple uses on federally administered lands in accordance with the NEPA processes.

Policy 3-4: Land Transfers to Local Government and State Government: As requested by local governments and state agencies, lands identified for public purposes should be made available through the R&PP process.

- A. Lands within municipal service areas should be made available for public purposes only when local governments determine that it is an opportune time and the transfer will not burden the local government.
- B. Requests for R&PP transfers should receive preference to disposal for private development.
- C. Preference should be given for land sales and exchanges that consolidate high value public purposes

Policy 3-5: Specially Designated Lands (i.e., National Recreation Areas, National Conservation Areas, Wildlife Refuges, Wilderness Areas, State Parks, State Wildlife Management Areas, etc.)

- A. Support designation of new specially designated lands within White Pine County which are suitable and beneficial to White Pine County citizens, consolidate high value public purposes lands, and are valuable assets to the State and its residents.
- B. Support a balanced review and inventory of all multiple interests prior to designation of any new wilderness areas.

Policy 3-6: Withdrawals from Mineral Entry

- A. Support withdrawals from mineral entry only after careful evaluation of mineral resources which is documented by a mineral report that adequately describes the mineral potential of those lands.
- B. Support minimal separation of surface and mineral estates in all realty actions.
- C. Encourage federal management policies on existing split mineral estates based on state and local participation
- D. Support limited use of the mineral withdrawal process to protect fragile special lands.

Policy 3-7: White Pine County opposes any further military withdrawals of land and restrictions of airspace.

Policy 3-8: Acquisition of Private Land for Public Purposes: Recognize that the acquisition of some private lands for certain special public purposes is a benefit to its residents.

- A. Recommendations for acquisition of private land for public purposes shall ensure:
 - 1. All transactions must involve a "willing seller".
 - 2. Private land is not acquired unless it clearly benefits the citizens of White Pine County.
 - 3. Environmental, recreation, and cultural values are protected.
 - 4. Private property interests are protected and enhanced.
 - 5. Socio-economic impacts are duly considered and the local economy is not negatively impacted.

6. Due process is guaranteed to all private parties involved in land use controversies by means that do not demand or create a financial hardship.

4. Agriculture and Livestock Production

Agricultural production is necessary to help maintain the historical, cultural and economic viability of White Pine County.

Policy 4-1: Preserve agricultural land and promote the continuation of agricultural pursuits, both traditional and non traditional, in White Pine County.

Policy 4-2: The pursuit and production of renewable agricultural resources are consistent with the long term heritage of White Pine County. This private industry benefits White Pine County economically and culturally.

Policy 4-3: Opportunities for agricultural development on public lands should continue at levels that are consistent with historical customs, environmental sustainability, culture and compatibility with other multiple uses.

Policy 4-4: Grazing should utilize sound adaptive management practices. White Pine County supports the periodic updating of the Nevada Rangeland Monitoring Handbook to help establish proper levels of grazing.

Policy 4-5: Allotment management strategies should be developed that provide incentives to optimize stewardship by the permittee. Flexibility should be given to the permittee to reach condition standards for the range. Monitoring should utilize the use of long-term trend studies as described above.

Policy 4-6: Encourage agencies managing public lands to coordinate with the N-4 Grazing Board on all matters affecting livestock grazing on public lands within White Pine County.

Policy 4-7: Range water rights and improvements such as those associated with seeps, springs, streams, lakes and wells used by livestock should be protected in the long term for that use. Encourage cooperation between the federal land management agencies and the grazing operator in protecting the riparian values of these water sources.

5. Forestry

Forest and forestry products production in White Pine County is a benefit to the livelihood and well being of its citizens. Therefore, it is the policy of White Pine County to protect forest resources and promote the continuation of a sustainable forestry products industry by providing economic opportunity, relying on self-determination and open market conditions.

Policy 5-1: Promote multiple use of public forest resources to realize sustainable and continuous provisions of timber, forage, firewood, wildlife, fisheries, recreation and water.

Policy 5-2: Support the prompt salvage of forest losses due to fire, insect infestation or other events.

Policy 5-3: Support the management of woodlands/forest by ecological condition for a diversity of vegetation communities. Grass and shrub ecosystems with no or few invasive species are preferable to pinyon/juniper monocultures.

Policy 5-4: Urge BLM and Forest Service to allow and promote thinning of wildland/urban interface. This should be done in such a manner that local entities have an opportunity to derive economic benefit from the forest.

Policy 5-5: Recognize the importance of maintaining healthy aspen communities and encourages activities that will retain and improve the vigor of these communities.

6. Wild Horses

Sightings of wild horses are thrilling and memorable moments for many travelers crossing public lands. An overabundance of horses, however, may be detrimental to the health of these lands. Management must carefully balance needs of wild horses against the needs of other multiple uses.

Policy 6-1: Publicize and encourage visitation in areas where wild horses can be seen by the public.

Policy 6-2: Manage wild horses to reduce detrimental impacts to other multiple uses. Potential adverse effects on private lands, rangelands, wildlife habitat, and water sources should be avoided or properly mitigated.

Policy 6-3: The BLM, US Forest Service and the State should work cooperatively on wild horse management issues. Appropriate management levels (AMLs) should be set at reasonable limits as determined through public involvement through coordinating agencies such as the BLM Northeast Great Basin Resource Advisory Council, Mojave Southern Great Basin Resource Advisory Council, the White Pine Coordinated Resource Advisory Council, and the Nevada Wild Horse Commission.

Policy 6-4: Educate Congress and the public on the impacts of wild horses. Encourage legislation to allow greater flexibility for their management and adoption.

Policy 6-5: Encourage the BLM to increase the potential of the adoption program for wild horses through an aggressive marketing program. Holding and adoption facilities for wild horses should be created in White Pine County.

7. Mineral Resources

The development of Nevada's mineral resources is desirable and necessary to the economy of the nation, the state and particularly to White Pine County. White Pine is the state's leading producer of copper and has produced vast quantities of gold, silver, and other metals. The area is an active frontier for oil and geothermal development. Sand, gravel, decorative rock, and other industrial minerals are produced daily.

Policy 7-1: Encourage the careful development and production of White Pine County's mineral resources while recognizing the need to conserve other environmental resources.

Policy 7-2: Support State and federal policy that encourages both large and small scale operations. Regulatory hurdles should not be so complex that they undermine the principles of the various mining and leasing laws, including the Mining Law of 1872.

Policy 7-3: The federal government should continue to evaluate the mineral resources on lands before they are sold or exchanged. The federal agencies are encouraged to continue to manage the presently open, federally-owned mineral estate in White Pine County as open to mineral location, sales and leases. The agencies should carefully evaluate all withdrawals and land disposal and minimize the

separation of surface and mineral estates in all realty actions.

- A. Federal management policies on existing split mineral estates should be developed with state and local participation.
- B. Lands should not be withdrawn from mineral entry without a mineral report that adequately describes the mineral potential of those lands.

Policy 7-4: Mineral operations should be consistent with best management practices for the protection of the environmental qualities and the multiple use of public lands. Federal and state regulatory agencies should continue to enforce existing reclamation standards to ensure there is no unnecessary or undue degradation of the public lands and adjacent private lands.

Policy 7-5: Mine site and exploration reclamation standards should be consistent with the best possible post mine use for each specific area. Specific reclamation standards should be developed for each property rather than using broad based universal standards. Private properties (i.e., patented claims) should be reclaimed to the standard and degree desired by their respective owners, following state law and regulations.

Policy 7-6: Reclamation of mine sites should be coordinated with the White Pine County Commission and the PLUAC. Options should be considered for post-mine use of buildings, access roads, water developments, and other infrastructure for further economic development by industry as well as uses pursuant to the Recreation and Public Purposes Act.

This is particularly important concerning the foreseeable closure of the Robinson and Bald Mountain Mines within the next 10-20 years, or so. Each involves a significant mix of both patented and unpatented mining claims.

Policy 7-7: Support the policy of the small miner exemption if the miner is offered the opportunity to develop the property. Federal and state regulators should work closely with the small miner to ensure that permitting costs and complexity do not prevent the implementation of this option. An annual assessment requirement for holding mining claims has led to unjustified land disturbances which did not necessarily aid in the furtherance of the property's resource

development. These requirements have since been revised and require the claim holder to pay an annual rental fee to the BLM, in lieu of doing work on the ground. There is an exemption for a small miner who holds ten claims or less. If the small miner chooses the exemption, \$100 of assessment work must be expended annually to hold the claim.

Policy 7-8: Federal, State and county governments should cooperate in continuing to provide sources of gravel, topsoil, rock and other mineral materials for local communities. These should be located as near as practical to present and planned urban areas while being in conformance with County development plans. County, State and federal agencies should jointly plan for the efficient development and use of material sites for both the government agencies and the private sector.

8. Wilderness

The benefits of designating wilderness areas include protecting the scenic, recreational and ecological values of the land. Furthermore, special areas in White Pine County should be protected from irresponsible OHV use, speculative oil and gas development, and to provide for clean air and water for future generations. While OHV users continue to enjoy the majority of public lands where roads and trails already exist, it is important to provide for some areas where non-motorized users can experience and enjoy wilderness quality lands.

Dollar values are difficult to place on wilderness areas, but wilderness pays in a number of ways.

- Direct income from recreational use.
- Passive value by passing its legacy on to future generations.
- "Ecosystem benefits" such as cleaning the air we breathe and the water we drink.

Protecting land as wilderness can act as a strong economic lure to draw people to live in nearby areas for business, pleasure and retirement. Residents see this as a benefit to their quality of life that brings economic development. The White Pine County Conservation, Recreation and Development Act of 2006 (HR 6111) created additional wilderness in the county and released other areas to multiple use. The following table illustrates the total wilderness area in White Pine County. Note that some listed wilderness areas extend into other counties. However, only the acreage figures for those areas within the county are shown below.

WILDERNESS NAME	ACRES
Mount Moriah	65,222
Mount Grafton	54,011
South Egan Range	32,713
Egan Ridgeline	18,669
Highland Ridge	70,098
Government Peak	6,313
Currant Mountain	20,714
Red Mountain	17,496
Bald Mountain	22,352
White Pine Range	42,562
Shellback	36,133
Schell Creek Range	122,123
Becky Peak	18,119
Goshute Canyon	42,657
Bristlecone	14,096
TOTAL	583,388

Policy 8-1: Wilderness in appropriate areas is supported for its economic benefits to White Pine County.

Policy 8-2: As wilderness protects scenic, recreation and ecological values important to the economic future and as well as protecting important natural resources, including clean air and water of White Pine County, we support designation and proper management of existing wilderness areas in the County.

Policy 8-3: Existing wilderness should be managed to protect White Pine County's important natural resources, its clean water and air, its scenic and recreational values, and its economic future.

Policy 8-4: Support the restoration of unnecessary roads and trails and the proper management of wilderness lands by the administering agency.

Policy 8-5: White Pine County recognizes that multiple interests exist on potential wilderness areas and supports a balanced review and inventory of all such interests prior to any designation of new wilderness areas.

9. Wildlife

White Pine County residents support a diversity of wildlife species. Coordination of federal and state wildlife and fisheries' management and enforcement is encouraged.

Policy 9-1: Recommendations made by the White Pine County Advisory Board to Manage Wildlife should be followed and actions taken where appropriate.

Policy 9-2: The Nevada Wildlife Commission should consider and give high priority to White Pine County Advisory Board to Manage Wildlife recommendations.

Policy 9-3: The White Pine County Advisory Board to Manage Wildlife and the White Pine County PLUAC should maintain an active and constructive dialogue.

Policy 9-4: A yearly update by Federal and State agencies should be provided to the PLUAC to maintain an active and constructive dialogue regarding threatened and endangered species and potential listings of same.

Policy 9-5: Identify habitat needs for wildlife species, such as adequate forage, water, cover, etc., and provide for those needs so as to, in time, attain appropriate population levels compatible with other multiple uses as determined by public involvement.

Policy 9-6: Support the Wildlife Services Environmental Analysis for the Humboldt National Forest and the Animal Damage Control Plan for the Ely District BLM.

Policy 9-7: Support habitat restoration to improve wildlife habitat when compatible with other uses.

Policy 9-8: Support big game species management through the White Pine County Advisory Board to Manage Wildlife and the County and State Management Plans for elk, mule deer, antelope, bighorn sheep and mountain goat.

Policy 9-9: Support hunting and fishing as recreational resources and as a multiple use of public lands. White Pine County endorses the State's programs to provide sustained levels of game animals.

Policy 9-10: The Ruby Lake National Wildlife Refuge should continue to

be managed for wildlife and appropriate recreational uses.

10. Public Safety

White Pine County appreciates the safe passage of its residents and visitors on public lands.

Policy 10-1: Any unfenced right-of-ways along State highways should be fenced to protect the traveling public and to reduce the loss of livestock. This fencing should be constructed under a cooperative effort between the BLM, US Forest Service, Nevada Department of Transportation, Nevada Department of Wildlife, Nevada Division of Forestry, private property owners, and the permittees.

Policy 10-2: White Pine County appreciates the presence and cooperation of federal law enforcement officers on public lands but is opposed to any increase in BLM law enforcement authority. The County prefers the existing protocol between BLM and other federal law enforcement officers and the White Pine County Sheriff.

Policy 10-3: Support cooperative training in areas of public safety such as search and rescue and hazardous materials. The US Forest Service and BLM should work with the County to ensure adequate personnel, training and equipment to meet the increased demand for back country rescues.

Policy 10-4: Military Withdrawals of Land and Air Space: Support full evaluation of criteria listed in the Public Land Use Policy Plan in regard to any public land and air space withdrawals for military use including those with potential for transportation, storage, and disposal of all hazardous, toxic, or nuclear materials.

Policy 10-5: Abandoned mines should be properly sealed through a cooperative agreement between the County, BLM, mining companies and private land owners. Emphasis should be placed on those mines in close proximity to communities and high-use recreational areas.

Policy 10-6: Roads on public lands should be maintained for safe passage. Areas of high travel should be made a priority. Where road conditions are dangerous, signs and other public

notification should be utilized until the condition can be mitigated. Maintenance of roads should be coordinated between the BLM, US Forest Service, County and the public.

11. Air Quality

Air quality in White Pine County is currently some of the best in the nation and it is an important factor influencing the quality of life and well being of its citizens. Therefore, it is the policy of White Pine County to protect air quality.

Policy 11-1: Air quality must be protected with a balanced approach that provides economic growth without a detriment to the social, aesthetic, cultural and ecological values of the County.

Policy 11-2: Best available control technology should be implemented to meet the emission levels/ standards/criteria and efficiency of combustion of coal gasification. All energy proposals should attain the lowest possible emissions and highest possible standards using best available technologies. Science proves that precipitation downwind from coal fire power generation is reduced and this must be avoided in this already dry state.

Policy 11-3: All water rights applications associated with proposed pipeline projects should require comprehensive monitoring programs to include air quality measurements. If PM-10 levels increase and immediate revegetation project will be necessary to stabilize the surface of any areas where any vegetation is changing as a result of the project.

Policy 11-4: Air quality standards should be established based on best available control techniques by the Nevada Division of Environmental Protection. White Pine County's excellent air quality should be maintained as an important aspect of the quality of life of the citizens and visitors.

Policy 11-5: Particulate monitoring stations should be established by the Nevada Division of Environmental Protection to establish local ambient air quality.

12. Cultural Resources

White Pine County cultural resources and customs include all the prehistoric and historic archaeological resources and traditional cultural practices of the people of White Pine County. The Great Basin Heritage Route traverses White Pine County and is a valuable asset that showcases the county's resources.

Cultural resources include, but are not limited to:

- historic roads
- trails
- railways
- highways and associated buildings
- sidings
- stations
- rock art sites
- historic townships
- mining camps and districts
- racetracks
- cemeteries and isolated gravesites
- paleoindian sites
- prehistoric villages and campsites
- rock shelters
- caves
- toolstone sources
- quarries
- White Pine Public Museum

Less tangible resources include:

- dance forms
- customary beliefs
- material traits of a group
- integrated patterns of human behavior passed to succeeding generations by stories and traditions

Policy 12-1: Support conservation of its historic properties, landscapes and practices which use these landscapes in a manner that does not degrade them for future generations.

Policy 12-2: Participate in the planning of appropriate uses and the protection of cultural resources. Threats to cultural resources include fire, vandalism, unauthorized use and rural/urban sprawl.

Policy 12-3: Promote educational programs for citizen stewardship of cultural resources in a manner that will guarantee the thrill of discovery for future generations. This includes the County's ghost town and mining heritage and the Great Basin Heritage Route.

Policy 12-4: Tangible artifact remains and records of folk life and cultural heritage should be preserved locally, rather than removed to out-of-county or out-of-state sites. Citizen access to the remains and the actual sites is encouraged if the resources are protected.

Policy 12-5: The customs and culture associated with American Indian activities in White Pine County is necessary to the livelihood and well being of American Indians. White Pine County supports American Indian activities on public lands.

13. Recreation and Open Space

White Pine County enjoys many natural amenities that attract local residents and visitors. These resources should be protected and developed for the public's multiple use benefit. This section is cross-referenced to, and is consistent with, the County Open Space Plan and County Wildland Urban Interface Emergency Services Plan, coordinated with White Pine County, BLM, US Forest Service, NDF and the UNR Cooperative Extension. Open space is critical to White Pine County's economic, historical and cultural identity.

Policy 13-1: Conserve and protect scenic, historical, recreational and open space resources for the benefit of the present and future generations with additional consultation with local, State and federal governments and users. White Pine County recognizes that recreation in all forms is consistent with multiple uses of public lands. All resources utilized by the public should be conserved and White Pine County reserves the right for application under the Recreation and Public Purposes Act (R&PP) for all such resources.

Policy 13-2: Encourage sustainable recreational use in White Pine County by increasing marketing efforts that describe the opportunities available. Marketing programs that promote such features as the Great Basin Heritage Route, The Loneliest Highway in America, the Pony Express Trail, Great Basin National Park, the mining history of Hamilton and

other areas, the Ghost Train, and state parks should be increased.

- Policy 13-3:** Promote "Eco-tour" and responsible off highway vehicle businesses in the County. The themes of the tours could vary from wildlife viewing, to visiting hot springs, historical sites, or to learn to ride motorcycles and drive four wheel vehicles. Ensure that all governmental agencies work in a cooperative effort to encourage such uses while protecting the resources from damage. OHV users are encouraged to visit and patronize county communities. White Pine County promotes the connection of established OHV trails with developed communities to increase tourism and provide for better options for OHV travelers.
- Policy 13-4:** Encourage the development of a community ski hill to provide close and low cost winter recreation opportunities for residents and visitors.
- Policy 13-5:** Encourage dispersed recreation opportunities on public lands as a substantial economic asset to local economies.
- Policy 13-6:** Public lands with value for concentrated recreational use (camp grounds, historic sites, wagon trails, etc.) should be identified, protected and developed for recreational purposes. The BLM and US Forest Service should consider withdrawing these key areas from mineral entry on a limited basis. Any proposals for mineral withdrawals should be coordinated with the PLUAC.
- Policy 13-7:** Recognizing that most Nevadans reside in towns, investments in open space, park and recreation facilities should be concentrated as close to resident populations as feasible.
- Policy 13-8:** Protect and promote the Pony Express Trail and Lincoln Highway corridors as a cultural and recreational resources in a way that protects private property rights and promotes tourism.
- Policy 13-9:** Protect water quality and water rights for recreational fishing at Cave Lake, Comins Lake, Illipah reservoir and other important water resources. Recreational uses and facilities are encouraged and should be developed where appropriate.

Any proposed federal action on public lands that may affect County water resources should be reviewed by the PLUAC at a publicly-noticed meeting.

Policy 13-10: Support hunting and fishing as recreational resources and as a multiple use of public lands. White Pine County endorses the State's programs to provide sustained levels of game animals.

Policy 13-11: The establishment of new specially designated lands (i.e. National Recreation Areas, National Conservation Areas, Wildlife refuges, wilderness, State parks, etc.) may be a valuable asset to White Pine County and its residents. Determination of value can only be achieved through close coordination with the PLUAC and close adherence to a public and transparent citizen input process.

Policy 13-12: Promote increased marketing of the Silver State Classic automobile road race between Lund and Hiko.

14. Wetlands, Riparian Habitat and Waters of the United States

Wetlands, riparian habitat and waters of the United States support the diverse populations of waterfowl, fisheries, wildlife, and plant communities prized by all public land users within the County. These policies correspond to the policies and statements contained in the White Pine County Water Plan.

Policy 14-1: The County, through the PLUAC, should be notified of any federal or state agency proposals concerning water resources within the County. White Pine County requests active participation in all decisions concerning management of wetlands, riparian habitat and waters on State and federally administrated lands in the County.

Policy 14-2: Wetlands, riparian habitat and waters of the US should be protected from undue degradation. Undue degradation may result from over pumping of groundwater, destruction of vegetation for over-development or misplacement of recreational facilities, poorly planned land dispositions, unintentional misuse of riparian resources by public and private users, and other actions.

Policy 14-3: Wetlands, riparian habitat and waters should be managed in a responsible and balanced manner with other resources.

Policy 14-4: Support a coordinated effort to protect wellhead protection areas and municipal watersheds from undue degradation through proactive zoning and development controls, pursuant to the County's Wellhead Protection ordinance.

15. Fire Management

Fire is an integral component of the well-being of public lands. However, introduced factors have led to the dangerous potential for out of control wild fires that affect the economic and environmental well-being of the County.

Policy 15-1: The recommendations contained in the current White Pine County Urban-Wildland Interface Regulation Review and the current White Pine County Wildland-Urban Interface Handbook should be implemented as soon as possible. Defensible space should be a responsibility of federal, state and local agencies, as well as the private property owner.

Policy 15-2: Maintain local coordination between BLM, US Forest Service, Nevada Division of Forestry (NDF) and local volunteer fire departments to increase the effectiveness of fire suppression. The federal agencies need to take advantage of the skills and local knowledge of local residents. This is particularly important when using out-of-area fire crews for fire fighting. White Pine County will aid in any way possible in suppression of wildfires that endanger the livelihoods and personal well-being of its citizens.

Policy 15-3: Encourage the development of mutual aid agreements between the local fire departments, NDF and the federal agencies. White Pine County supports the use of mutual aid agreements and encourages the federal agencies to utilize local fire fighting resources as much as possible.

Policy 15-4: Encourage the federal agencies to continue the policy of contracting with White Pine County residents for privately owned equipment suitable for fire fighting. Encourage the practice of early season inspections and sign-ups well before the fire season.

Policy 15-5: Encourage the federal agencies to consider using livestock to reduce the fire hazard. There may be situations where livestock grazing can be effective in reducing the fire danger

and will not result in environmental damage. Sheep and goats should be used wherever practical to reduce fuel loads.

Policy 15-6: The use of green stripping is encouraged if the treated areas are seeded with fire-resistant grasses and maintained.

Policy 15-7: Nevada Department of Transportation (NDOT) should mow and/or spread herbicide on all highway rights-of-ways as frequently as possible to reduce the potential for the spread of fires onto adjacent public and private lands.

Policy 15-6: All fire equipment should be cleaned to assure it is "weed-free" before being dispatched to a wildfire.

Policy 15-7: Encourage the federal agencies to consider experimenting with thinning, fire use areas, prescribed burns and reseeding to reduce the impacts of invasive species on the fire cycle.

16. Noxious Weeds and Invasive Species

Invasive weeds in White Pine County are currently displacing diverse native plant communities and greatly impacting Nevada's natural and economic resources. That threat to the biological diversity that makes the surrounding ecosystem function will expand rapidly unless kept in check by constant vigilance and work to control them whenever they are found.

Policy 16-1: Support the Tri-County Weed Program's cooperative weed management areas to control invasive species and institute a revegetation program in areas where weeds are treated.

Policy 16-2: Support the education of off-road vehicle operators about the hazard of transporting weeds from currently infested areas.

Policy 16-3: Surface disturbing activities in the county should be quickly revegetated to prevent the establishment of invasive species.

Policy 16-4: Water rights applications associated with pipeline projects should include a comprehensive revegetation monitoring program.

Policy 16-5: If weeds increase due to plant community changes as a

result of any water project, immediate revegetation projects will be necessary to stabilize the surface and revegetate the area with adapted species.

Policy 16-6: Support the Nevada Weed Free Forage Certification program. Any hay being transported and feed on public land needs to be from a certified weed free field. All hay/forage products being transported on any county or state roads shall be covered/tarped while transported unless from a state certified weed free field.

Policy 16-7: Federal, State and county agencies should investigate and treat invasive species as soon as they are detected in the County, and before those species develop an infestation. Proactive treatment at first detection will cost much less than treatment of established populations. (Example – The recent emergence of Sahara Mustard in Clark County.)

17. Off-Highway Vehicles (OHV's)

The use of off-highway vehicles (OHV's) has boomed over the past decade. Important to many Nevadan's lifestyles for work and play, they provide many economic benefits and many environmental impacts.

Policy 17-1: Encourage and support the development of a White Pine County OHV Management Plan encouraging a broadbased local planning group to provide input in determining and prioritizing needs for current and future OHV use and management in White Pine County.

Policy 17-2: Encourage and support the development of a White Pine County OHV Management Plan and any other policy and regulation that:

1. Incorporates the guidelines set forth by Congress in Title III White Pine County Conservation, Recreation and Development, Section 355 Silver State Off-Highway Vehicle Trail for any future consideration, development and management of any additional OHV trails, routes or limited off-road use areas in White Pine County (see exhibit A below).
2. Promotes sensible and responsible use of OHV's through registration, education, training, advertising and other means.
3. Requires OHV users to stay on designated roads and trails or in limited off-road use areas and actively discourage the pioneering of

- new trails.
4. Encourages sufficient resources to be made available to local district offices to publish maps of areas and routes suitable for OHV use.
 5. Effectively monitors and manages off-highway vehicles in areas that they are allowed.

Policy 17-3: Encourage and support the development of policy and regulation that will:

1. Register off-highway vehicles and make them identifiable in the field.
2. Provide for the safety of OHV users and non-users.
3. Prevent the environmental degradation of public lands, air, water, wildlife and vegetation.
4. Provide for restoration of damaged lands.
5. Provide for the enforcement of such rules and regulations.
6. Provide for the recreational enjoyment of both OHV users and non-users.

Policy 17-4: Encourage and support administration of money generated through off-highway vehicle registration that will:

1. Be administered by a balanced broadbased board with an emphasis on rural representation.
2. Provide public safety and enforcement.
3. Provide restoration and rehabilitation of damaged lands and trails.
4. Provide maintenance for existing trails.
5. Pay for new trail construction.

Exhibit A:

Subtitle E--Silver State Off-Highway Vehicle Trail
SEC. 355. SILVER STATE OFF-HIGHWAY VEHICLE TRAIL.

(a) Study-

(1) IN GENERAL- Not later than 3 years after the date of enactment of this Act, the Secretary shall complete a study of routes (with emphasis on roads and trails in existence on the date of enactment of this Act) in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) for the Silver State Off-Highway Vehicle Trail (referred to in this section as the 'Trail').

(2) PREFERRED ROUTE- Based on the study conducted under paragraph (1), the Secretary, in consultation with the State, the County, and any interested persons, shall identify the preferred route for the Trail.

(b) Designation of Trail-

(1) IN GENERAL- Subject to paragraph (2), not later than 90 days after the date on which the study is completed under subsection (a), the Secretary shall designate the Trail.

(2) LIMITATIONS- The Secretary shall designate the Trail only if the Secretary--

- (A) determines that the route of the Trail would not have significant negative impacts on wildlife, natural or cultural resources, or traditional uses; and
- (B) ensures that the Trail designation--
 - (i) is an effort to extend the Silver State Off-Highway Vehicle Trail designated under section 401(b) of the Lincoln County Conservation, Recreation, and Development Act of 2004 (16 U.S.C. 1244 note; Public Law 108-424); and
 - (ii) is limited to--
 - (I) 1 route that generally runs in a north-south direction; and
 - (II) 1 potential spur running west.
- (c) Management-
 - (1) IN GENERAL- The Secretary shall manage the Trail in a manner that--
 - (A) is consistent with any motorized and mechanized uses of the Trail that are authorized on the date of enactment of this Act under applicable Federal and State laws (including regulations);
 - (B) ensures the safety of the individuals who use the Trail; and
 - (C) does not damage sensitive wildlife habitat, natural, or cultural resources.
 - (2) MANAGEMENT PLAN-
 - (A) IN GENERAL- Not later than 2 years after the date of designation of the Trail, the Secretary, in consultation with the State, the County, and any other interested persons, shall complete a management plan for the Trail.
 - (B) COMPONENTS- The management plan shall--
 - (i) describe the appropriate uses and management of the Trail;
 - (ii) authorize the use of motorized and mechanized vehicles on the Trail; and
 - (iii) describe actions carried out to periodically evaluate and manage the appropriate levels of use and location of the Trail to minimize environmental impacts and prevent damage to cultural resources from the use of the Trail.
 - (3) MONITORING AND EVALUATION-
 - (A) ANNUAL ASSESSMENT- The Secretary shall annually assess--
 - (i) the effects of the use of off-highway vehicles on the Trail to minimize environmental impacts and prevent damage to cultural resources from the use of the Trail; and
 - (ii) in consultation with the Nevada Department of Wildlife, the effects of the Trail on wildlife and wildlife habitat to minimize environmental impacts from the use of the Trail.
 - (B) CLOSURE- The Secretary, in consultation with the State and the County and subject to subparagraph (C), may temporarily close or permanently reroute a portion of the Trail if the Secretary determines that--
 - (i) the Trail is having an adverse impact on--
 - (I) wildlife habitats;
 - (II) natural resources;
 - (III) cultural resources; or
 - (IV) traditional uses;
 - (ii) the Trail threatens public safety;
 - (iii) closure of the Trail is necessary to repair damage to the Trail; or
 - (iv) closure of the Trail is necessary to repair resource damage.
 - (C) REROUTING- Any portion of the Trail that is temporarily closed may be permanently rerouted along existing roads and trails on public land open to motorized use if the Secretary determines that rerouting the portion of the Trail would not significantly increase or decrease the length of the Trail.
 - (D) NOTICE- The Secretary shall provide information to the public with respect to any routes on the Trail that are closed under subparagraph (B), including through the provision of appropriate signage along the Trail.
- (4) NOTICE OF OPEN ROUTES- The Secretary shall ensure that visitors to the Trail have access to adequate notice relating to the routes on the Trail that are open through--
 - (A) the provision of appropriate signage along the Trail; and
 - (B) the distribution of maps, safety education materials, and any other information that the

Secretary determines to be appropriate.

(d) No Effect on Non-Federal Land and Interests in Land- Nothing in this section affects the ownership or management of, or other rights relating to, non-Federal land or interests in non-Federal land.

18. Military Operations

Policy 18-1: Support a collaborative dialogue with the Department of Defense on the use of all public lands for military operations.

19. Water Resources

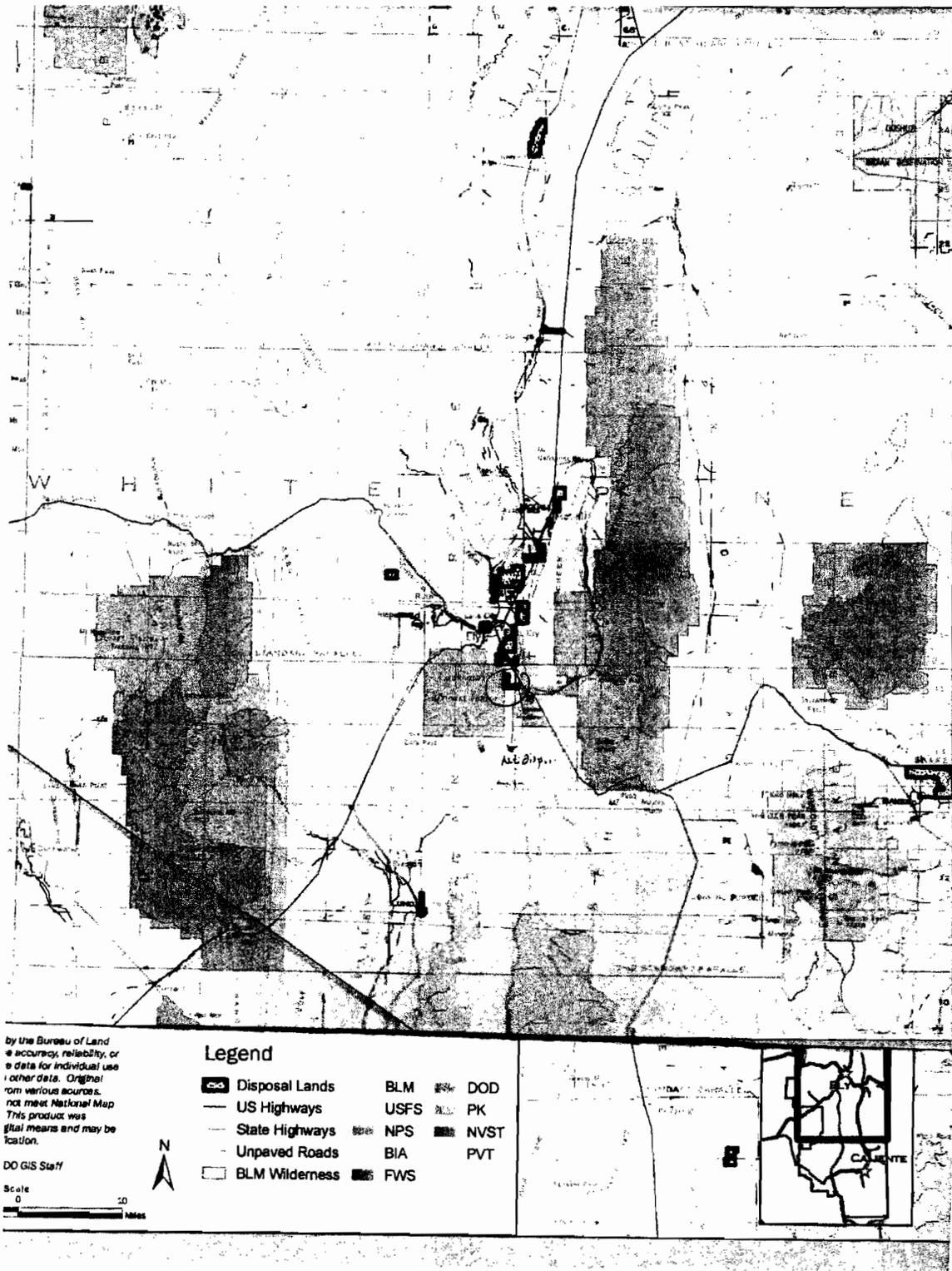
Water is fundamental to White Pine County's present and future.

Policy 19-1: Promote the intent and policies of the White Pine County Water Resources Plan.

***WHITE PINE COUNTY
LAND USE PLAN***

***ATTACHMENT 5
2008 Bureau of Land Management
Resource Management Plan,
Lands for Disposal***

LANDS PROPOSED FOR DISPOSAL WHITE PINE COUNTY, NEVADA



***WHITE PINE COUNTY
LAND USE PLAN***

***ATTACHMENT 6
Final Environmental Impact Statement
White Pine Energy Station
Socio-Economic Impacts Discussion***

Final Environmental Impact Statement for the White Pine Energy Station Project

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4.17 Socioeconomics

This section summarizes the potential effects of the White Pine Energy Station Proposed Action and its alternatives on socioeconomic resources, focusing on impacts that would occur in White Pine County. Overall, the development of the Station would result in a range of economic benefits to White Pine County. These benefits include, but are not limited to, local income and job creation, generation of tax revenue, and the development of a reliable and affordable source of power. Also, the Station would help diversify the local economy and support the development of local community infrastructure, resulting in less dependence on the boom-and-bust cycle of the mining industry and leading to an improvement in public services for local residents. Economic benefits would likely also extend outside of the county based on purchases of goods and services during Station construction and operations, as well as power- and railroad-related benefits. These economic benefits would be derived, in part, from putting to beneficial use water rights held by White Pine County (see discussion of Other Indirect Economic Benefits near the end of the Socioeconomics discussion) and the re-establishment of the NNR.

Conversely, the Station would induce mostly short-term population growth into the region, and some long-term population growth, thereby creating additional demand for public services and other community-based infrastructure and resources. The potential beneficial and adverse socioeconomic effects of the proposed Station are described below. The socioeconomic effects resulting from increased population in White Pine County because of project construction and

operations work forces are an integral part of the following discussions.

Methodology

To evaluate the potential effects of the Station on socioeconomic resources, both quantitative and qualitative analytical techniques were used. Where quantitative analyses were not warranted or feasible, potential socioeconomic effects were analyzed qualitatively. All quantified monetary values are presented in 2006 dollars. For the analysis of local economic impacts, an input-output analysis using IMPLAN (Impact Analysis for Planning) was used to quantify Station effects on economic output, income, and employment in White Pine County. Economic output refers to the value of goods and services produced in a region. IMPLAN is a computer-driven system of software and data commonly used to perform economic impact analysis. It was originally developed by the USFS to assist in land and resource management planning. The IMPLAN system has been in use since 1979, and is widely used as a tool for applied economic analysis. The system is now maintained and marketed by the Minnesota IMPLAN Group, Inc. IMPLAN estimates total economic effects of the Station based on Station-related spending and production values (direct effects), which generate indirect and induced economic effects from money circulating throughout the economy. These multiplier (or "ripple") effects are based on inter-industry linkages in the study area and household spending patterns. Indirect economic effects refer to changes in output, income, and employment resulting from the iterations of businesses in some industries purchasing from businesses in other industries and initially caused by the direct economic effects. Induced economic effects refer to changes in output, income,

and employment caused by the expenditures associated with new household income generated by direct and indirect economic effects. The economic parameters of the Station and related assumptions, including Station-related spending over time, the likely sources of purchased materials, available local labor, power production and other values, were defined with input from WPEA and White Pine County staff, and were used as inputs to the IMPLAN model. For the purposes of the input-output analysis, a 2004 economic model for White Pine County was used to estimate economic impacts, which is based on the latest available IMPLAN dataset. The model was modified to more accurately represent local industry conditions based on the economic parameters related to the proposed Station.

Potential impacts to the fiscal resources of local agencies and related public services were assessed using a number of sources. Estimated tax revenues are based on a separate fiscal analysis (Applied Analysis, 2005) prepared for the Station, which considered the level of economic activity that would be generated by the Station and applicable tax rates and regulations. The distribution of tax revenues was estimated using historic data on revenue distributions and established formulas found in the tax regulations. Available budget and other fiscal data were provided by White Pine County. Potential effects on public services are based on communications with affected agencies via White Pine County staff and those familiar with the services likely to be affected by the construction and operation of the proposed Station. In addition, the actions that WPEA and the county are expected to take to minimize adverse effects on local public services during Station

construction and operation were also considered. These actions are referred to as BMPs and are referenced in the related impact sections below, in the Station description (see Chapter 2), and in Appendix C, *Best Management Practices*.

The socioeconomic analysis, including the economic modeling conducted for the Station, assumes the Station would be developed in two phases. The first phase (Phase I) involves the concurrent development of two generating units with a nominal generating capacity of 1,060 MW. The second phase of the Station (Phase II) consists of the development of a third generating unit, which would add another nominal 530 MW of generating capacity for a total of 1,590 MW. For the purposes of this analysis, it is assumed the third unit, if developed, would be constructed subsequently to the first two units. Because of the uncertainty regarding the actual development of the third generating unit, the focus of the narrative is on the first phase of the Station, although the socioeconomic effects associated with the development of the third generating unit are referenced where applicable and included in the data tables.

Lastly, the construction and operation phases of the Station would result in unique socioeconomic effects. Therefore, the impact analysis is organized into construction- and operations-related impacts for each of the resource topics. Impacts are characterized as either positive (beneficial) or negative (adverse), and where possible, they are evaluated relative to regional conditions to help put their magnitude into perspective.

4.17.1 Proposed Action

4.17.1.1 Impacts

4.17.1.1.1 Construction-Related Effects

Population

Development of the proposed Station would require a substantial construction work force. Over the approximate 52-month construction period, it is estimated that the work force would fluctuate between approximately 40 and 50 workers (during Station start-up and completion) and 1,200 workers (during peak construction periods), resulting in an average annual construction work force of about 760 workers (WPEA, 2006). This construction period is for the concurrent development of two generating units. Construction of a third generating unit is expected to last about 44 months if developed independently of the first two units. To the extent that local labor is available, construction workers would likely be hired from the local labor force, primarily workers living in Ely and the surrounding communities of McGill and Ruth. The extent to which local labor would be used to serve the construction needs of the Station is not known at this time and depends on the selection of the prime contractor and their hiring policies. The availability of local workers with appropriate and specialized skills also may be limited because of the number of other large construction projects that are expected to be developed in the general area during the same timeframe as the Station (see Section 4.19.2). For the purposes of this analysis, estimates of the utilization of local construction labor are based on the size of the existing construction work force (approximately 150 employed workers), number of unemployed workers in the county and their qualifications, and assumptions

regarding the potential shift in the currently employed construction labor force from existing and yet-to-be-constructed projects to the Station. Discussions with the Nevada Employment Security Department indicate that it is estimated that about 10 workers of the unemployed work force (147 workers) would qualify for Station-related construction jobs (Rajala, 2006). Further, it is assumed that there would be a 20 percent shift in the existing employed construction work force from other projects and jobs to meet the labor needs of the Station. Based on these assumptions, it is estimated that an average of approximately 40 jobs (or about 5 percent of the average annual construction job base serving the Station) would be filled by local residents from White Pine County. Over the life of the Station's construction (approximately 4 to 5 years), up to approximately 300 construction jobs could be filled by local residents, which includes workers already employed by local contractors who may serve as subcontractors during Station construction. It is quite possible additional local workers would be hired to help construct the project given the ongoing and anticipated efforts of county and state agency staff to recruit and train more local workers. County staff would work with the Nevada Employment Security Department and the school district to increase technical training opportunities for local workers and to recruit more qualified workers from other areas in Nevada and other states (Rajala, 2007). Most of the work force would likely come from areas outside the county (Las Vegas, Reno, Salt Lake City, other parts of rural Nevada, or other areas). Workers drawn to the Station project area from outside the county, as well as some workers from distant areas of the county, may choose to temporarily

relocate to the project area during construction. It is anticipated that most of these non-local workers would use the proposed temporary housing that would be developed by WPEA on and off the Proposed Action power plant site. These housing facilities would accommodate up to 1,000 workers on the power plant site and an additional 300 workers (and their families) in/near the nearby community of Ely. Assuming full occupancy in the new Station housing units and an average household size for those workers bringing families, and recognizing the extent of local construction labor that would be used, it is estimated that there would be an average short-term population increase in the county of approximately 1,320 people during the approximate 52-month construction period. During peak construction periods, which would last about 10 months, as many as 1,760 people could be drawn to the area on a temporary basis. U.S. Census data show that the average household size in White Pine County is 2.45 people. For the purposes of this analysis, it is conservatively assumed that the average household size for workers bringing families would be higher (3.0 people per household) to account for typically larger household sizes for families.

In summary, the Proposed Action is expected to result in temporary increases in local population levels. This could be particularly evident in Ely where the proposed family housing serving the Station would be located. Specifically, approximately 900 new people may relocate to Ely, an increase of nearly 21 percent relative to its existing population of about 4,300 residents. The magnitude of the temporary population effects at the county level would be relatively smaller (about an 18 percent increase during peak construction periods)

based on its larger population base of approximately 9,500 residents. Potentially, some workers, particularly those with specialized skills that are not available in the local labor pool, may decide to move to the area permanently. This effect is expected to be negligible. The potential effects of these temporary increases in local population levels are described in the subsections that follow and address related resource topics, primarily housing and public services.

Housing

Based on the potential increase in population in the county resulting from Station construction, the Proposed Action would result in a short-term need for temporary housing to accommodate the construction work force. As described previously, these workers would likely relocate to the Station project area on a temporary basis during construction as opposed to traveling to/from their permanent residences in outlying areas based on the remote nature of the Station site. This pattern is typical in the region because of the cyclical nature of Nevada's predominantly rural economy where much of the construction work force has become fluid, moving from one project site to the next. In other words, many workers travel to various job locations across the state while maintaining a permanent residence at another location.

In anticipation of temporary housing needs during project construction, the Proposed Action includes provisions to provide temporary housing to serve the construction work force. Construction worker housing would include a combination of modular dormitory-style housing and recreational vehicle (RV) facilities on the power plant site, as well as modular apartments and/or homes in or near the communities of Ely or McGill to serve workers relocating with

their families. Specifically, up to 20 modular facilities (with a capacity of 800 workers) and RV facilities (with a capacity of 200 additional workers) would be provided onsite and an additional 300 apartments/homes would be established offsite. In total, Station housing would be able to accommodate up to 1,300 workers, which is greater than the estimated peak construction work force of 1,200 workers. Based on the provision of on- and offsite Station housing, the Proposed Action would not generate a substantial demand for other types of temporary housing in the Ely or McGill areas or other parts of the county. This would preclude potential adverse impacts on rental housing (which there is a current shortage of because of the re-opening of the Robinson Mine near Ruth, Nevada) and on available motel and/or RV space. Accordingly, it would also preclude potential adverse impacts on the local tourism industry, which relies on the adequate availability of motel space and other accommodations.

Local Economic Activity

Construction of the proposed Station would require substantial expenditures for capital equipment, construction-related goods and services, and labor. These expenditures would generate local economic activity, as measured by changes in economic output, labor income, and employment, over the approximate 52-month construction period. The estimates of changes in local economic activity generated by the Station, and contained in this section, are based on input-output economic modeling using IMPLAN (see Methodology for more information).

Under the Proposed Action, the total capital investment of Phase I of the Station is estimated at approximately \$1.75 billion. Of that total, construction spending on

goods/services and major equipment (including pollution control equipment) accounts for approximately \$1.35 billion; \$350 million is attributed to construction labor payroll. Other costs (primarily composed of "soft costs") represent the remaining \$50 million. Soft costs consist primarily of payments on debt used to finance the Station. The direct value of Station-related construction output in White Pine County, which excludes these other costs, totals \$1.7 billion, or about \$392.3 million annually over the construction timeframe. By definition, the direct value of construction output is attributed entirely to the location of the Station site, in this case, White Pine County.

However, a substantial portion of construction expenditures would be made outside of White Pine County, including spending on specialized equipment that is not manufactured locally (for example, boilers, steam turbines, and pollution control equipment), as well as pipe conduit, wiring, pumps, motors, steel, etc. Based on the construction-related values presented above and using representative data for gas and electric facilities derived from IMPLAN, it is estimated that a total of approximately \$667.1 million in specialized equipment would be purchased from outside the county and installed at the Station site. Because these products are not produced and/or sold locally, no additional *economic* activity directly attributable to these expenditures would be generated in the county. However, ancillary monetary benefits would be realized, such as spending for transportation and construction labor needed to transport and install the equipment, as well as use tax revenues on out-of-state purchases. (Refer to the discussion of potential fiscal impacts below for more information on use tax revenues).

To the extent that construction expenditures are made locally, construction of the proposed Station would generate additional local economic activity, including income and employment benefits in White Pine County. Local expenditures would primarily consist of spending on construction labor and materials such as aggregate/gravel, concrete, electricity, lumber, paint, tools, vehicles, office supplies, lubricants, furnishings, hardware and software, well drilling services, asphalt, etc. Excluding those expenditures on major equipment that are expected to occur outside the county, it is estimated that the Station would generate a total demand for about \$682.9 million (\$157.6 million annually) in other construction goods and services (excluding labor). However, the existing industries serving the construction sector in White Pine County are limited, and only a portion of local demand would be met by local industries in the county.

In addition to spending on construction-related goods and services, the proposed Station would also generate direct employment and labor income benefits during Station construction. In terms of jobs, construction of the Station would directly support an average of 760 temporary construction jobs over a 52-month period, with peak employment levels at about 1,200 jobs. Based on available construction labor, it is anticipated that about 40 jobs would be filled by local residents of White Pine County (please refer to the analysis of population impacts discussed previously in this section for more information).

Payroll expenditures required to fund the Station's construction labor requirements are estimated to total \$350 million over the initial construction period, averaging about \$80.8 million annually. Of this annual total, approximately \$4.3 million would be earned by construction workers from White Pine

County, with the remaining \$76.5 million accruing to non-local workers. This represents the direct income effect of Station construction. A portion of construction income would be retained and spent in the local economy resulting in additional economic activity. Labor income earned by local workers is expected to be spent in the county in accordance with typical household spending patterns. Conversely, most of the labor income earned by non-local workers is expected to be transferred out of the county (to the area of primary residence). However, it is assumed that 20 percent of income earned by non-local employees would be spent in the local economy to pay for standard living expenses, such as food and entertainment, while temporarily residing in the county. Overall, it is estimated that approximately \$19.6 million of direct labor income from construction would be retained and spent locally annually, which would generate additional economic activity.

Table 4.17-1 summarizes the estimated annual economic impacts of the Proposed Action during the initial construction phase (Phase I) of the Station. The table includes the direct economic effects of construction activities described above, as well as the additional (indirect and induced) economic benefits that would result as money circulates throughout the White Pine County economy.

Based on direct construction spending, employment, and payroll levels, it is estimated that construction of the Station would generate an additional \$22.1 million in local economic output for a total output value of \$414.4 million per year. In total, about \$1.8 billion in economic output would be generated during the initial construction phase of the Station, of which about \$95.6 million represents additional economic production beyond the construction value of the Station.

TABLE 4.17-1

Summary of Estimated Annual Economic Output, Income, and Employment Impacts of the Proposed Action (Phase I-Two Generating Units) ^{a,b,c}

Economic Impact	Direct	Indirect	Induced	Annual Total
Construction				
Output	\$392.3 million	\$17.2 million	\$4.9 million	\$414.4 million
Labor Income/Earnings	\$80.8 million	\$5.9 million	\$1.1 million	\$87.8 million
Employment (Temporary)	760 jobs	212 jobs	43 jobs	1,015 jobs
Operations				
Output	\$315.7 million	\$1.9 million	\$2.1 million	\$319.7 million
Labor Income/Earnings	\$10.5 million	\$707,000	\$457,000	\$11.7 million
Employment (Permanent)	135 jobs	27 jobs	19 jobs	180 jobs

Source: ENTRIX, 2006

^a Numbers in the table represent annual average values. Monetary values are in 2006 dollars.

^b Direct effects are based on information provided by White Pine Energy Associates. Indirect and induced effects are based on estimates derived from IMPLAN.

^c Economic effects listed in the table are for White Pine County only.

More pertinent to local economic conditions are the income and employment benefits that would be generated by the Station. Construction of the Station under the Proposed Action is estimated to generate approximately 255 jobs in the county in addition to the average annual employment requirements at the Station site (760 jobs). In total, the estimated employment benefits attributed to the initial construction phase of the Station under the Proposed Action is 1,015 jobs annually. This is equal to 23 percent of the existing job base in the county. Of this total, employment of local workers could reach nearly 300 jobs (40 direct construction jobs plus 255 additional jobs), which accounts for almost 7 percent of the local labor force in White Pine County.

Overall, employment generated by construction of the Station would be a major and temporary economic benefit of the Proposed Action. Further, to the extent that these construction jobs are filled

utilizing locally unemployed residents, the local unemployment rate could temporarily decrease. Because most construction workers are expected to be drawn from areas with a substantially larger employment base, there would likely be a negligible effect on unemployment rates in areas outside White Pine County.

Potential increases in employment during construction would also have a positive effect on the earnings/income of construction workers serving the Station. The direct income effect from construction of the Station is estimated at \$80.8 million annually, and the additional income generated as a result of Station construction is estimated to be \$7.0 million per year. Total labor income benefits generated by Station construction are estimated at \$87.8 million annually, which accounts for about 55 percent and 34 percent of existing wage earnings and personal income levels in the county, respectively. Over the entire construction

period, total labor income generated by the Station is expected to reach about \$380.4 million. The income benefits generated by Station construction would be a short-term and positive economic impact of the Proposed Action.

Economic Impacts Associated with a Third Generating Unit (Phase II)

A summary of the economic benefits attributed to the construction of a third generating unit is presented in Table 4.17-2. Generally, subsequent construction of additional generating capacity at the power plant would prolong the economic benefits of Station construction by an additional 44 months. On an average annual basis, the magnitude of economic benefits under Phase II of the Station would be smaller relative to Phase I. Specifically, the direct economic effects of Phase II construction are estimated to be \$231.8 million in economic output, \$47.7 million in labor

income, and 502 jobs. These direct effects, in turn, would generate additional economic benefits for a total of \$245.0 million in output, \$51.9 million in labor income, and 655 jobs annually over the 44-month construction period.

Tax Receipts and Fiscal Resources

White Pine County, as well as the State of Nevada and its other counties, would experience fiscal benefits during construction of the Station. Fiscal benefits during construction would be attributed to sales and use taxes (including out-of-state purchases of equipment and materials), ad valorem (property) taxes, and business taxes. Another potential source of additional tax revenue is the Motor Fuels Tax. Revenue from this tax would be generated by construction-related fuel consumption (although as noted below, this tax is not expected to be a major source of revenue for White Pine County).

TABLE 4.17-2

Summary of Estimated Annual Economic Output, Income, and Employment Impacts of the Proposed Action (Phase II-Third Generating Unit) ^{a,b,c}

Economic Impact	Direct	Indirect	Induced	Annual Total
Construction ^d				
Output	\$231.8 million	\$10.1 million	\$3.1 million	\$245.0 million
Labor income/earnings	\$47.7 million	\$3.5 million	\$701,300	\$51.9 million
Employment (temporary)	502 jobs	125 jobs	27 Jobs	655 jobs
Operations ^e				
Output	\$157.9 million	\$773,400	\$608,000	\$159.2 million
Labor income/earnings	\$3.0 million	\$282,900	\$134,300	\$3.4 million
Employment (permanent)	40 jobs	11 jobs	6 jobs	56 jobs

Source: ENTRIX, 2006

^a Numbers in the table represent annual average values. Monetary values are in 2006 dollars.

^b Direct effects are based on information provided by White Pine Energy Associates. Indirect and induced effects are based on estimates derived from IMPLAN.

^c Economic effects listed in the table are for White Pine County only.

^d Construction effects in Phase II would occur after Phase I of the Station is complete.

^e Operations effects represent the incremental increase in economic effects from development of Phase II of the Station, and are in addition to the effects listed for Phase I.

A separate estimate of direct fiscal revenues generated during Station construction (and operations) was prepared for the Station by Applied Analysis (Applied Analysis, 2005). This fiscal analysis does not include revenue from the Motor Fuels Tax, and does not address the indirect fiscal impacts associated with indirect or induced economic activity that would be generated by the proposed Station. This analysis was based on a proprietary model and a number of assumptions, which correspond closely to the parameters of Phase I of the Station (the scenario where two generating units are developed concurrently). The following assumptions were made in the fiscal analysis prepared by Applied Analysis:

- The Station would have a generation capacity of 1,000 MW with a total capital investment of \$1.6 billion over a 5-year period.
- Construction employment would average 800 jobs, with a peak of 1,200 jobs.
- Permanent employment payroll would be \$1 to \$3 million per year.
- Annual coal purchases subject to sales and use tax would be \$33 million per year. The fiscal analysis assumes that coal used to fuel the proposed power plant would be subject to use taxes. A court case is currently pending that is examining the applicability of use taxes to such items.

- There would be no change in ad valorem tax rates. White Pine County would continue to maintain the maximum allowed rate.
- No tax abatements or other economic incentives would be provided to WPEA other than the exemption for pollution control equipment that is currently available. It should be noted that that the State does offer incentive programs; however, to date, an application has not been made to the State Commission of Economic Development to request the incentives.

The results of the Phase I fiscal analysis have been extrapolated to provide a rough approximation of fiscal impacts under Phase II of the Station (the scenario where a third generating unit is developed subsequent to the first two units). The Phase I and II fiscal analysis results are summarized in the tables presented and described below.

The results of the Phase I fiscal analysis indicate that the Station would generate an estimated \$129.4 million in total tax revenues during the 5-year construction period (see Table 4.17-3). Total tax revenues consist of \$77.3 million in sales and use taxes, \$27.7 in real property taxes, \$22.9 million in personal property taxes, and \$1.4 million in modified business taxes. On an annual basis, tax revenues are estimated to average \$25.9 million per year during the 5-year construction period.

TABLE 4.17-3

Summary of Estimated Tax Revenues Generated Under the Proposed Action (Phase I-Two Generating Units) ^{a,b,c}

Construction	2007	2008	2009	2010	2011	Total
Modified business tax	\$105,625	\$359,125	\$430,950	\$392,925	\$147,875	\$1,436,500
Ad valorem property tax – real	\$1,087,721	\$3,403,679	\$5,990,509	\$8,208,276	\$9,031,050	\$27,721,235
Ad valorem property tax – personal	\$809,182	\$2,774,339	\$5,317,482	\$6,762,450	\$7,224,840	\$22,888,293
Retail sales and use tax	\$10,687,500	\$19,593,750	\$23,868,750	\$15,318,750	\$7,837,500	\$77,306,250
Total	\$12,690,028	\$26,130,893	\$35,607,691	\$30,682,401	\$24,241,265	\$129,352,278

Operations	2012	2013	2014	2015	2016	Annual Average
Modified business tax	\$40,138	\$40,138	\$40,138	\$40,138	\$40,138	\$40,138
Ad valorem property tax – real	\$8,960,595	\$8,826,090	\$8,826,090	\$8,557,080	\$8,422,575	\$8,718,486
Ad valorem property tax – personal	\$6,882,630	\$6,245,926	\$5,694,118	\$5,209,083	\$4,773,813	\$5,761,114
Retail sales and use tax	\$2,351,250	\$2,351,250	\$2,351,250	\$2,351,250	\$2,351,250	\$2,351,250
Total	\$18,234,613	\$17,463,404	\$16,911,596	\$16,157,551	\$15,587,776	\$16,870,988

Source: Applied Analysis, 2005

^a Monetary values are in 2006 dollars.

^b Values represent direct fiscal impacts. Indirect and induced fiscal effects have not been estimated.

^c Motor Fuels tax revenue and franchise fees are not included in the fiscal analysis.

Sales and use tax revenues are expected to be the largest source of tax revenues generated by the Station, averaging about \$15.6 million per year over the construction period. This type of tax revenue is collected by the State of Nevada, which, in turn, distributes a portion of the money back to local jurisdictions based on established formulas. Based on historic distributions, it is estimated that annual sales/use tax revenues generated by Station construction would be distributed as follows: White Pine County (including White Pine County School District) (approximately \$10.3 million), State of Nevada (about \$4.4 million), and other

Nevada counties (approximately \$733,000). In total, sales tax revenues realized by White Pine County during Phase I construction are estimated at \$51.6 million. These tax revenues would be a major fiscal benefit to state and local government agencies, particularly those in White Pine County. To ensure that sales and use tax revenues are collected in a timely and appropriate manner, White Pine County and the Nevada Department of Taxation would work with WPEA to develop policies and procedures for reporting and payment of sales and use taxes generated during project construction.

Station construction also would generate sales tax benefits from construction worker spending in the local economy. The extent of such benefits depends on how much labor income is retained in the county and the proportion of local spending on taxable goods and services. Although not quantified, these indirect sales tax revenues would be another positive fiscal impact of Station construction.

Property tax benefits would be realized by White Pine County and its local agencies/districts, as well the State of Nevada. It is estimated that of the approximate \$50.6 million in property tax revenues generated by the Station, approximately \$23.1 million would go directly to White Pine County (excluding local agencies/districts) and about \$2.4 million would go to the state.

As indicated above, potential Motor Fuels Tax benefits have not been quantified for the proposed Station. Gasoline tax revenues are very difficult to quantify because of a range of statutory provisions that govern their applicability. For example, the following provisions apply to the Motor Fuels Tax in White Pine County: (1) it applies to gasoline but not diesel fuel; (2) fuel used by vehicles that are not registered and are used off road (on the construction site for example) is not taxed; (3) Motor Fuels Tax on vehicles that are registered out-of-state is distributed on a nation-wide formula rather than the state formula; and (4) fuel purchased for a centralized distribution point on the construction site is taxed on the wholesale price at the point of delivery, and if the

contractors set up a central tank for construction vehicles, they can submit a claim to be reimbursed for the fuel used by unregistered off road vehicles. Discussions with the Nevada Department of Taxation indicate that gasoline tax revenues generated by the Station and realized by White Pine County would likely be minimal (Rajala, 2007).

Fiscal Impacts Associated with a Third Generating Unit (Phase II)

Based on estimates of construction spending for the third generating unit, which is expected to be approximately 50 percent of projected spending under Phase I, related fiscal impacts are expected to also be approximately half of the fiscal impacts presented for the two-generating unit scenario (see Table 4.17-4). This includes approximately \$38.7 million in total sales and use taxes, \$13.9 million in real property taxes, \$11.4 million in personal property taxes, and \$718,000 in modified business taxes. Although limited, additional gasoline tax revenue would also be generated during the construction of a third generating unit. In total, and excluding the limited gas tax revenues, the revenues generated during construction of Phase I and II of the Station are estimated to be over \$194 million over an approximate 9-year construction period.

Property Values

The potential effect of the Station on local property values and related tax revenues is addressed below in Section 4.17.1.1.2, *Operations-Related Effects*.

TABLE 4.17-4

Summary of Estimated Tax Revenues Generated Under the Proposed Action (Phase II-Third Generating Unit) ^{a,b,c,d}

Construction	2012	2013	2014	2015	Total	
Modified business tax	\$70,463	\$256,591	\$256,591	\$134,604	\$718,250	
Ad valorem property tax – real	\$1,359,788	\$4,951,640	\$4,951,640	\$2,597,549	\$13,860,618	
Ad valorem property tax – personal	\$1,122,721	\$4,088,367	\$4,088,367	\$2,144,690	\$11,444,147	
Retail sales and use tax	\$3,792,042	\$13,808,647	\$13,808,647	\$7,243,789	\$38,653,125	
Total	\$6,345,014	\$23,105,246	\$23,105,246	\$12,120,633	\$64,676,139	

Operations ^e	2016	2017	2018	2019	2020	Annual Average
Modified business tax	\$20,069	\$20,069	\$20,069	\$20,069	\$20,069	\$20,069
Ad valorem property tax – real	\$4,480,298	\$4,413,045	\$4,413,045	\$4,278,540	\$4,211,288	\$4,359,243
Ad valorem property tax – personal	\$3,441,315	\$3,122,963	\$2,847,059	\$2,604,542	\$2,386,907	\$2,880,557
Retail sales and use tax	\$1,175,625	\$1,175,625	\$1,175,625	\$1,175,625	\$1,175,625	\$1,175,625
Total	\$9,117,307	\$8,731,702	\$8,455,798	\$8,078,776	\$7,793,888	\$8,435,494

Source: ENTRIX, 2006

^a Fiscal impacts are based on fiscal study prepared for Phase I (two generating units), and are based on the proportion of construction spending that would occur under Phase II (third generating unit).

^b Monetary values are in 2006 dollars.

^c Values represent direct fiscal impacts. Indirect fiscal effects have not been estimated.

^d Motor Fuels taxes and franchise fees are not included in the fiscal analysis.

^e Operations-related fiscal impacts shown in the table are incremental to the impacts presented for Phase I.

Community Infrastructure and Public Services

This section addresses potential impacts to public services in White Pine County. These types of potential effects are a concern given the county’s relatively precarious financial condition (see Section 3.17.5) and the need for the county to provide some services before the new tax revenue stream estimated in the previous section begins. While the fiscal benefits of the Station would be substantial and would likely help fund a

variety of public services in the county in addition to those needed by the Station and its construction work force, there would be an initial delay between the start of construction and when the revenue would become available to the county. The length of delay would vary based on the type of tax and is determined by the length of time it would take to go through the tax reporting and collection process, and because tax revenues are collected by the State of Nevada, the length of time it takes until these revenues are re-distributed to

White Pine County from the state. Generally, and based on discussions with the Nevada Department of Taxation, tax revenues generated by the Station's construction would be realized by White Pine County within 6 to 18 months after assessment and reporting (Rajala, 2007).

Because the new tax revenue stream is expected to eventually be more than sufficient to cover the costs of public services needed by the Station over the long-term, this section focuses on those local services that could be affected during the Station's construction phase and prior to when the new revenue stream associated with the Station would begin.

Law Enforcement

Based on the Station's relatively large construction work force and the county's previous experiences with crime increases during previous large construction projects (see Section 3.17.7.1), the Proposed Action would likely result in an increase in demand for traffic control and law enforcement services in the Station project area during construction. The increased demand for law enforcement services may strain police protection services in White Pine County, and preliminary discussions with the Sheriff's Department indicate that an additional one to two deputies and one patrol car would be needed to serve the Proposed Action power plant (Romero, 2005). The costs associated with adding these resources would ultimately be covered by the increased tax revenue generated by the Station. However, until this tax revenue stream is established, WPEA has agreed to provide funding for these additional resources such that there would be no interim service deficiencies. Other security-related BMPs have been included as part of the Station, consisting of an onsite security office to provide space and facilities for security personnel,

a guardhouse for security personnel at the entrance to the power plant site, security fencing around the power plant site, and security vehicles to patrol the site. Speed limit and caution signs would be placed near construction sites and access routes. Traffic control personnel would also be employed at road crossings and construction access ingress and egress sites and would also help minimize the potential increase in demand for sheriff patrols and reduce the need for issuing speeding tickets.

Another type of law enforcement-related impact would be a likely increase in jail inmates during Station construction. Up to 1,320 workers and their families would live in the Station project area during the construction period and would thus increase the likelihood of arrests requiring the use of the county's jail facility or juvenile detention services, both of which have capacity limitations under existing conditions. While it is difficult to estimate related increases in the inmate or juvenile detention populations, the county has experienced such population increases in the past as discussed in Section 3.17.7.1. Therefore, WPEA has agreed to monitor this situation with the Sheriff's Department, and if necessary, would place a temporary building next to the jail to increase jail capacity, or would help the county expand its existing permanent facility, until a long-term solution can be implemented by the county at a later date. Such facilities would be developed in accordance with all applicable standards and regulations governing jail facilities. Given the large amount of tax revenue to be generated by the Station, some of the new revenue from the Station may be used to help fund long-term expansions and/or improvements to the existing jail and juvenile detention facilities.

Fire Protection and Other Emergency Services

Construction activities, in conjunction with the potential increase in the number of people temporarily residing in the Station project area during construction, may increase the need for emergency services in the project area, such as fire protection and emergency medical aid. An increase in demand for such services could result from accidents that could possibly occur with the use of heavy equipment, construction vehicles, toxic chemicals, or other hazardous materials. Also, approximately up to 25 percent of the peak construction work force (300 out of 1,200 workers) would commute to the Station site from the new housing units developed in or near Ely by WPEA (as opposed to living onsite) and thus could be involved in traffic accidents en route to the Station site.

The proposed Station would be served primarily by volunteer fire departments in the county, including emergency medical technicians (EMTs). The closest emergency services to the Station site are in McGill, approximately 22 miles south of the Proposed action power plant site. According to White Pine County, an important issue facing these outlying volunteer departments is covering emergencies during the day when most of their volunteers are at their regular places of employment during daytime business hours (Rajala, 2005). Because construction activities would occur during the time that most volunteers are at work, providing fire protection and emergency services to the Station may strain existing services levels in White Pine County or cause delays in response times until Station-related tax revenue can fund any necessary service upgrades (additional staff and/or equipment).

To address this issue, WPEA has agreed to provide for up to four permanent employees that are trained in EMT and fire-fighting procedures on the site and available to serve as first responders during the Station's construction phase. Further, WPEA would coordinate these efforts with the White Pine Ambulance Service ensuring that all applicable licensing requirements are met and that onsite emergency response efforts are integrated with local emergency medical services, including transport of victims to local medical facilities. WPEA staff trained in EMT procedures would likely be supported by similar personnel that work for the contractor firms hired by WPEA to help construct the Station. At least one emergency ambulance/paramedic vehicle would also be supplied on the Station site by either WPEA or its contractors to expedite response and transport times as well as assist with treatment of patients while being transported to the hospital. WPEA would also make available within the power plant site an onsite helicopter pad, thus facilitating the use of helicopters during emergencies.

The Station's BMPs also include a number of measures that would effectively support first responders if they have to fight fires before fire-fighting personnel from McGill or Ely arrive, including extra water storage, backup diesel generators and pumps, water trucks, and other equipment.

Other Medical Aid

If necessary, serious medical emergencies occurring at the Station site or related to the construction work force temporarily residing in the Station project area would be directed to the William Bee Ririe Hospital in Ely, which provides emergency room services. Based on plans for hospital expansion and existing

capacity levels, hospital capacity is not anticipated to be an issue, and no additional hospital beds and/or medical staff are expected to be required to serve Station workers or their families.

Education and Schools

The majority of construction workers are likely to come from outside White Pine County and would move into the Station project area temporarily. Most of these workers are not expected to bring their families with them or would be single without families, and would thus likely live in the 1,000 unit, onsite and temporary, housing facility that would be provided by WPEA. Married workers and workers with children would likely live in the temporary housing units that would be developed in or adjacent to Ely. WPEA has committed to building up to 300 of these family units. Using a range of census data for the county regarding people per household and children as a percentage of the population, a worst-case analysis approach leads to an estimate of 115 to 144 school age children potentially residing in the temporary family housing units. While 2000 census data for White Pine County indicate an average of 2.45 people per household, the county has a relatively high retirement population (WPCEDC, 2006). (According to the 2000 Census, in White Pine County, persons 60 years and older account for 18 percent of the population, compared to 14 percent for Nevada as a whole and 15.2 percent for the United States. The percentage of the county's population that was 60 years and older in 2000 is higher than it was in 1990.) Also, because most of the workers are expected to come from areas outside of the county and families tend to have more people living in their households, a higher figure of 3.0 people per household was used to develop a range of the total

number of people that may live in the 300 family housing units (735 to 900 people). County statistics on the average number of school age children as a percentage of the total population (15.67 percent) (Rajala, 2006) were then applied to this estimate to come up with an estimated range of school age children (115 to 144).

Based on the available data regarding school capacity summarized in Section 3.17.7.4, sufficient capacity is expected to be available in the White Pine County School District to accommodate this potential increase in enrollment.

Social Services

The relatively large number of jobs that would need to be filled by WPEA and its contractors to construct the Station would attract a number of workers seeking new employment in the county. Some of these people may be unemployed or may need assistance from the county's social services organizations. While an increase in demand for county social services can be expected, this increase would be temporary, the number of people needing assistance would likely not be large, and the county Social Services Department and other existing organizations described in Section 3.17.7.6 are expected to be able to help most, if not all, of these people (Hill, 2006). Nevertheless, and as discussed in Section 4.17.1.2, White Pine County and WPEA would monitor and mitigate social service and other types of socioeconomic impacts during project construction if warranted.

The county has very few homeless people that stay for extended periods of time, possibly because of very cold temperatures much of the year. Most of the unemployed that come to town looking for work are transients who typically leave town and

seek opportunities elsewhere if they are unsuccessful securing employment locally (Rajala, 2006). Also, some of the increase in demand for temporary housing for those who need assistance while looking for other work locally, or before they leave the area, could be met with the new temporary housing that would be developed by WPEA.

In addition, the Proposed Action would have a minor affect on the ability of local motels to provide emergency shelter to the local residents as part of the county's existing motel voucher program. The demand for motel space generated by the Station would be minimal because construction workers would be required to use the onsite project housing.

Solid Waste Disposal

Construction of the Proposed Action power plant would generate solid waste (for example, wood and metal construction debris, household waste from onsite housing, etc.) that would require disposal. Until an onsite waste disposal facility is developed by WPEA, which is expected to take 1 or 2 years to construct, all solid waste generated during project construction would be hauled to the City of Ely Landfill for disposal. The City of Ely Engineer's office estimates that approximately 300,000 cubic yards of capacity is available at the landfill for construction waste (Rajala, 2006). In addition, the landfill has approximately 35 years of capacity for household waste (Rajala, 2007). If local landfill capacity becomes constrained during construction because of the disposal needs of the Station and other large construction projects in the area, it has been confirmed that the City of Elko Landfill has available capacity for construction and household waste and is licensed as a solid waste importer (Dodson, 2007). Once the onsite

landfill facility is operating, it would be large enough to handle all of the solid waste generated by the Station's construction process. The Station would generate revenue for the City of Ely from disposal fees at the landfill and in the long-term, the new tax revenue generated by the Station could be a major source of funding for any necessary expansions at the landfill.

Road Maintenance

The county roads that would be used to transport gravel to the construction site could experience a relatively fast rate of wear and tear (compared to No Action Alternative conditions) as large gravel trucks would need to travel this route for as many as 96 months (assuming the third unit of the power plant is built after construction of the first two units is completed). However, gravel roads require less maintenance than paved roads and future tax revenues generated by the Station should be sufficient to maintain this road (Rajala, 2006). These tax revenues would be from motor fuel taxes on construction-related gasoline purchases, as well as other project-generated tax revenues deposited into the County General Fund. Legislation is also pending that may authorize the use of sales tax revenues for road improvements.) Lastly, White Pine County and WPEA would monitor the condition of the county roads affected by the Station and work together to develop and implement appropriate mitigate if needed.

Water and Wastewater

Water required to construct the Station would come from the proposed water supply system developed as part of the Proposed Action. The system would ultimately consist of eight ground water wells and an underground water pipeline

system. It is anticipated that until the distribution system is developed, water would be trucked to the Station site for construction activities, including dust control. The Proposed Action well field is expected to provide sufficient water to support construction activities, and no existing water utilities would be affected.

Generation of wastewater during construction would be from human and industrial sources. An onsite wastewater treatment plant would be constructed to serve the wastewater treatment needs in the immediate vicinity of the Station. Until that time, portable toilets would be placed at the Station site and along linear facilities during construction and used to contain human wastewater. Waste in the toilets would be collected by the local companies that already service such facilities, treated at the City of Ely Waste Water Treatment Plant (WWTP), and disposed of at the Ely Landfill. Based on the temporary nature of this impact and low volume of waste generated, the Station is not expected to exceed local treatment capacity (Day, 2007). If capacity does become an issue at the Ely facility, the City of Elko WWTP has the capacity to accept the waste from the septic services' companies providing portable toilets during construction (Sawyer, 2007).

In addition, industrial wastewater and storm water runoff generated by Station facilities that is collected after coming into contact with potential pollution sources would be discharged to an onsite evaporation pond in accordance with applicable federal and state regulations.

Power

Power during Station construction, including electric service to the wells, would be supplied by the local electric provider, Mount Wheeler Power

Cooperative. Mount Wheeler would also provide electrical service to construction workers residing in the temporary housing to be developed by WPEA. This electrical cooperative has adequate capacity to meet these needs, and the Station is not expected to affect its ability to adequately serve its other customers (Rajala, 2006).

Out-of-County Economic Effects

Construction of the Station would also result in notable economic benefits outside of White Pine County. These benefits are driven primarily by expenditures for large equipment and other goods and services that are not produced locally. Items that would likely be imported from out of the county include major equipment such as boilers, steam turbines, and pollution-control equipment, as well as standard construction materials (for example, pipe conduit, wiring, pumps, motors, and steel). It is estimated that approximately \$667 million worth of major equipment would be imported to serve the Station over the initial 52-month construction period, with an additional \$334 million in major equipment purchased from outside the county if a third generating unit is developed. These expenditures are in addition to the purchase of other construction goods and materials that cannot be provided by local industries. These out-of-county construction expenditures would result in direct and indirect economic benefits (income and employment) in the economies where these items are produced. In addition, to the extent that local labor is not available and/or specialized labor is needed, workers could be drawn in from surrounding counties, including Clark County or Salt Lake City, which have relatively large and diverse construction work forces. This would result in employment benefits and generate wage

earnings that are spent primarily outside the county. Finally, fiscal benefits would be realized by those jurisdictions where this out-of-county spending occurs.

Another potential economic benefit to other Nevada counties is an increase in tax revenues resulting from White Pine County no longer being a "guaranteed" tax county. Currently, the county earns a guaranteed amount of tax revenue based on its past fiscal hardship. The tax revenue benefits generated by the Station would likely change the county's status from a guaranteed tax importer to a tax export county, which would allow more tax revenues to be distributed to other Nevada counties.

4.17.1.1.2 Operations-Related Effects

Population

The size of the work force needed to operate the first two generating units is expected to be approximately 135 full- and part-time staff. It is assumed that approximately half of the workers would be hired from the labor pool in White Pine County, while the remaining positions would need to be filled by workers with specialized skills not available locally. New employees involved in Station operation that are not existing county residents would be expected to relocate to the county with their families. Based on the estimated proportion of employees that would need to relocate and the average household size in the county, there could be a long-term increase in the local population of about 165 people, a 1.8 percent increase relative to existing conditions. If a third-generating unit is developed under Phase II, an additional 40 permanent employees would be required at the power plant, and the total population increase is estimated to be 214 new people in the county. The

potential effects on related resources, and associated with this long-term increase in population, are addressed below.

Housing

To the extent that new workers elect to move into the local area from outside the county or from other areas within the county, the Station's operational phase would result in a minor increase in demand for permanent housing. Based on existing vacancy rates and ongoing efforts by the county to facilitate the development of new housing in the county, including up to 170 new housing units in the Ely/Ruth/McGill area over the next two years, existing and anticipated future housing resources in the county would likely be sufficient to meet demand. Additionally, new housing may be constructed and financed by the salaries of these new employees during Station operation, some of whom may be able to afford to build their own homes on undeveloped lots.

Local Economic Activity

Operation of the Proposed Action power plant would result in long-term economic benefits to the local economy of White Pine County. The direct economic benefits of power plant operations consist of the value of power generated by the plant (this includes the value of the Station's power sales and is referred to by economists as the direct output effect) and operations-related work force requirements and related payroll (direct employment and labor income effects, respectively). These direct effects, in turn, generate additional economic activity (indirect and induced effects) based on local expenditures that are required for the power plant to operate and local spending of income earned by the operations work force and other local workers.

Based on the maximum capacity of the power plant if only the first two generating units are built (1,060 MW), and assuming an operational load factor of 85 percent, the proposed Station would generate approximately 7.9 million MWh of electricity annually, with an estimated wholesale market value of approximately \$315.7 million per year. This estimated value of the power produced represents the direct output effect of the Station. It is based on representative current wholesale market values for electricity in the southwestern United States, which serves as a proxy for the value of power that would be generated at the plant. For purposes of this analysis, the wholesale value of electricity in the regions served by the Proposed Action power plant is estimated at \$40/MWh and is based on data in the California Independent System Operator's (ISO) 2005 "Annual Report on Market Issues and Performance," and related spot market and power exchange data provided by California ISO staff. Representative market values were used because the proposed power plant would be a private merchant facility and contract agreements and projected revenue data are proprietary.

Power plant operations would require local expenditures for goods and services, which would generate additional economic activity in the county. Operational expenditures (excluding labor and fuel costs) are estimated to be approximately \$25 million annually, a portion of which would be spent locally (as estimated by IMPLAN). This value includes expenditures for items such as lime, ammonia, water treatment additives, electricity, fuel oil, lubricants, office supplies, janitorial services, landscaping services, asphalt, vehicles, rail cars, etc. This figure does not include the cost of coal that would be used to fuel the power

plant (about \$36.5 million annually in 2004 dollars) and related coal shipping costs (about \$49.5 million annually in 2004 dollars). Because the coal would be imported from out of state (the Powder River Basin in Wyoming), coal purchases and shipping costs would not affect local economic conditions. These out-of-county effects are discussed separately below.

In terms of employment and payroll, power plant operations would require 135 full- and part-time staff, which represents the direct employment effect of operations. The annual payroll associated with the operations work force is estimated at \$10.5 million annually.

Similar to construction-related effects, operations-related expenditures and labor income would generate additional economic benefits in White Pine County beyond the direct effects described above. A summary of operations-related economic effects, as measured by changes in output, earnings/income and employment, is presented in Table 4.17-1 above.

The total value of economic output generated in White Pine County as a result of power plant operations is estimated at \$319.7 million annually. This includes the direct value of power production (\$315.7 million), as well as an additional \$4.0 million in output that is generated from local operational expenditures and local spending of labor income.

As for employment effects, in addition to the operations work force at the power plant (135 employees), it is estimated that the Station would generate an additional 45 jobs annually in the county during operations. Total employment generated by Station operations (about 180 jobs) accounts for approximately 4 percent of the county's employment base and labor

force, and could potentially lower existing unemployment rates. Overall, these employment effects represent a positive and long-term economic benefit for White Pine County.

Operation of the Proposed Action power plant would also have a positive long-term effect on income levels in White Pine County. The total income generated by Station operations is estimated at \$11.7 million annually, which consists of direct income effects (\$10.5 million in operations payroll) and indirect and induced income effects totaling \$1.2 million annually. Total labor income that would be generated by the Station represents about 7 percent of wage earnings and almost 5 percent of total personal income generated in the county under existing conditions.

The operations-related economic benefits described in this section would continue to be generated through the life of the Station (expected to be 40 years or longer).

Economic Effects Associated with a Third Generating Unit (Phase II)

If a third generating unit were developed at the power plant site, the operations-related economic benefits of the Station would increase. Table 4.17-2 shows the incremental increase in economic benefits with the construction of a third generating unit under Phase II of the Station. The incremental economic benefits resulting from Phase II of the Station, if developed, include \$157.9 in direct annual economic output, \$3.0 million in direct annual labor income, and 40 additional jobs at the power plant. Considering the additional (indirect and induced) economic benefits generated by these direct effects, Phase II of the Station would result in an incremental increase of \$159.2 million in total output, \$3.4 million in total labor

income, and 56 jobs on an annual basis during Station operation.

Tax Receipts and Fiscal Resources

Similar to construction, operation of the Proposed Action power plant would generate sales/use, property (real and personal), and business tax revenues, which represent major long-term fiscal benefits that would be realized at the local and state level (see Table 4.17-3). Based on the fiscal study prepared by Applied Analysis, it is estimated that an average of \$16.9 million per year in total tax revenues would be generated during Station operations. The fiscal study evaluated fiscal effects over the first 5 years of Station operations. The largest source of tax revenues during operations are property taxes (\$14.5 million annually), followed by sales/use taxes (\$2.4 million annually) and business taxes (\$40,000 annually).

Property taxes generated during Station operations would provide a fiscal benefit to White Pine County and the state. Because the Station would generate electricity that is sold outside of White Pine County, Station facilities would be centrally assessed by the Centrally Assessed Properties Section of the State Department of Taxation, which is responsible for the valuation, assessment, collection, and distribution of ad valorem taxes related to property of an interstate or inter-county nature (NRS 361.320). Recent legislation (NRS 361.320 (4)) provides that all property taxes generated by a facility such as the proposed power plant remain in the county of origin and not be proportioned out over the system using the unitary system of value. However, the state would still collect 17 mils of the assessed value. Based on estimated revenues and historic distributions of property tax revenues,

White Pine County, excluding the local school district and special districts, would receive approximately \$6.6 million in property tax revenues annually, and the state would receive about \$673,000 per year, during the initial construction period.

A minor increase in property tax revenues would result from the transfer of public lands into private ownership upon purchase of the power plant site from BLM. These property tax effects would depend on the appraised value of the land and changes in PILT payments received by the county, and are considered negligible in the context of the other type of potential property tax revenues described above.

Taxable sales would be generated from expenditures during Station operations. White Pine County would collect sales and use tax on all taxable real property purchased and delivered to the Station site, including coal. Sales/use taxes generated by Station operations would result in an estimated \$1.6 million in revenues to White Pine County, \$671,000 to the State of Nevada, and \$112,000 to other Nevada counties annually.

Fiscal Effects Associated with a Third Generating Unit (Phase II)

The fiscal impacts of the Station under the scenario where a third generating unit is built are presented in Table 4.17-4. It is estimated the average incremental fiscal effect of the third unit includes an additional \$7.2 million in property tax revenues, \$1.2 million in sales/use tax revenues, and \$20,000 in business tax revenues annually. These benefits would be realized at the county and state level.

Property Values

Local property values could be affected by the construction and long-term operations

of the proposed Station. In fact, since the Station has been proposed, properties near the Station site (which are currently undeveloped for the most part and used for some cattle grazing) have been rising in value as speculators are hoping additional economic development will take place in the area near the Station. According to the County Assessor, property values in Steptoe Valley have increased at a greater rate than the rest of the county and roughly doubled from 2005 to 2006 (Bishop, 2007).

Overall, and from a county-wide perspective, the positive employment and income effects associated with the Station, and its potential for helping to improve public services, recreational amenities and other important elements affecting the quality of life in White Pine County (by providing important new tax revenues), are expected to cause positive property value effects and should outweigh any negative effects on nearby properties that may experience adverse air quality, noise, or visual effects. Therefore, the Proposed Action is expected to have an overall positive effect on property values and the additional tax revenues and community amenities the Station would make possible would benefit all county residents. Increasing land values in Steptoe Valley would also provide a favorable market for those who elect to sell their property near the proposed site.

Some individual property owners who own property near the Station site may experience negative effects. There could be some isolated and negative effects on properties where air quality, noise, or visual effects take place, or where those residing near the Station experience other changes in their quality of life.

The different types of property value effects that could be associated with the

Proposed Action are described in more detail below.

The effect that different industrial facilities have on property values has been researched in numerous economic studies. The primary technique used to evaluate these effects is the hedonic property-pricing method, which uses statistical techniques to isolate the effects of a range of distinct housing characteristics on a property's value. A summary and review of such studies has been conducted and presented in *A Survey of House Price Hedonic Studies of the Impact of Environmental Externalities* (Boyle and Kiel, 2001). Several studies included in this article specifically evaluated the effect that power plants have on property values. For example, Blomquist (1974) concluded that distance to a power plant (up to 11,500 feet, or approximately 2 miles) has a positive and statistically significant effect on property values (the price increases with distance from the plant, all else being constant). Clark and Nieves (1994) conducted a large empirical study that found that property values are lower in areas that have a greater density of "noxious" facilities, which included power plants that emit pollutants and cause adverse noise and visual impacts. Generally, the results of studies that focused on the effect that industrial land uses have on property values showed a statistically significant relationship that implies these types of facilities adversely affect property values for properties directly affected by air, noise, and/or visual impacts. However, the magnitude of these effects varies substantially and some individual property owners owning property near the proposed Station may not feel that the county-wide positive impacts outweigh the negative impacts they perceive for their property and their way of life. They may attribute values to

their property other than dollar values. Thus, increasing land values may not resolve concerns they have over changes in nearby land uses that become more industrial in nature, or if they experience new and adverse visual, air quality or noise impacts at their property. They may place a high value on their specific piece of property because of family history, the investment they made for their retirement years, or because of the peace and quiet and pristine surroundings they experienced when they originally purchased the property.

The construction of the Proposed Action power plant could positively affect local property values by creating approximately 135 to 175 permanent jobs in the local area during its operational phase, and thus increasing the long-term demand for housing in the county. While some of these jobs would be filled by local residents who already live in the county, some workers from other areas could be expected to be drawn to the region as these jobs are filled. To the extent that employees permanently move into the area, the demand for local housing would increase, tending to increase local housing prices, particularly if there is no change in supply.

The proposed Station would generate a substantial amount of new tax revenue that would be available to local government agencies to improve community infrastructure, including schools, crime control, libraries, parks and recreational opportunities, social services, and other public services. Improvements to these services would likely result in an improvement in the quality of life for local residents. This would make the county's local communities a more desirable place to live and could draw people to the region, resulting in higher property values.

Community Infrastructure and Public Services

This section addresses potential direct and operations-related effects on community infrastructure and public services, including impacts on law enforcement, emergency services and medical aid, education and schools, solid waste disposal, and public utilities (water, wastewater, and power). Potential indirect effects on community infrastructure and public services are covered in the "Other Indirect Economic Benefits" section below.

Direct effects on community infrastructure and public services would primarily be caused by the potential long-term increase in population attributed to the Station and associated with the creation of permanent employment opportunities. The estimated operations work force is expected to be 135 to 175 staff, which is estimated to result in a permanent population increase in the county of up to approximately 165 to 215 people, which is only about 2 percent of the county's existing population. As a result, adverse effects on community infrastructure and public services from the Station-related population increase are expected to be minimal during Station operations. Other aspects of the Station's operation, aside from population increases, could potentially affect community infrastructure and public services. These effects are discussed in the following text.

Law Enforcement

Although the number of sheriff patrols of the power plant site during operation would be less than those needed during the construction phase, patrols during operations would likely be needed, especially given concerns regarding utility infrastructure as terrorist targets, potential

vandalism, stealing of equipment, etc. However, public law enforcement services would be funded by project-generated tax revenues, and private security officers, fencing, a guard station, alarms and other security measures would be employed at the site by WPEA, thus likely reducing the need for assistance from the Sheriff's Department.

Fire Protection and Other Emergency Services

Operation of the proposed Station involves public safety risks that are inherent to all major power plants and industrial facilities. However, the Station would incorporate a wide range of safety features to minimize the risk of injury that would require medical attention. For example, public access to the power plant site would be restricted through the use of fencing and security gates, and the power plant would be equipped with numerous fire suppression systems and industry-recognized BMPs would be implemented to minimize fire and safety risks. In addition, by the time the power plant starts operating, any necessary increase in fire or emergency services would be funded by the new tax revenue generated by the Station.

Water and Wastewater

Operation of the proposed power plant would also generate a demand for water and wastewater treatment. Water supplies that would be used for power plant operations and potable water needs would come from the Station's proposed water supply system. No public water supplies are available in the Station project area. Industrial wastewater and storm water runoff generated by project facilities and collected after coming into contact with potential pollution sources would be discharged to an evaporation pond in

accordance with applicable federal and state regulations. Domestic wastewater would be treated at the Station site with onsite septic systems. Therefore, public water and wastewater service providers would not be affected.

Solid Waste

The different types of solid waste that would be generated during the project's operational phase are described in Section 2.2.3.1.3. An onsite solid waste disposal facility would be constructed and operated to dispose of the coal combustion byproducts and the other types of wastes described in Section 2.2.3.1.3. All other types of waste generated by the Station (for example, office wastes, oil, liquids, etc.) would be hauled to the City of Ely's offsite landfill facility, which should have sufficient capacity to handle waste that is not treated at the onsite facility. If the Ely facility does not have sufficient capacity, waste from the Station can be sent to the Elko facility as described in the subsection above regarding waste disposal during construction.

Out-of-County Economic Effects

Operation of the Proposed Action would generate notable and positive economic effects outside of White Pine County. These effects include: (1) economic benefits (jobs and income) in areas where coal is extracted and purchased for use at the power plant; (2) benefits related to the purchase of goods/services from outside the local area; (3) benefits attributed to regional rail operations; (4) benefits associated with renewable energy development in eastern Nevada counties; and (5) power reliability- and cost-related benefits in areas where White Pine Energy Station power is used. Also, long-term tax benefits to other Nevada counties would extend from the construction phase to the

operational phase if White Pine County is no longer a guaranteed tax county and instead becomes a tax revenue exporter.

Coal used to fuel the proposed power plant would come from the Powder River Basin in Wyoming. Approximately 4.5 to 6.8 million tons of coal would be needed to fuel the power plant annually (depending on the number of generating units built) at a cost of approximately \$36.5 to 54.7 million per year.

Expenditures made to purchase the coal that fuels the plant would support mining-related employment and income in the Powder River Basin area of Wyoming. An additional \$49.5 to 74.3 million would be spent annually to ship the coal from its origin to the Proposed Action power plant site. This money would support jobs and generate income for the railroad companies serving the plant, which may include Union Pacific, Burlington Northern Santa Fe, or the Nevada Northern Railroad.

Some goods and services required to operate the proposed power plant, other than coal, would be purchased locally in White Pine County. However, most operating expenses would require expenditures outside the county resulting in out-of-county economic benefits. Operational expenditures for goods and services not available in White Pine County would likely occur in surrounding counties with a relatively more diversified economy (for example, Clark County). However, it is plausible that the local economy would adapt quickly, with new businesses established to meet the needs of the Station, thereby capturing a much larger share of operational expenditures and related economic benefits that would otherwise be enjoyed by out-of-county businesses.

Economic benefits would also be realized outside White Pine County because of expanded railroad operations. By improving the regional rail network to serve the Station, other regions would be able to supply White Pine County and use the improved transportation infrastructure, thereby resulting in employment opportunities (and related income benefits) in the transportation sector, as well as potential expansion of industries utilizing rail services. These regional economic benefits would be realized mainly in surrounding counties, such as Elko County, including the cities of Elko and Wells.

Another out-of-county benefit is the possible expansion of renewable energy projects throughout eastern Nevada, including Eureka, Elko, and Lincoln counties. Such expansion would be attributed to the development of required infrastructure under the Proposed Action and connected actions, especially transmission capacity, which would help to encourage smaller, renewable energy projects that could not physically support or afford the transmission capacity on their own. This would also help support the state's goals of increasing the use and development of the technology to support renewable energy options. The State of Nevada has an aggressive renewable energy portfolio standard that requires the state's utilities to rely on renewable power sources for 25 percent of their generation over the long-term. This is indicative of the state's desire to further develop its ample biomass (including the use of pinyon-juniper as a fuel source), wind, and other renewable power sources. Such projects can increase local employment and income opportunities, and generate additional tax revenue for local government. The BLM's Ely District, NDOW and others are also planning on

thinning much of the dense, pinyon-juniper trees found in eastern Nevada to improve greater sage-grouse, elk and other wildlife habitat, reduce fire risks, and improve local economic opportunities. An important piece of the puzzle for achieving these goals is facilitating the development of biomass energy projects that can use the pinyon-juniper as a fuel source, and the enhanced transmission capacity associated with the Proposed Action and its connected actions would be needed by future biomass projects.

Finally, the electrical power produced by the Station would generate economic benefits to the region and state. The Station is expected to generate nearly 7.9 to 11.8 million MWh of power annually, which would be used to serve the State of Nevada (via the Falcon-to-Gonder and SWIP transmission systems) as well as surrounding states in the west. By providing more power to the market, power rates would potentially decrease if demand remains relatively constant. Furthermore, the proposed Station is expected to be operated as a "base load" plant (in contrast to more expensive power plants that operate less frequently, for example, just during peak power usage periods), and coal as a fuel source is less expensive than such other traditional power plant fuels as oil, natural gas, and uranium. Additional power supplies on the market from the Station combined with a low-cost fuel source and its baseload operating mode should result in lower operating costs for the utilities and businesses that use Station power, which in turn, enhances profit margins, improves the efficiency of the regional economy where the businesses are located, and has positive effects on income, jobs, and agency tax revenues. In addition, lower power rates have a positive effect on disposable incomes of residential

customers, thus allowing people to spend more money in the local economy, which stimulates economic activity.

The Proposed Action power plant would also provide important power benefits related to what are collectively referred to as "ancillary benefits." Ancillary benefits include voltage support and greater system stability for those portions of the western U.S.'s transmission system that would be connected to Station-related transmission lines. Improvements in system stability in turn result in less frequent and shorter power outages, thus helping avoid reductions in business output and related adverse income and employment effects.

Other Indirect Economic Benefits

Construction and operation of the Station would help White Pine County realize some other economic benefits that are less tangible than the other economic effects described in this section, but nevertheless, important to the local economy.

The first type of indirect benefits would be associated with planned railway improvements to the NNR. These upgrades are necessary to allow the delivery of coal to the Proposed Action power plant site and could lead to other benefits as well. In addition to improvements directly paid for by WPEA, a local redevelopment agency may be created to help fund the rehabilitation costs of the railroad. These improvements may extend beyond the segment to be used by WPEA and approximately 20 percent of the property tax revenues from the Station may be used by this redevelopment agency. This money would be invested locally for the railroad infrastructure and could attract new business to White Pine County, including the City of Ely, and provide additional rail access for a variety of materials needed for new commercial

and industrial developments in the county, or expansion of existing industrial activities or mining operations. The improved rail system may also be used to help boost rail-related tourism.

Another type of indirect benefits would be associated with putting the water needed by the Station to beneficial use locally, as opposed to exporting the water outside the county for beneficial uses elsewhere. There is great concern in the counties north of Las Vegas, primarily White Pine and Lincoln Counties, that the Southern Nevada Water Authority (SNWA) will eventually try to export more ground water from these counties to help meet the fast-growing water demands of the Las Vegas metropolitan area. While SNWA has not filed for the rights to water underlying Steptoe Valley where the Station would be located, it has filed for the rights to appropriate ground water from Spring and Snake Valleys, which are east and south of Steptoe Valley. By using the ground water of Steptoe Valley for in-county economic development purposes, the many direct and indirect employment, income, and tax revenue benefits associated with the use of local water resources can be realized locally as opposed to being exported out of the county.

As described in the potential property value impacts section above, another type of indirect benefit from enhanced tax revenues are the many positive community and social benefits that occur when community infrastructure and public services improve once the additional revenue is available.

4.17.1.2 Mitigation

BMPs (see Appendix C, *Best Management Practices*) and the other mitigation measures and commitments described in this section and summarized in

Section 4.20.1, *Mitigation Measures Committed to by WPEA*, would minimize adverse socioeconomic effects. These BMPs and other mitigation measures and commitments were designed to address all of the major socioeconomic issues associated with the Proposed Action. In addition, WPEA will work closely with White Pine County to monitor socioeconomic impacts during the Station's construction and operation phases. If the socioeconomic effects are greater than currently expected and problematic, appropriate mitigation beyond that committed to by WPEA will be developed and implemented by the county and WPEA as warranted.

4.17.2 Alternative 1

4.17.2.1 Impacts

Development of the White Pine Energy Station under Alternative 1 would entail approximately the same level of capital and operating expenditures, labor force requirements, and power generation as the Proposed Action. Because the proposed transmission line route would be shorter under Alternative 1, there would be slightly lower construction-related expenditures compared to the Proposed Action. However, this difference is expected to have a negligible effect on socioeconomic conditions. Therefore, the values reported in the summary tables (Tables 4.17-1, 4.17-2, 4.17-3, and 4.17-4) also apply to Alternative 1. The primary difference between Alternative 1 and the Proposed Action is the physical location of the Station. Under Alternative 1, the Station would be located approximately 10 miles south relative to the Proposed Action, closer to the communities of McGill and Ely. This location could lead to minor benefits related to response times for law enforcement and emergency

services. With that exception, Alternative 1 is expected to result in the same type and magnitude of socioeconomic impacts as described above under the Proposed Action.

4.17.2.2 Mitigation

Alternative 1 is expected to result in the same types (and nearly identical levels) of impacts as described for the Proposed Action. The BMPs and other measures and commitments described in Section 4.17.1.2 and provided in Appendix C, *Best Management Practices*, would apply. As described in Section 4.17.1.2, WPEA and White Pine County would also monitor socioeconomic effects during the Station's construction and operation and mitigate such effects if warranted. Therefore, mitigation is not required at this time.

4.17.3 Connected Actions

4.17.3.1 SWIP

4.17.3.1.1 Construction Impacts

The analysis of SWIP construction impacts considered the size and staging of the construction effort, the nearness and size of communities along the transmission line route, and available accommodations (BLM, 1993). A minimum of 105 workers would begin construction of the SWIP at one end of the route, with another group of workers possibly beginning construction at the opposite end of the route. Fenced construction yards would be spaced every 20 to 30 miles. Construction would occur over 3 years. About 60 percent of the workers would be unskilled laborers hired locally and the remainder would be skilled laborers from other areas. About half the workers would require temporary accommodations near the construction site. Temporary accommodations were

anticipated to be adequate to house workers, except in Elko where there was a housing shortage (at the time of analysis in the early 1990s) because of mining activity. Local communities would benefit from purchases by construction workers, but benefits would be minimal because the work force would be small and moving from one worksite to the next (BLM, 1993).

4.17.3.1.2 Social and Economic Impacts

The effects of transmission lines on social structures and economic activities are generally relatively small (BLM, 1993). Construction effects are typically minimal because of the small, short-term work force and their mobile nature. Potential adverse effects may include conflicts with tourist activities, such as space for lodging (motels, parks, trailers, and campgrounds) and increased traffic from construction workers and equipment. Mitigation for such conflicts includes scheduling construction to avoid tourist areas during holidays, establishing worker camps, and busing workers. Principal areas of tourist-related concern in the vicinity of the SWIP project in Nevada are Humboldt National Forest and Great Basin National Park. Additional social and economic concerns in Nevada identified in the evaluation of SWIP alternatives included potential disruptions to residences, agricultural properties, the Moapa Indian Reservation, gravel pits or quarries, a school, and two airstrip clear zones. New land rights would be required for the transmission line and transmission line access roads. Use of federal lands would require ROW grants, while use of private lands would be via easement or purchase (BLM, 1993).

4.17.3.1.3 Fiscal Impacts

Annual property tax revenues during the first year of SWIP operation were

estimated for the States of Idaho and Nevada and for each of the counties the transmission line would pass through (BLM, 1993). Estimated revenue (in 1992 dollars) during the first year of SWIP operation would be over \$1 million for Idaho and over \$2.2 million for Nevada.

4.17.3.2 NNR

4.17.3.2.1 Demographics and Population

Reinstatement of operations on the NNR is expected to indirectly benefit the demographics and population of the City of Ely, White Pine County, and Elko County. Economic diversification and increased employment opportunities associated with NNR operations could lead to long-term, sustained growth in the region (David Evans and Associates, Inc., 2002).

4.17.3.2.2 Employment and Income

Restoration and operation of the NNR rail freight service is expected to result in direct and indirect short-term and long-term employment opportunities and income for skilled and unskilled laborers. CRS and MSC (2005) anticipate that NNR rehabilitation between mileposts 18.5 and 115 would take one or two construction seasons, occurring primarily during the dry months (May through November). Construction crew size usually ranges from 6 to 12 men. Three or four crews of this size would be able to complete the work in one construction season while one or two crews of this size may require two construction seasons (CRS and MSC, 2005). Expanding the excursion tourist train operation would result in increased tourism activities and generate additional income. These effects would economically benefit the City of Ely, White Pine County, and Elko County (David Evans and Associates, Inc., 2002).

4.17.3.2.3 Community Infrastructure

No NNR-related impacts on community infrastructure are anticipated.

Infrastructure-related activities would be limited to reconstruction and improvement of NNR road and highway crossings and replacement or possibly addition of NNR culverts to facilitate storm drainage (David Evans and Associates, Inc., 2002; CRS and MSC, 2005).

4.17.3.2.4 Public Services

Reinstatement of NNR operations would potentially cause a slight increase in the demand for fire protection, law enforcement, and emergency services in the area because of more people in the vicinity. No major demands for medical services are anticipated. No direct impact on school services is anticipated because residential growth is not expected to generate a substantial increase in the student population (David Evans and Associates, Inc., 2002).

4.17.4 No Action Alternative

No Station-related socioeconomic effects would occur under the No Action Alternative. It is assumed that the NNR and SWIP connected actions would be implemented and effects described previously would occur.

***WHITE PINE COUNTY
LAND USE PLAN***

ATTACHMENT 7

***Comparison of White Pine County Land
Use Plan Recommendations***

White Pine County
Planning Recommendations

	1970 Master Plan	1998 Land Use Plan	Other
McGill Highway	5+ acres	Industrial, airport and Industrial Park, Commercial, E. and W. of 93, N. of airport Residential, 2.5 min. low density E and W of 93, then open space	McGill Highway Area Master Plan, expansion, airport and industrial park, residential commercial adjacent to golf course, retain rural character, RA-5, O-5, buffers for higher density uses
Cross Timbers/Smith Valley	Open Range	Open Range	Steptoe, Municipal, Industrial Commercial, (Water Res. Plan) Did not address Smith Valley
Ward, South of Ely	Proposed Bypass will be the Urban Boundary, Open Range	Open Space, Federal Reserve	Water Res. Plan, Steptoe V. Municipal, Commercial, Industrial, Ski Resort
Lund/Preston/White River	No recommendations, review of status quo	Maintain, enhance ag character modest growth, influx of urban population, Reroute 318 W. of Lund, MH area N. of Lund, Lund, core, medium density res. commercial, low density, Preston low, medium density housing added schools, airport, industrial park, recreation, golf course, safety complex, MH N. of Preston, White River Open Space	Water Res. Plan, White River Municipal, Industrial, Comm. Geothermal, Oil, Beverage Bottling
County Wide, North of McGill, Butte Valley	Ruth, High Density Res. On Main Street, Commercial, and Industrial in center of town,	Baker, High density residential town center, commercial, limited to SR 487, 488, in town, low	Water Res. Plan: N. Steptoe, Municipal, Industrial, Comm. Resort, Oil, Power Plan, Geo-

White Pine County
Planning Recommendations

medium to low density housing throughout town, recommends parkway corridor into town
McGill, Baker, report of status quo, no recommendations
County-wide, open range, federal land

density res. Outskirts, town site to Park, view shed, green belt, parkway, recreation, entry way
Border area near Baker, commercial for casino develop.
Ruth, N.E. corner, Industrial Center, commercial, medium density res. Parkway, 485 to Ruth, Cherry Creek, Pleasant Valley, open range 0-5 in spite of higher density uses, Cave Lake Duck Creek, recreational dev.
Overlay, recreational homes dev.
McGill North, ranch estates overlay, encourage ranchettes

Thermal, Spring and Snake Valleys, Municipal, Industrial Commercial, Resort, Geothermal Beverage Bottling, Water Export.
Butte Valley, Prison, Power Plant, Oil, Cave Valley, Water Export.

White Pine County
Planning Recommendations

	1970 Master Plan	1998 Land Use Plan	Other Plans
Open Space	High Mountain/Open Range, natural state grazing, forest industries, mining, recreation	Retain and expand mining, grazing adhere to Public Land Users Plan n policies encourage water intesive uses in basins with unappropriated ground water, industrial sites, ranchettes, recreation	Public Land Users, Water Res. retain and expand mining and ranching, define sensitive areas maximize in-county ground water use
Irrigated Agriculture	rural ranchland, valley floor between Ely and McGill, 5 acre parcels minimum	retain and expand irrigated ag. Direct development to non-ag lands	preserve agricultural land, retain and expand irrigated agriculture
Recreation	expand golf course, new cemetary .5 miles south of proposed bypass, rest area east of US 93, S. of airport, overnight camping S. and NE entrances of Ely, Keystone Reservoir, Georgetown Ranch rec. proposal	encourage full time, county wide recreation programs, encourage ground water use for recreation	encourage/expand county wide recreation, co. wide recreation plan, ski resort feasibility study
Commercial	Highway Commercial N. to Maverick St., 93/6/50 S. Urban Boundary, W of 93, S. entrance of McGill	discourage linear sprawl	
Industrial	Kennecott facilities, McGill, Ruth, NNRy East Ely, heavy industrial, 1.5 mi. S/E airport, N. to drive in theater, 93	Industrial Park, US 93 Identify industrial sites in basins with unappropriated ground water	Power generation, water bottling plants, outlying valleys

White Pine County
 Planning Recommendations

Residential	<p>Mobile Homes, adjacent to highway comm. E. Ely, W. entrance, N. of Aultman, E Murry Canyon, N. of Bypass, Lane City</p> <p>Urban Fringe, 1, 2 acre parcels, S. Bypass, McGill Highway</p>	<p>reduce Mobile Home overlay encourage all types of housing</p> <p>Discourage 2.5 + acre sub-Div. in town, estalbish urban growth area boundaries, discourage leap frog dev. Encourage cluster development, first priority urban infill,</p>	<p>maximum use of existing infra-structure</p>
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