

# CHAPTER 1

# EXECUTIVE SUMMARY

## 1.0 Introduction

The purpose of this Master Plan is to provide goals and objectives for the development of Storey County. Contained in the Executive Summary is an outline of those goals and objectives as well as a definition of the study area, its history, and the direction of land use development.

### 1.1 The Study Area

Storey County is located in northwestern Nevada approximately 40 miles from the California stateline. The western boundary follows township, range and section lines that roughly conform to the western crest of the Virginia Range. (Table 1.1) The northern boundary is defined as the line equidistant between the north and south banks of the Truckee River, which it follows for about 25 miles. The southeast boundary line connecting the north and west boundaries, trends along the base of the southeasterly edge of the Flowery Range.

The county is bordered on the west and the north by Washoe County and on the east and south by Lyon County. With 264 square miles of total land area, Storey County accounts for less than one-quarter of one percent of the state's total land area. This makes Storey County the second smallest county in Nevada. In 1990 with a population of 2,526, the county had a population density of 9.6 people per square mile, compared to the state's population density of 11.7 people per square mile. The U.S. Bureau of the Census classifies the county as "rural".

The major geophysical feature of the county is its mountainous topography. The county seat is Virginia City which is located on the steep eastern slope of Mt. Davidson. The majority of the land developed over the past 40 years has been on the perimeter of the county, primarily in the level areas adjacent to Lyon County and along the riparian zone of Truckee River. Although there is a considerable amount of developable land in the interior of the county, the mountainous terrain and lack of adequate road networks have combined to restrict development. Therefore the development trend of the past 40 years is encouraged to continue.

Storey County is defined by four populations areas:

**Virginia City/Gold Hill:** This area is located in the mountainous southwest section of the county. The development of this area can be directly attributed to the discovery of the Comstock Lode and is a major tourist attraction in the State of Nevada.

**Virginia Highlands:** Located 5 miles north of Virginia City, this is a mountainous residential subdivision of one, ten, and forty acre parcels with primarily upscale housing. There is currently no commercial development in this area.

**Mark Twain:** Located six miles due east of Virginia City, this is a residential subdivision consisting primarily of mobil homes. The terrain is relatively level.

**The River District:** This district stretches about 25 miles along the south bank of the Truckee River and makes up the northern boundary of the county. It has a mixed land use of residential, agricultural, recreational, industrial and commercial development.

All of these districts are within a mile or two of the county boundary, none are in the interior. With few exceptions, all of the population of the County is located within these four districts.

Unlike most of Nevada, 87% of which is managed by federal agencies, over 90% of Storey County is privately owned. Without the active support of a federal land management agency or sufficient revenues necessary to develop a County Planning Department, land management efforts in the interior have been minimal and the resources available are largely unknown.

## **1.2 Land Use Master Plan Development**

This Master Plan will serve as an update to the Storey County Land Use Plan written by the Carson River Basin Council of Governments in 1973. Many of the original elements have been incorporated into this Master Plan. Land use zoning districts have been defined by county ordinance and incorporated in the county code (Title 17). However, planning decisions have been hampered by unclear zoning district maps. The Board of County Commissioners is prepared to geographically redefine these zoning districts with the assistance of this document.

A further goal of this Master Plan is derived essentially from a desire to preserve and improve the present quality of life in Storey County, to resist changes detrimental to the historic integrity of the Virginia City area, to define geographic growth areas, and to direct growth in all parts of the county. Since 90% of county land is in private hands, the potential threat of change is perceived to come from large scale land subdivisions. This type of development could destroy historic land use patterns, the unique social and architectural environment of the Virginia City/Gold Hill area, and other values which residents want to protect.

Storey County has experienced phenomenal growth since 1973 and reflects modern development trends and problems occurring throughout the state.

An important consideration in this Master Plan should be future land use planning in the Virginia City/Gold Hill area. In an effort to retain the historic flavor of this area, county officials should adopt distinct development standards and zoning requirements to allow for land use development that will enhance this effort. These standards should be designed so they do not conflict with requirements of public and private development loan agencies.

A master plan is not a zoning ordinance. It carries no penalties under the law, rather it is a guide to

development. It sets forth a view of the future, a direction for development growth and a guide for community action.

However, a zoning ordinance is a law. It creates districts and land use regulations. Land owners must abide by zoning ordinances. Violations of the zoning ordinance are the same as violations of any law and are punishable by fine or even imprisonment. The master plan forms the basis for the designation of the various zoning districts.

The relationship between a master plan and a zoning ordinance should be considered. Since the master plan is a statement of direction, the zoning ordinance should only be amended in conformity with the master plan. In fact, once a master plan is officially adopted, non-conformity with the master plan is ample reason for rejecting an amendment to the zoning ordinance. In short, the zoning ordinance expresses more closely what is. The master plan expresses what should be.

### **1.3 History of Storey County**

The unprecedented wealth of the Comstock Lode virtually created Virginia City and Storey County. The following account gives a historical outline of Storey County:

One of the most famous mining camps in the world, Virginia City was established in 1859 after the discovery of the Comstock Lode. The mining camp was named in honor of James "Old Virginny" Finney by the early prospectors because of his discovery and knowledge of placers below what would later be the Ophir Mine and his location of the first quartz mining claim on the Comstock.

Virginia City, county seat of Storey County, is on the east side of the Virginia Range just below Mountain Davidson at an elevation of 6,220 feet. Today Virginia City is a year-round international tourist attraction with a population of about 700.

In the fall of 1859, Virginia City had an initial population of between 200 to 300. After word of the Comstock discovery in early 1860, perhaps 10,000 rushed to the Comstock, many from the California goldfields. About 4,000 remained in the area: 2,345 in Virginia City (868 dwellings), the rest in Gold Hill and vicinity. The political ramifications resulted in the creation of the Nevada Territory, carved from Utah Territory, by President Buchanan on March 2, 1861.

The population remained about 4,000 through 1862. Samuel Clemens arrived in late 1862, worked as a reporter for the Territorial Enterprise for 21 months, and left as Mark Twain. During this period construction of the old Geiger Grade Toll Road was started and in partial use by the end of the year. This road linked Virginia City with emigrant trails and supply routes that crossed the Truckee River at the site that would become Reno in 1868. Organization of the San Francisco Stock Exchange Board, the first mining exchange in the United States, also occurred in 1862.

By 1863, mining successes and promotion brought the Virginia City and vicinity population to some 15,000. Homes, business buildings and office blocks were built, gas and sewer pipes were laid in

the principal main streets. Daily stages brought in all the luxuries of the Bay Area. The town was made up of two classes of people, each of which kept its own place and went its way without interference from the other. Seventy-five stamp-amalgamation mills were operating in the region: 19 in Virginia City and in Six and Seven Mile canyons below, 35 in Gold Canyon from Gold Hill to Dayton, 12 on the Carson River, and nine in Washoe Valley.

The Comstock brought enough people, money and politicians to the area that on October 31, 1864, Nevada was admitted as the 36th State. Economic slow-down saw 10,000 leave the area, many for other mining camps, leaving an area population of about 4,000 in 1865. Virginia City population increased to about 11,000 by 1868. The Yellow Jacket Mine fire occurred in 1869, which also saw the construction of the Virginia and Truckee Railroad between Virginia City and Carson City and Reno was completed on August 24, 1872, linking up with the existing Central Pacific Railroad. This pretty much ended the wagon freight business over the Sierra and to Virginia City.

The increased mining operations and population between 1869 and 1870 expended the available local water from natural springs and mine tunnels to the west of town. In 1870, plans were made to bring water to the Comstock from Marlette Lake high in the Sierra near Lake Tahoe, down the east slope of the Sierra, and across Washoe Valley using an inverted siphon system. This was completed in August 1873 and, now modernized, is the source of Virginia City water today.

Between 1873 and 1874, the population of the area exploded to 25,000 in Virginia City and 5,000 in Gold Hill as the result of the discovery of the Bonanza ore body in the Con. Virginia Mine and extending into the California Mine. On October 26, 1875, just after 6 a.m., a fire, probably started from a wood stove, destroyed most of Virginia City, burning an area of about one square mile. During 1876 Virginia City was rebuilding and supported a regional population of 23,000. The Irish predominated in Virginia City and the Cornish in Gold Hill. The third line vertical shafts were being sunk east of town (evidence by the large mine dumps) to intersect the Comstock Lode at depths of 2,500 to 4,500 feet. Of the 135 Comstock mines quoted in the San Francisco Stock Exchanges in 1876, only three, the Con. Virginia, the California, and the Belcher, were paying dividends. The others were levying assessments.

The decline of Virginia City began in 1877 as hard times hit the Comstock and discoveries were made in other mining districts in Nevada and California. In 1880 there were about 11,000 people and 1,200 buildings in Virginia City of which 92 were made of brick. Most of the mines closed after the panic of 1893 and by 1900, the population of Virginia City had dwindled to 2,700, and continued downward to about 500 in 1930. In 1980, the census showed 1,503 living in the Virginia City-Gold Hill area.

As an epilogue it can probably be said that the Comstock produced 29 millionaires in an environment where more than 1,000 mining companies were formed, of which only 19 ever paid dividends. More money was lost in the essentially unregulated stock market through assessments and stock manipulations than was ever produced in gold and silver.

## **1.4 Goals and Objectives**

The following list of planning goals and objectives is recommended for consideration by the Storey County Planning Commission and the residents of the county. In developing and implementing a master plan, planning officials need direction concerning the type of community which they and the residents agree should develop over a period of years. The goals and objectives perform that function by becoming official policy statements. Future planning decisions should reflect these policy statements.

### **Chapter 2 - Population**

**Goal 1:** Anticipate populations changes and the level of county provided services needed to accommodate the change.

**Objective 1.1:** Request population and demographic data be presented the Board of County Commissioners annually from the office of the Nevada State Demographer and review same for impacts to county finances and county provided services.

### **Chapter 3 - Economy**

**Goal 1:** Enhance diversification of economic opportunities within the county.

**Objective 1.1:** Develop and adopt standards for industrial park development before a large project is proposed.

**Objective 1.2:** Promote commercial business activity in Virginia City which will benefit local residents as distinct from tourists and visitors.

**Objective 1.3:** Expand programs and improve communications and interaction with existing economic development and diversification agencies.

**Recommendation:** Contact the Economic Development Authority of Western Nevada regarding membership and the coordinated development of prime industrial land in the River District.

### **Chapter 4 - Housing**

**Goal 1:** Encourage that adequate housing is provided all residents of the county through zoning and planning.

**Objective 1.1:** Encourage development of affordable housing.

### **Chapter 5 - Conservation and Natural Resources**

**Goal 1:** Ensure that present and future county residents have an adequate water supply meeting safe drinking standards.

**Objective 1.1:** Require all proposed development furnish proof of the availability of owned rights to adequate water meeting safe drinking standards before necessary land use or building permit applications are approved.

**Objective 1.2:** Actively participate on regional governmental water agencies to ensure the water rights of all owners and residents are protected. In addition, actively protest the granting of water rights or land development proposals which will have a negative impact on the quantity and/or quality of Storey County resident's water supply.

**Objective 1.3:** Investigate the feasibility of using recycled, treated effluent water for agrarian and recreational uses. Establish the county's priority of right to the use of this water.

**Objective 1.4:** Working with the Nevada division of Water Planning, create and maintain within the Public Works Department a data base of water resources within the county.

**Objective 1.5:** Request the Nevada State Engineer to undertake a hydrologic study of water resources in the undeveloped northerly and easterly portion of the county.

**Objective 1.6:** The condition of the Marlette Water System pipe line be periodically replaced as necessary.

**Goal 2:** Protect the quality of present and future water resources.

**Objective 2.1:** Refuse special use permitting of industries which cannot guarantee the quality of effluent produced by their activity. Require users of toxic or hazardous materials to provide monitoring capabilities to assure protection from surface and groundwater contamination.

**Goal 3:** Minimize risks to public welfare and private property resulting from seismic activity.

**Objective 3.1:** Review the seismic activity map when considering development permits and require sufficient engineering structural safeguards when building construction is proposed on or near active seismic areas.

**Goal 4:** Regulate use of open range and watershed areas to minimize fire danger and prevent degradation.

**Objective 4.1:** Assist property owners and interested groups in controlling grazing and public use of critical watershed and riparian areas.

**Objective 4.2:** Cooperate with ranchers, property owners and interested groups in the county in maintaining wild horses and other grazing animals, but in numbers which will not exceed capacity of the land.

## **Chapter 6 - Public Services**

**Goal 1:** Provide county residents with more efficient means of communicating their needs to county administrators.

**Objective 1.1:** Provide efficient transportation routes between all communities in the county.

**Objective 1.2:** Form local advisory boards as necessary within each community to advise county commissioners regarding problems of concern to their community. Advisory boards can be requested for their input regarding controversial land use permits affecting their communities.

**Goal 2:** Provide adequate park and recreation facilities for all residents of the county.

**Objective 2.1:** Undertake a study of the adequacy of existing facilities and prepare a plan for developing additional facilities as anticipated population increases require.

**Objective 2.2:** Initiate a study of the feasibility of a regional or county park along portions of the Truckee River riparian zone including an examination of the availability of federal, state and private development grants.

**Goal 3:** Anticipate future public building new construction, renovation and repair requirements resulting from projected population growth.

**Objective 3.1:** Prepare a study of future requirements of each county department based upon expansion requirements.

**Goal 4:** Anticipate costs of expansion of county provided public services and/or utilities.

**Objective 4.1:** Prepare a study of county absorbed costs of future development projects and consider the implementation of a capital improvement development fee schedule.

**Objective 4.2:** Establish and adopt regulatory standards for present and future private operations of water supply and sewage disposal systems to ensure that the county will not be required to maintain such systems due to poor management or operation or due to insufficient capital investment on the part of the private developer.

**Goal 5:** Protect the public safety and welfare of the residents of newly developing areas.

**Objective 5.1:** Require the preparation and submittal of an acceptable emergency response plan for all proposed development projects outside the response perimeter of existing emergency response units. This plan should be approved before required land use permits are issued by the appropriate emergency response management personnel.

**Goal 6:** Support efforts to provide Storey County students with superior education opportunities.

**Objective 6.1:** Maintain liaison with Storey County School district in regards to population growth and school facilities expansion.

**Objection 6.2:** Review the need for additional education facilities when considering land use permit approvals for residential development.

## **Chapter 7 - Transportation**

**Goal 1:** Provide efficient transportation routes between all communities in the county.

**Objective 1.1:** Request the Nevada Department of Transportation to undertake a feasibility study for paving Six Mile Canyon Road connecting Virginia City and Mark Twain.

**Objective 1.2:** Request the Nevada Department of Transportation to undertake a feasibility study for the construction of a two-lane rural, paved or unpaved, road connecting State Route 341 with Lockwood.

**Objective 1.3:** Undertake a complete survey of all existing public and private roads to prioritize funding for new construction, upgrading existing roads, and repair of deteriorating roads. Additionally, this survey will give planners some indication of future needs for dedicated roads on private lands.

**Objective 1.4:** Actively promote the upgrading of state roads within the county before the Nevada Department of Transportation.

**Goal 2:** Enhance transportation availability to the Reno-Sparks metropolitan area.

**Objective 2.1:** Request the Washoe County Regional Transportation Public Service Commission to study the feasibility of extending full or partial bus service to Virginia City, Virginia Highlands and the River District.

**Goal 3:** To see the completion of the Virginia & Truckee Railroad from Virginia City to Carson City.

**Objective 3.1:** To participate and support the Tri-County Railroad Commission.

**Goal 4:** Anticipate future needs for a small airport or helipad to serve Virginia City and the Virginia Highlands area.

**Objective 4.1:** Identify area.

## **Chapter 8 - Cultural Resources**

**Goal 1:** Protection of the historic resources.

**Objective 1.1:** Maintain and enhance the existing policy of consultation between the Storey County Building Department and the Comstock Historic District Commission regarding CHDC prior approval of exterior design of structures before county permitting is approved.

**Objective 1.2:** Enforcement of ordinances and statutes that facilitate protection of resources.

**Objective 1.3:** Public education on the importance of the protection of historic resources.

**Goal 2:** Long term planning of the direction of historic preservation within the district.

**Objective 2.1:** Grants planning for historic preservation.

**Objective 2.2:** Dialogue, planning and project development between tourism promotion and historic preservation entities.

**Objective 2.3:** Maintain and enhance consultation between the Storey County Planning Commission and the Comstock Historic District Commission.

**Goal 3:** Protect the petroglyphs from vandalism.

**Objective 3.1:** Review ownership of the site and request state or federal assistance in protecting this resource.

## **Chapter 9 - Land Uses**

### **County Wide**

**Goal 1:** Maintain a healthy environment for all residents of the county.

**Objective 1.1:** Ensure that land use permit decisions are compatible with the zoning map, master plan, and previous planning decisions.

**Goal 2:** Minimize conflicts between mobile/manufactured and site built housing units.

**Objective 2.1:** Determine the impact on county revenues and services of present and increased mobile home residential development.

**Objective 2.2:** Creation of mobile home overlay zoning districts with distinct tax rates to ensure that property owners pay their fair share of the property tax burden.

**Goal 3:** Provide for the orderly development of the largest undeveloped area in the county - north and east of Virginia City and the south of the Truckee River.

**Objective 3.1:** Working with regional economic development authorities, private land owners and state government agencies, initiate a study of the resources of this area and its potential for residential, industrial, recreational or other types of development. Such a study would lead to orderly and desirable development, enhance the natural amenities of the area and increase county tax revenues.

**Goal 4:** Preserve existing agricultural areas.

**Objective 4.1:** Through zoning regulations direct non-agricultural development to non-agricultural areas.

**Goal 5:** Support the development of the county's significant mineral resources while ensuring that negative impacts to the tourism based economy of the Comstock Lode area are minimized.

**Objective 5.1:** Adopt standards or policy statements concerning mineral development on or near the Comstock which are distinct from development standards in outlying areas.

**Objective 5.2:** Refrain from duplicating permit applications requirements and fees which have been established by state and federal agencies.

**Goal 6:** Enhance private and public property values by redefining property boundaries in areas of conflict.

**Objective 6.1:** There are significant discrepancies and conflicts in property boundary definitions and, consequently property rights on deeded lands in Storey County, particularly in the Comstock Lode area. Generally these problems have resulted from faulty land surveys undertaken during the 19th century mining days and result in a significant reluctance and outright refusal of lending institutions to loan funds for property improvement. Therefore, starting with the Planning Commission the county should undertake appropriate actions necessary to initiate a federal resurvey of section, township and range baselines and a redefinition of the boundaries of Land Patents issued by the Bureau of Land Management and its predecessor, the General Land Office.

### **Virginia City/Gold Hill**

**Goal 1:** Reduce land use conflicts between mining operations and other private and public land users.

**Objective 1.1:** Actively advise new residents of the importance of mining to the economy of the county and the proximity of patented and possessory mining property when they apply for Building and/or Special Use Permits.

**Objective 1.2:** Include a "visitor/tourism" element into Special Use Permit requirements for mining operations within the Comstock Historic District. Such an element could include informational signs explaining the history of the property being worked.

**Goal 2:** Preserve the historic heritage of the Comstock Lode are the enjoyment and education of present and future residents and visitors and the economic opportunities it affords.

**Objective 2.1:** Inaugurate programs to ensure that no more historically and economically important buildings are lost through neglect (See Cultural Resources, Objective 1.1)

**Objective 2.2:** Adopt the Uniform Code of Historic Building Preservation to allow flexibility in plans for the rehabilitation of buildings contributing to the historical significance of the area.

**Objective 2.3:** Develop a sub-area land use plan for the Comstock Lode area which recognizes and

enhances its unique attraction to tourists and forms the economic base of the area.

**Recommendation:** A portion of development and land use permit fees be placed in a separate fund for the development of an updated land use plan.

**Goal 3:** Ensure that an adequate drinking water supply is available for anticipated growth in the Comstock region.

**Objective 3.1:** Maintain the primacy of the Virginia City/Gold Hill water allotment allocated in the Franktown Water Decree.

**Objective 3.2:** Enhance local water conservation awareness and prioritize needed repairs on the antiquated water delivery system.

**Objective 3.3:** Redefine by County Ordinance the geographic boundaries of the townsite of Gold Hill as originally written.

### **Virginia Highlands**

**Goal 1:** Ensure efficient and safe transportation routes for community residents.

**Objective 1.1:** Require that future road and drainage design meet specific standards for rural residential development.

**Goal 2:** Minimize county financial jeopardy related to the issuance of building permits on properties without adequate water resources.

**Objective 2.1:** Require permit seekers to provide the county with documentation showing that their well water meets safe drinking standards before permit is issued.

### **Mark Twain**

**Goal 1:** To improve road surfaces through paving and increased drainage engineering.

**Objective 1.1:** Complete road surveys by County Road Department to determine the extent of road improvements needed. This schedule is presented annually to the governing body for prioritizing roads via the Regional Transportation Commission.

**Goal 2:** To improve roads within the residential area.

**Objective 2.1:** Through the Regional Transportation Commission, an expanded road improvement program should hasten completion of this goal and objective.

**Goal 3:** The development of a community park and trails for walking and bicycling.

**Objective 3.1:** A park area should be added in the community design as an integral part thereof. The development of parks and trails should be encouraged.

**Goal 4:** Retain existing water resources which exist for the benefit of Mark Twain.

**Objective 4.1:** Request legislation, both at county and state level to allow restriction or to prevent water or water rights exportation to areas outside Mark Twain.

**Objective 4.2:** Request Nevada State Engineer to commence hydraulic study of water basin in Mark Twain to determine quantity and quality of aquifers to assure aquifers are not being depleted beyond their recharging capabilities.

**Goal 5:** To protect and enhance water quality throughout Mark Twain.

**Objective 5.1:** Require users of toxic and hazardous materials to provide monitoring capabilities to assure protection from groundwater contamination.

**Goal 6:** Minimize possibility of flooding and resultant damage.

**Objective 6.1:** In areas where this condition is a possibility, consideration must be given to such things as retention ponds and properly engineered drainage courses in accordance with good engineering practices.

**Objective 6.2:** Restrict development in areas where flood plain conditions exist.

**Goal 7:** Require emergency response study on all proposed projects for evaluation prior to approval.

**Objective 7.1:** To recognize the necessity for reasonable response by fire, law enforcement, ambulance and other emergency services.

### **River District**

**Goal 1:** Increase a sense of community in the widely and thinly dispersed developing areas.

**Objective 1.1:** Working with local land owners and developers, create and consolidate distinct village commercial areas separate from residential and industrial areas through zoning and innovative architectural and landscape standards with the Truckee River as the major design element.

**Objective 1.2:** Since this area has more potential developable land, seek funding for the preparation of a detailed sub-area plan for the entire south side of the Truckee River stretching the 30 miles from Washoe county to Fernley.

**Goal 2:** Eliminate congestion resulting from truck traffic on Canyon Way at Rainbow Bend.

**Objective 2.1:** Construct an alternate access to the dump area.

**Goal 3:** Retain existing water resources for the River District.

**Objective 3.1:** Require new development to obtain water rights before land use permits are approved.

**Objective 3.2:** With local residents and development firms, investigate the development of a unified water and sewer district for the River District.

**Goal 4:** Coordinate land uses on the south side (Storey County) of the Truckee River with developments on the north side (Washoe County) of the river and vice versa.

**Objective 4.1:** Maintain liaison with the Washoe County Planning Commission.

**Objective 4.2:** Send the WCPC notification of pending planning decisions regarding developments on the south side of the river and request the SCPC be added to their mailing list regarding planning actions.

**Objective 4.3:** If and when the WCPC approves the proposed race track at the I-80 Patrick interchange, rezone adjacent areas of Storey County as appropriate.

**Goal 5:** Design zoning districts to allow for a mix in land use development.

**Objective 5.1:** Consider zoning the Tracy-Clark and area for industrial use.

**Objective 5.2:** Set aside a site for a small retail commercial area at Lockwood.

**Objective 5.3:** Define and designate the area including and surrounding the Aerojet facility as "High Risk Industrial Zone" with appropriate buffer zones.

### **American Flat**

**Goal 1:** Minimize the potential for uncontrolled negative land use of this relatively undeveloped area.

**Objective 1.1:** Redefine the boundaries of Gold Hill to once again include American Flat. (See Virginia City/Gold Hill Objective 3.3)

## **CHAPTER 2:                    POPULATION**

### **2.0 Introduction**

This chapter is intended to provide basic demographic information necessary for future land use policy decisions in Storey County.

### **2.1 Population Trends**

U.S. Bureau of the Census data illustrate the volatile changes in population growth experienced by Storey County during this century (Table 2.1). During the decades of the 1920's and the 1940's the county lost approximately one-half of its population, so that by 1960 the population had decreased to 568 people. However, since 1960 the county has shown strong growth with the population increasing to 2,560 by 1990.

Storey County experienced a 78% increase during the 1980's and is expected to maintain the same growth rate during the 1990's (Tables 2.2 and 2.3). However due to the low population base, any changes in business related activity effecting Storey County would significantly impact population figures.

### **2.2 Population Demographics**

For the past twenty years in-migration has been the major population growth factor. Given the county's proximity to the growing Reno/Sparks and Carson City areas this trend is expected to continue. However, due to land development constraints, such as water quality and availability, the county is not expected to exhibit major urban population growth. The U.S. Bureau of Census classification of Storey County as rural can be expected to continue.

#### **Age and Ethnic Distribution**

Storey County has a slightly greater proportion of males to females and is predominately White (Table 2.4). 1990 estimates show that 23% of the population was under the age of 20, 65% was between the ages of 20 and 64, and 11% was 65 or older. As is occurring nationally, a general aging of the population is predicted through 1995 (Table 2.5).

## **2.3 Geographic Distribution**

Previous estimates of the geographic distribution of Storey County's population was based on factors such as: utility hookups, school enrollment, registered voters, etc. In 1990, the U.S. Bureau of the Census counted 2,526 individuals and 1,085 housing units in the county. Breakdown of distribution is as follows:

**Virginia City/Gold Hill** - 899 people, which represents over 35% of Storey County's total population, reside in this area.

**River District** - With 700 residents mostly located in or around Lockwood, this district is the second most populated area of the county. With a large amount of developable land and its proximity to the growing Reno/Sparks metropolitan area, the River District is expected to be the fastest growing section of the county and will probably have a greater population than the Virginia City/Gold Hill area by the end of the century.

**Virginia Highlands** - This subdivided residential area is also increasing in population and is expected to continue to grow throughout the decade. With a 1990 population of 492 residents, this area had almost 20% of the county's population.

**Mark Twain** - This subdivided residential area had a population of 435 in 1990. The population is expected to increase considerably during the next decade due to the fact that 55% of the subdivided lots are vacant.

## **CHAPTER 3**

## **ECONOMY**

### **3.0 Introduction**

Historically, the economy of Storey County has been directly and indirectly linked to mining. In fact, without the unprecedented richness of the gold and silver contained in the Comstock Lode and the ability of early miners to develop them, there is no reason to account for the existence of the present towns of Virginia City and Gold Hill. During the initial mining period, other economic activities within the County, such as agriculture, construction, finance and transportation were dependent upon the market provided by mining in the area.

The perceived stability of the mining industry, a large metropolitan population, and high transportation costs to other contemporary industrial centers resulted in the development and diversification of the Comstock economy during the 1860's. Many of the industrial products needed by the mining industry and consumer goods required by the general population were soon supplied by local firms.

The unprecedented amounts of gold and silver which were extracted from the Comstock Lode helped finance the northern forces during the U.S. Civil War and created many millionaires. Because of the nature and depth of the ore, the lack of nearby natural and financial resources and the mining industry's inexperience with the development of underground ore bodies, existing technologies were refined and new technologies developed. Among the more significant of these developments were square-set timbering to support the walls and ceilings of underground slopes, the Marlette water system which incorporate a seven mile inverted syphon to bring water from the Sierra Nevada mountains to the Comstock, the construction of the Virginia & Truckee Railroad, the three and one half mile Sutro Tunnel which drained the Virginia City mines to the 1,600 foot level,

the development and improvement of hydraulic pumps and elevators, and the refinement and invention of various ore milling processes and equipment. These developments were on the "cutting edge" of mid-19th century technology.

With the exception of some ranching, quarrying and power generation activities along the northern border on the Truckee River, Storey County's economic well being remained linked to the health of the mining industry. By 1933 the average price of an ounce of gold went from \$25/oz to \$36/oz, and silver went from \$.30/oz to \$.64/oz. This created widespread mining in Nevada for precious metals.

Numerous mines reopened and a period of steady growth ensued which economically benefitted the entire Comstock. New ore processing mills were built on the Comstock which used cyanide extraction technology. The main connecting roads to both Reno and Carson City were paved. These two developments however, brought about the demise of the Comstock's only railroad link, the 60 year old Virginia and Truckee Railroad. The original function of the V & T Railroad was to provide inexpensive transport of ore to the mills on the Carson River ten miles away. With new mills located on the Comstock and alternative transportation opportunities offered by the newly paved highways, the V & T was forced to close its Virginia City line in 1938.

In contrast to the financial situation of the federal government during the U.S. Civil War, gold and silver were not commodities necessary to fuel the country's military involvement during W.W. II. In fact during this war, War Production Board Order L-208 restricted "production of non-essential mines" which included gold and silver operations. Although several mines and mills operated for a short period after W.W.II, this order effectively shut down Comstock mining operations until the government allowed the price of gold to be dictated by market demand in the mid 1970's. Several mining operations which started up after Order L-208 was rescinded in 1947 were unsuccessful due to substantially increased labor costs and a shortage of production machinery.

During the 1950's and 1960's, the economy of Storey County shifted from an industrial (mining) to a service (tourism and gaming) base. The single most important influence in this shift was probably the television show Bonanza. Virginia City was depicted in this highly successful and long running series as being located a short wagon ride away from the Cartwright Ranch, located in the majestic pines next to Lake Tahoe. Notwithstanding the facts that the Comstock Lode is two mountain ranges away and over 35 miles by road, tourists began to flock to Virginia City looking for evidence of the Cartwright family. Local merchants have adapted to the changing economic parameters by promoting events such as Camel Racing, Firefighters' Musters, Bonanza Days and a host of other events which capitalize on the mystique of Virginia City during the heyday of the Comstock.

## **3.1 Economic Characteristics**

### **3.1.1 Labor Force Characteristics**

Analyzing labor force and employment data in Storey County is complicated by the fact that a very large proportion of residents commute to jobs outside the county, mainly Carson City and Reno. In

1985, the Nevada Office of Community Services estimated that nearly half the people living in Storey County commute to jobs outside the county (Storey County Nevada Profile, 1985 Edition). Labor force data includes those commuting workers while establishment based employment figures do not. Consequently, total employment is shown to be significantly greater in the labor force data than in the Storey County establishment based employment data.

In June 1990, there were 980 workers in the Storey County labor force (Table 3.1). 950 workers were employed and 30 were unemployed. 98% were occupied in non-agricultural positions. Unemployment according to the Nevada Employment Security Department, was 3.3%, the lowest figure for the previous three years. From June 1988 to June 1990 total employment increased from 900 to 950, or 5.6 %.

Since 1985, seasonally adjusted unemployment has declined steadily from an annual average rate of 10.6% to 5.0% in 1989. The highest seasonally adjusted monthly figure for this period was 12.7% in May 1985 while the lowest rate was 3.3% posted in June 1990. (See Table 3.2)

### **3.1.2 Employment and Wages**

In 1989 total establishment based employment was 730 in Storey County (Table 3.3). This represents a 14% increase from the year before and a 26% increase from 1985. 150 new non-agricultural jobs were developed in the county during this period, the largest number, 50, occurring in the trade sector.

Mining continues to represent a significant proportion of non-agricultural industry based employment. However, employment figures indicate that tourism has replaced mining as the county's major economic activity. During the last decade, mining employment declined significantly from 290 (42%) in 1983 to approximately 130 (15%) of the work force in 1989. In the last decade, mining has played less of a role in the overall economic activity in terms of employment. However, it should be noted that with such a small total employment base, the reopening of even a single moderate sized mining operation would significantly impact employment.

In 1989 the largest percentage of the work force was employed in the wholesale and retail trades. The second largest category was the service trade with 210 employees. Combined, these two sectors accounted for 54% of non-agricultural employment in the county. Although less than the comparable statewide figure of 63%, this illustrates the development of tourism into the county's major economic activity.

During June 1989, Storey County employers paid an average weekly wage of \$591 (Table 3.4). The highest weekly wage of \$736/week was paid in the transportation, communication and public utility industry. This is considerably higher than the statewide average of \$477/week in this industry. The only other industry which exceeded the statewide average was manufacturing. In all other industries, Storey County average weekly wages were less than the Nevada average; the total figure

for all industries was 11% less than the statewide average of \$666/week.

### **3.1.3 Business Firms**

According to the Nevada Employment Security Department, in 1989 there were 88 firms operating in Storey County. (Table 3.5) This represents a 14% increase since 1987. The largest increase was reflected in the trade sector. In 1989 over 94% of the firms reporting to the Nevada Employment Security Department employed had less than 50 workers, the smallest reporting category. The remaining 6% firms employed between 50 and 99 workers. No firms reported employing 100 or more people. Even though the firms in the 50-99 category accounted for close to 40% of all establishment based employment, the average number of workers for all firms in the county was less than 10 employees. (Table 3.6)

### **3.1.4 Buying Income and Taxable Sales**

In 1989 the household effective buying income in Storey County was comparable to the state average and slightly below the national average (Table 3.7). However, due to the greater number of residents per household, per capita buying income was almost 30% less in Storey County than either the state or national average. 35% of the county households had an effective buying income of less than \$20,000, compared to 44% in Nevada and 39% throughout the nation. The percentage of Storey County households with a buying income of \$35,000 and over was 38%, higher than either the state or national average.

For the past five years Total Taxable Sales in the county have ranged from \$1.4 million to \$1.8 million (Table 3.8). There is no definable trend in this indicator. The year to year percentage change has varied from -10.4% (1988 to 1989) to +15.1% (1987 to 1988).

## **3.2 Economic Development**

The economic base of a county are those activities which provide basic employment and income. Storey County's economic base has shifted since World War II from mining to tourism. However, most of this economic activity has occurred in the Virginia City/Gold Hill area, where 35% of the county's population is located. Although the Mark Twain and the Virginia Highlands districts have about the same percentage of total county population they have no established business firms. Residents in these districts are primarily employed outside Storey County. The River District has a few businesses where employment opportunities exist. However, no area in this district can be said to have a developed economy.

For these reasons, Storey County's economy should be considered fragmented and underdeveloped. The four districts within the county are entirely separate and distinct; only two of them are connected by a paved road within the county. There are no supermarkets, furniture stores, department stores, motion picture theaters or pharmacies in the county. Two small grocery stores serve the community of Virginia City/Gold Hill.

In this situation, most land use planners and planning documents would stress the need for concerted community involvement in economic development. However, in Storey County, it must be asked if the local market is large enough to support the development of consumer retail and service businesses for residents. Ancillary to this is the question: would the resident voting population of the county support the use of scarce resources to develop an economic development and/or diversification program? Evidence suggests that development of such a plan would not be feasible without the same concerted community involvement. Limited existing resources would be used more effectively in developing roads and other public and semi-public facilities throughout the county.

However, there are two areas in the county which should be viewed for potential industrial development. One area close to Virginia City which merits consideration is American Flat to the east of Gold Hill. Previous development in this area, specifically two ore processing mills which are presently abandoned, has been directly related to mining. There has been considerable surface disturbance as a result of these facilities which needs to be addressed in the future. A connecting road south to U.S. Highway 50 would provide direct access to Carson City. This area is prime for either industrial or residential development.

Considerable development has occurred in the River District and development is expected to continue. Planning officials should give serious consideration to development and zoning for an industrial park in this area. Several benefits to the community offered by industrial park development over land development by individual industries include:

- Full serviced site developed by an experienced industrial developer.
- Diversification of the economy through attraction of several industries or branch offices of larger firms. This negates the economic dependency often created by relying on one large industry.
- Broadens the tax base by permitting more equitable and efficient assessment and administrative practices by the county because of a common base.
- Permits more efficient and economic extension of municipal services (water, sewer, utilities, streets, etc.) through concentration of a number of industries in a specific area rather than scattered indiscriminately in separate locations.
- Provides a real measure of control over industrial operations, sounder land use relationships, environmental management and community compatibility.

An industrial park is a highly restricted, planned industrial district. Special emphasis and attention are given to aesthetics, environmental controls and community compatibility. The industrial park is developed according to a comprehensive plan, prepared by a developer and approved by the county.

The comprehensive plan should include sufficient detail to illustrate circulation patterns, including rail if applicable, and all necessary utilities. The plan should discuss all services to be provided for a community of basic industrial and non-basic industrial oriented uses.

Adequate control of the land, buildings and industrial operations is provided through zoning, private restrictions incorporated as legal requirements in deeds of sale or lease and the provision of continuing management. This assures attractive and efficient uses within the park and the harmonious integration of the industrial area into the community in which it is located.

Several limitations of industrial parks include:

- Unsuitability for industries needing large acreage such as chemical plants, primary metal operators, ore mills, etc., which require total control of the land and surroundings.
- Initial high price of locating in an industrial park may exclude newly established or small firms.
- Loss of identity is a drawback, particularly for large firms wanting to construct unique buildings.
- Difficulties involved in future plant expansion.
- Development restrictions and performance standards which initially seemed reasonable may become burdensome as production processes change because of altered production systems.
- Transportation problems can occur unless the park is carefully situated, comprehensively planned and judiciously developed.

Whether or not industrial park development is pursued, the county zoning ordinance should require Special Use Permits to regulate environmental impacts, noise levels, site control, services, utilities and circulation. To ensure a sound economic future for Storey County, the Board of County Commissioners in 1979 commissioned a study to evaluate the County's industrial development potential and its impacts, both positive and negative. The report resulting from this study (S E A, 1979) is still relevant and is incorporated by reference as a part of this Master Plan.



2. Future population and economic growth in the surrounding counties.
3. Goals established by local planning agencies and government entities.
4. Preservation of historical and natural resources.
5. Taxation of Real Property (Mobile Homes).\*

\*With regards to the taxation of real property, Nevada law (NRS 361.244) stipulates that a mobile home is eligible to become real property if the running gear is removed and the mobile home becomes permanently affixed to the land; and an affidavit of conversion has been signed by the owner, verified and filed with the appropriate agencies. Typically, a significant number of manufactured housing units are not taxed as real property. As a result, County residents who are owners of such units receive many of the same services as other property owners, but they do not have to pay property taxes on the mobile home.

### **4.3 Growth Prospects**

Currently no future growth prospects have been identified in Storey County that would accelerate the County's population growth beyond the expected rate. Industrial growth along Highway 50 and Interstate 80, and in-migration from Washoe County, Carson City, and the State of California could increase the rate of population growth over the forecasts prepared by the State Demographer. Furthermore, as Washoe County and Carson City continue to grow, Storey County will play a larger role as a bedroom community. As a result the total number of housing unit demand may well exceed 648. One of the major constraint to growth is the availability of water.

### **4.4 Affordable Housing Demand**

For the anticipated growth of Storey County adequate housing must include "affordable housing". Affordable housing units can be defined as a single family, multiple family, or mobile home unit which can be purchased or rented by a household with an income level at or below 50% of Storey County's median household income, assuming that no more than 20% of the household income is spent on housing. Of the 648 additional housing units demanded between 1990 and the year 2000, 205 of the 648 housing units must be considered affordable.

In 1989 the maximum affordable housing purchase price in Storey County was calculated to be \$42,500 with a maximum affordable rental rate of \$423 a month. In 1989, approximately 32% of households had a level of income at or below 50% of the area's median household income.

Affordable housing is often a concern to industries considering expanding or developing new facilities in an area. Gaming, retail trade, and certain sectors of the manufacturing and service industries traditionally pay low wages in Nevada. As such, the availability of affordable housing may influence future location or expansion decisions.

Affordable housing is always a concern with local residents, especially with young families and elderly persons. There are a number of federal and state agencies which provide housing assistance to low income individuals or households such as USDA Farmers Home Administration, U.S. Department of Housing and Urban Development, the Nevada Rural Housing Authority, and the Nevada Housing Division, among others.

## 4.5 Land Inventory

The ability of Storey County to accommodate future growth is dependent upon available land suited for residential development. The primary developing regions are: Virginia City/Gold Hill, Mark Twain, Virginia Highlands and the River District. Currently, there are a number of land use codes which designate vacant land listed on the 1990-91 Storey County tax role. For purposes of this report, only vacant land having a land use code of 10, 11, 12, and 13 appear in the land inventory (Table 4.4). The following definitions correspond to the land use codes appearing in the tax role.

- 10: Vacant Unknown\*
- 11: Under Development
- 12: Vacant Single Family
- 13: Vacant Multi-residential

\*Vacant Unknown: Under current Storey County Code these parcels are zoned (F) Forestry and approved for one single family dwelling with the approval of a Special Use Permit.

There are approximately 1,415 parcels of land designated as vacant single family. A majority of such parcels are located in Virginia City, Gold Hill, Virginia Highlands, and Mark Twain. No vacant single family parcels were identified in the Truckee River Area. There are approximately 1,119 parcels of land which are designated "Vacant Unknown". Much of this land has been subdivided into parcels ranging in size from 10 to 40 acres and are generally unimproved. Virginia City and to a limited extent, Gold Hill are the only areas in Storey County which have sewer and water services. In the Lockwood area the Canyon General Improvement District (G.I.D.) has a sewer and water service with capacity to service 403 residents. As of 1993 there are 203 vacant lots available for single family dwelling to be serviced by the G.I.D. Outside these areas property owners are dependent upon well and septic systems.

Storey County land inventory suggests there are enough parcels of land to support growth through the year 2000. Much of the Vacant Unknown land is intended for residential use. Converting parcels of land from Vacant Unknown to Vacant Single Family will depend upon access to the land, water availability, suitability of the land for development, and required services. Future consideration should be made for households who earn relatively low wages by designating additional parcels of land for the development of multi-residential housing units. Based upon the availability of vacant land and accessibility, future growth can be expected to be limited to the four communities. However, there is a large amount of land in the north-central section of the county which is in private ownership and has considerable development potential.

#### **4.6 Resale Market**

Tables 4.5 and 4.6 provide information on land and residential resales in Storey County during 1989-90. In Virginia City and Gold Hill the average parcels sold for less than \$30,000 with an average price per square foot of \$1.16 in Virginia City and \$.64 in Gold Hill. Parcels in the Virginia Highlands, which generally ranged in size from one acre to one and a half acres, and sold for \$25,000 or less, had an average price per acre of \$7,706. Most of the available parcels in the Virginia Highlands ranged in size from ten acres to fifteen acres.

Most residential housing units in Storey County sold for more than \$55,000. The average price for homes in Storey County was \$57/sqft. During the 4th quarter of 1989, residential detached housing units in the City of Sparks averaged \$54/sqft. to \$65/sqft. and the Reno average was from \$61/sqft to \$79.60/sqft.

Most mobile home resales occurred in the Mark Twain area. The average sale price was \$28,416.

## **CHAPTER 5: CONSERVATION AND NATURAL RESOURCES**

### **5.0 Introduction**

There are 167,680 total acres in Storey County, 39,146 acres are in the Carson basin with the remaining 128,534 in the Truckee Basin. Because the topography is generally steep, the soil permeability low, evaporation high and vegetation sparse, water runoff is hard to keep. For these reasons ground water recharge is limited to alluvial fans located at the base of various drainage networks.

Storey County is subject to summer convection storms (which deliver precipitation in large amounts over small areas). Most of that input is lost to runoff. Winter storms probably contribute more to upslope recharge, however here the soil mantle is often frozen.

Although those portions of the watershed over 6,500 feet in elevation contribute up to 7.5% of its total precipitation to ground water recharge, the recharge occurs on the alluvial fans near the bottom of the slopes, and not at higher elevations. The water destined for recharge reaches the lower slopes via runoff.

### **5.1 Topography**

Storey County is mostly comprised of mountainous terrain, but some flat land does exist in the Mark Twain area and on the south bank of the Truckee River District. Although Virginia City itself was

built on steep slopes, the fragility of the land makes it undesirable to follow this precedent. Only slopes of less than 10% should be developed.

### **Slope Analysis**

A slope analysis has been made and a map prepared to determine topography and terrain suitable for various types of industrial development (such as manufacturing and warehousing). This information is charted on the Slope Analysis Map recorded #74667, Book 102, Page 37, which is available for reference at the Storey County Recorder's Office (see Appendix D).

Terrain with 0-5%, and 5-15% were initially considered as most probable development sites. The feasibility of these sites was further analyzed by water availability, accessibility and location within the county. Based on these factors, the following sites show potential for industrial development: Lockwood, Tracy, Painted Rock, the southern edge of Six Mile Canyon Road and the Flowery Range districts. Land use zoning decisions will be made compatible with slopes and drainage areas.

## **5.2 Climate**

Virginia City and the nearby Virginia Highlands are located at an elevation of over 6,000 feet. This is considerably higher than the rest of the county's populated areas. Because of their elevation this area does not experience the extreme changes of temperature common to the rest of the county. Generally, Virginia City and the Virginia Highlands do not experience the stagnating air which normally occurs, particularly during winter, in many valley floors of Nevada. The Mark Twain and River Districts are more representative of the temperatures experienced in the Reno and Carson City areas.

The county's high mountainous location is also conducive to higher precipitation amounts which average slightly over 12 inches a year. Much of this precipitation comes in as snow during the winter. Total snow fall averages 56 inches a year but as much as three feet has fallen in one month.

Summer daytime average temperatures are in the 70's and low 80's. The nighttime temperatures drop down to the mid-50's. During the winter, daytime high temperatures average 40 to 50 degrees and nighttime temperatures range from 25 to 30 degrees F. The highest temperature recorded at Virginia City was 100 degrees in August of 1970; the lowest was -3 degrees in February 1956.

In spite of the high elevation, the growing season is relatively long, averaging 107 days. Relative humidity is slightly higher than the regional average. Humidity averages 40-50% over the year, but varies from about 70% during the winter to approximately 30% during mid-summer. Thunderstorms average about 10 to 15 a year and are usually accompanied by lightening.

Wind information is relatively sparse. The higher exposed location of Virginia City leads to higher wind velocities. The constraining influence of the Virginia Range also has an effect on the prevailing winds, which generally are from north to south. However, upslope and downslope valley winds are dominant throughout the day. Occasionally wind speed has been known to reach 100 miles per hour.

### **5.3 Geology**

The geology of the county has greatly dictated its development. Among the most notable geological contributions have been a wealth of minerals and a fragmented ground water resource. The mineral deposits shaped the county's early development, while poor quality ground water throughout the county south of the Truckee River has restricted development activities.

Much of the county is underlain by relatively stable volcanic bedrock, blanketed by a very shallow surface cover. However, deposits of unstable conglomerates, sandstones, shales and diatomaceous sediments also exist. Gravel and sand deposits also occur and while relatively stable, are unsuitable for septic tank usage. The county is also affected by seismic activity and development in these areas should be restricted.

The outstanding geological feature in Storey County is the world renowned Comstock Lode. This rich vein crops out to the surface along the eastern face of Mount Davidson about 1,200 feet below the summit. For approximately five miles to the north and south to Virginia City the vein runs along the east side of other smaller mountains in the Virginia Range. Below Gold Hill the vein splits, one branch heading southwesterly into American Flat and the other branch heading in a more southerly direction to Spring Valley south of Silver City.

The face of Mount Davidson slopes to the east at an angle of about 25 degrees. The vein dips in the same direction at an average inclination of 45 degrees. At depths over 2,000 feet portions of the vein tend to become more perpendicular to the surface. The vein has been tapped at several different angles and three lines of shafts were sunk to encounter it at different depths.

For further geological information refer to the Soil Survey of Storey County Area, Nevada. Issued May, 1990.

### **5.4 Seismology**

Storey County is located in seismic zone 4. Seismic zones are rated 1 through 4, with seismic zone 1 having the minimum number of seismic events and zone 4 being the most active. This becomes a major consideration for land use planning and particular construction requirements are necessary.

## 5.5 Soils

A comprehensive soil survey for Storey County has been generated by the Soil Conservation Services (SCS) and is used to describe soil characteristics which affect the county's potential.

Of critical concern to the county is its inability to capture and hold what little precipitation it receives. All but a small portion of the county has been classified by the SCS as exhibiting poor infiltration capability. Soil interpretations for both profile permeabilities and soil hydrologic grouping lead to this conclusion. Only a narrow strip of land bordering the Truckee River, and a few isolated sites in the southwestern interior of the county, diverge from the norm. However, these sites exhibit only moderate infiltration capability. Because of this condition, most of the county's runoff occurs as surface flow. Only a small portion occurs as ground water yield.

The soil surveys show that the county is well drained, there are no soils exhibiting drainage problems. Runoff leaves the county immediately. However, while drainage is no problem, the runoff does take its toll in terms of erosion. All but a fraction of the county's soils exhibit a moderate erosion hazard. The remainder is categorized as severe. Any disturbance to natural conditions will greatly increase the hazard.

Wind erosion is also a factor to consider. Again, most of the county exhibits a moderate hazard. The remaining portions are about equally divided between severe and slight. Likewise, any disturbance to natural conditions, such as blading to create roads, will greatly increase wind erosion problems.

According to the SCS land capability classification, only land along the Truckee River has irrigation capability. Even so, that land consists of Class II soils, having climatic restrictions. In terms of dry land capability, the best soil in the county is classified as Class VI. Again, this is the Truckee River strip. As a whole, the county falls into Class VII soils having such severe limitations as to make them unsuited to cultivation and which restrict their use largely to open space uses as wildlife habitat and watershed preserves. In summary, the capability classification indicates that Storey County soils are unsuited for most developmental purposes.

Further, should structures be built upon the county's soils, consideration must be made for both shrink-swell and the frost-heave potential. Over 60% of the county is classified as having very high shrink-swell characteristics. Only a small portion of the county is classified as low. To add to construction problems, over 90% of the county is classified as having moderate frost action. Thus, construction of stable foundations for any structure necessitates special design techniques or structural failure may result.

The soil survey for the upper Lousetown Creek area indicates severe limitations for septic tank activity, along with severe limitations for roads and streets as well as for dwellings. Being more detailed, this data should be referred to when considering developmental potential of the area. Both Lousetown and Long Valley Creeks are critical watersheds for surrounding areas.

## **5.6 Flora**

Vegetation within the county is mainly restricted to three communities: the Pinion-Juniper, the Big Sagebrush-Grass, and the Low Sagebrush-Grass. The Pinion-Juniper, located in the upper elevations of Storey County, is accompanied with an understory of big sagebrush and antelope bitterbrush. Frequently lying above the Pinion-Juniper is the Low Sagebrush-Grass community. Associated with low sage are grasses and forbs such as needlegrass and balsamroot. Below the Pinion-Juniper lie the Big Sagebrush-Grass community. Big sagebrush is accompanied by a host of grasses, forbs and shrubs.

These vegetal communities are typical of the region, and exist in a very harsh climate. Recovery from disturbance is slow. Disturbance to vegetation leads to a host of environmental problems such as dislocation of native fauna (permanent or seasonal), increased erosional hazards and a deterioration of the local watershed.

Both Lousetown and Long Valley Creeks are critical watersheds for surrounding areas and provide valuable riparian growth in areas of natural springs which flow year long in many places. These areas should be protected from erosion by encouraging and cooperating with property owners and interested groups to control grazing and public use.

One of the key elements of maintaining a healthy environment in an area as fragile as Storey County is to insure protection of the natural vegetation. In reseeding disturbed land areas, reclamation plans are most successful when vegetation native to the area are planted.

## **5.7 Fauna**

Within the interior of Storey County exist the usual array of wildlife found in Western Nevada. Beaver, muskrat and weasel abound along the Truckee River. The river itself is important to the region's fishery. Upon completion of both the Marble Bluff Dam and Fishway at the terminus of the Truckee River and a fish by-pass around Derby Dam, the Truckee will once again provide spawning grounds for the Pyramid Lake fishery, in addition to its present fishery capacity.

Further inland, game birds such as the mountain and California valley quail, dove, and chukker partridge are abundant around the county's many springs and seeps. Sage grouse, though small in number, can also be found. Cottontail rabbits dwell close to these natural water supplies.

In terms of larger animals, the County hosts one of Nevada's larger herds of wild horses. A conservative estimate of the herd size is 300 animals throughout the County. The wild horse is the primary and preferred grazing animal in some areas, notably the Highlands area. These herds keep the fine fuel (dry grasses) from adding to the high fire danger. Consequently their presence is needed. The Virginia Range Wildlife Protection Association has formally adopted the wild horse herds in the Virginia Range to protect them from exploitation. However, the competition for available forage and water is high, and the herd will exceed the natural carrying capacity of the range unless their population is controlled. The Wildlife Protection Association works to maintain a reasonable population size and monitors the herds throughout the year.

Storey County provides a habitat for both a resident population of deer as well as a wintering ground for a portion of those deer that summer around and about the Tahoe Basin. The Flowery Range-Upper Long Valley Creek area is a key deer wintering site, as is the western face of the Virginia Mountains in Washoe County. Regular seasonal migration routes include the Five Mile Flat area as well as the canyons between Gold Hill and Silver City.

Associated with the game are the usual assortment of non- game species, ranging from chipmunks to eagles to coyotes. All the County's fauna survive within a delicate framework of available water and food. Thus the fauna are intimately associated with the county's fragile environment and are therefore equally fragile.

To protect the county's wildlife, this Master Plan agrees with the State Fish and Game Commission's recommendation to establish a wildlife management area to cover the county.

## **5.8 Water**

Storey County lies in the rain shadow created by the Sierra Nevada Mountains. Additionally, most of the county lies in a rain shadow created by a portion of the Virginia Range.

Average annual precipitation at Virginia City is 9.94 inches per year. Higher elevations of the county receive 12 to 15 inches of precipitation annually. Lower elevations receive about five inches of precipitation annually.

The county has negligible areas of snow accumulation. Lake areas are limited to a sum of ten surface acres, a figure which includes water supply reservoirs. The length of rivers and streams is limited to fourteen surface miles, including the Truckee River, which borders the county on the north.

Evaporation is high, greater than 50 inches per year. Recharge is limited to approximately 5% of total precipitation because of the high evaporation rate, depletions such as irrigation, surface water

evaporation, and phreatophyte consumption. (Phreatophyte refers to plants with a deep root system that obtain water from the water table).

Annual recharge, which results from such factors as precipitation, evaporation, and other depletions, is extremely limited.

### **Implications for Future Development**

It is apparent that with the exceptions of the alluvial fans which form a perimeter around the Virginia Range, there has been little success in developing any dependable potable ground water supply within that range of mountains. As water is essential to any land uses, it follows that before a development is allowed within the Virginia Range, availability of water should be the primary consideration.

The responsibility of such considerations falls upon Storey County, whose boundaries closely follow the Virginia Range topography.

The three parameters which make scarce a potable ground water supply are low precipitation, low recharge and a soil mantle high in sulfates, iron, and numerous other chemical elements which become dissolved in what little ground water that does exist, making it unfit for consumption.

Viewing past patterns of ground water development, there have been no recorded successful wells (ones drawing potable water on a long sustained basis) in the interior of the county, at least as far as official state records are concerned. There is an artesian well located at Cottonwood Springs in the Virginia Ranches (40 acres), that is important to area wildlife. This well has been there for twenty years. Producing wells of adequate quality have been developed along the flood plain of the Truckee River and also within the Mark Twain area which lies within a declared critical ground water basin.

The patterns of success and failure of ground water development in Storey County imply that development should be treated very carefully. A cautious approach would actually benefit the County, because it would help ensure the success of new developments thereby avoiding possible county burdens in the future. Such a cautious approach would also protect the general public from what might prove to be unwise investments.

With the exception of the Truckee River flood plain, most of the county can be developed only at exceedingly low densities. The Mark Twain area should be included in the concept of low density uses, as the State Engineer has declared the area to be short of ground water.

Actual densities should be based on consideration of ground water recharge. The density of

development should be based on that amount of land necessary to provide recharge equal to the needs of the proposed use.

Criteria for density zoning then becomes a situation of defining recharge rates for areas in question. At this time detailed hydrologic information has not been produced for Storey County, even on a reconnaissance level. However, the planning efforts of the USDA Nevada River Basin Planning Staff along with technical opinions by the United States Geologic Survey provide guideline data dealing with the County as a whole and with hydrologic variations within the County. As for that part of the County served by the Virginia Water Company, land uses that depend upon the company for water should be designed around the ultimate transmission capacity of the State-owned delivery system.

Presently, the most important source of domestic water for the Virginia City/Gold Hill area is the State Marlette-Hobart System. Limitations in the Marlette System and in good quality ground water pose serious constraints on the capability of the county to absorb new development.

### **Ground Water Availability**

In order to determine the availability of ground water in Storey County, well log records on file at the State Engineer's office have been inspected. Nevada Revised Statutes require well drillers file a log for each well drilled. This requirement dates back to the early 1940's. It should be pointed out that there had been no practical method to enforce this regulation in the past, and wells have been drilled that were never recorded. However, the State Engineer's office feels that since about 1955, 75% of all wells drilled in the State have been recorded.

The files in that office revealed that only 23 well logs have ever been filed in the county. Those that were filed were mostly in the alluvial areas to the extreme north or south of the interior, and in the Virginia Highlands area on the western edge.

It can thus be accepted that there is a lack of adequate ground water in the central portion of the County. 'Adequate', as used here, relates to both the quantity and the quality of the resource. The aspect of quality will be considered in a later section.

### **The Marlette System**

Presently, the only source of domestic water for the Virginia City - Gold Hill area comes from the State owned Marlette-Hobart system. The Virginia City - Gold Hill water system has a contract with the Marlette-Hobart State system. The contract, which is presently being renegotiated, limits the daily maximum amount of water to be provided to 750,000 gallons per day.

Transmission capacity of the 20 mile delivery system is relatively uncertain. Estimates from personnel in State Buildings and Grounds who operate the system range from 400 gpm (576,000 gpd) to 800 gpm (1,152,000 gpd). An opinion has been expressed by an engineer intimately associated with the pipeline that pressures at Lakeview (the low point of the inverted siphon) should not exceed 800 psi. In order to deliver 200 gpm (288,000 gpd), the gauge at Lakeview is held at 750 psi; hence it would follow that capacity of the system should not exceed 300,000 gpd for any length of time if the engineers advice is to be heeded. It is interesting to note that a century ago, 800 psi at Lakeview would theoretically deliver 700 gpm to Storey County. However, many conditions along the pipeline restrict flow and cut this theoretical capacity by over two-thirds.

Total annual rechargeable storage belonging to the state is 3,575 acre-feet. All but 100 acre-feet lies in Marlette Reservoir, and to be utilized, water must be pumped from Marlette over the ridge line to the Hobart system. At any rate, as total demands on the State-owned system (including Carson City, Lakeview, State Buildings, and Virginia City) have not exceeded 920 acre-feet, there is ample water should it be decided to draw on Marlette's total annual rechargeable supply.

In summary, the limiting resource in the system is the transmission capability, rather than the peaking or total annual water availability at the source.

### **Water Quality**

Analysis of ground water as a source for domestic water requires evaluation of both quality and quantity. Previously, "soft" facts implying a lack of adequate quantity were presented. Table 5.1 summarizes fairly recent findings relative to water quality as determined by analysis of twenty Storey County wells and three mine shafts. Only those twelve sites not meeting acceptable water drinking standards were individually listed in the report. Two sites in the Mustang area, one at the Orchard Exit, two at Painted Rock and three in the Mark Twain area met or exceeded water drinking standards.

The chemical parameters of sulfate and iron indicate the quantity of each compound existing within the sample. The parameter of total dissolved solids indicates the amount of dissolved inorganic and organic material within the sample and is often used as an indication of salinity.

In summary, 60% of the twenty samples submitted for quality analysis of Storey County well water were found to be below standards for domestic consumption. This figure has been determined to be three times that of the five county western Nevada regional average. The implication is that water is not only scarce in Storey County but the quality of available ground water quality is also poor.

The interior of Storey County does not produce high quality water and neither do the Truckee River benchlands. Generally, groundwater of acceptable drinking quality may only be found directly adjacent to the Truckee River as well as in the Mark Twain area.

## **Summary**

There are few technically reliable detailed data which can be used to determine the precipitation patterns throughout most of Storey County. Similar lack of data is found for recharge patterns. As a result, the determination of future land use densities based on water availability must rely to a great degree on (river) basin-wide inventories. Planning must be based on data which represent County conditions as a whole, an approach which may not be accurate for any specific location.

It is assumed that land should not be developed at densities which will lead to the mining of water. Population densities should not be allowed to exceed the point where more water is taken out of the ground than is naturally recharged.

Precipitation at the Virginia City rain gauge is 10 inches per year. This gauge is the only one in the county which has provided data over a sufficient length of time for analysis. Although located below Mt. Davidson in the rain shadow of the western boundary of the Virginia Range, it is observed that most of Storey County lies in the same rain shadow. The gauge is located rather high in the watershed, and should receive more precipitation than sites of lower elevations. Based on these facts it is reasonable to use the 10 inches per year as an average precipitation figure for the county until more accurate precipitation data become available. However, it should be kept in mind that precipitation may approach 15 inches at high altitudes and as little as five inches at lower and more easterly elevations.

It is obvious that sufficient water of potable quality should be produced for residential developments. The generally accepted standard is one acre-foot available for each single family dwelling. This is a reasonable standard, as it encompasses not only the actual water use of the residents but also the numerous demands created by subdivision development (fire fighting, recreational use, water loss, etc.).

It is recommended that a ground water monitoring system be installed in sensitive areas where well water is the primary source.

## **CHAPTER 6: PUBLIC SERVICES**

### **6.0 Introduction**

This section outlines the available public safety resources, educational services, parks and recreation, governmental agencies and solid waste plan for Storey County.

### **6.1 Public Safety**

#### **Fire Protection**

As the population of Storey County grows, it puts additional pressure on existing fire protection agencies.

Responsibility for fire protection rests with the Nevada Department of Forestry on a contractual basis. Additional resources are provided through agreements with the United States Forest Service, Bureau of Land Management and neighboring fire protection districts.

The following elements should be considered when the planning commission reviews development projects:

#### **New Development:**

1. Fire protection analysis from a local fire agency.

2. If the nearest fire suppression facility is more than four miles away, consideration for the dedication of land for additional fire facilities should be given.
3. The formation of volunteer fire departments will be made a requirement in low density areas.
4. The establishment of a tax supported rural fire district in areas which are experiencing growth. This could also be made a condition prior to approval based on a residential vote.

#### **Road Conditions:**

1. The county will not accept the dedication of sub-standard streets and roads that could hamper emergency vehicle response time.
2. The planning commission is responsible for the approval of road designs to meet emergency vehicle standards.
3. For private development the planning commission will require guarantee of repair and maintenance on private roads.
4. For private buildings more than 150 feet from public access, sufficient emergency vehicle access must be provided.
5. Uniform Building Code and Uniform Fire Code design standards relating to emergency vehicle access will be considered before issuance of permits.

#### **Emergency Response Planning:**

1. Planning Commission will require a fire department approved emergency response plan for new development be included before permit approval.
2. An adequate water supply and delivery system, when square footage demands as per the Uniform Fire Code, for fire suppression must also be required. Approval must be obtained from the Fire Chief before a permit will be issued.
3. The commission will adopt land use hazard areas and categorize the degree of potential hazard, i.e. most critical, critical and least critical. Different minimum building and other fire prevention and suppression design standards could then be applied to each of these areas.
4. It is presently the duty of the fire chief to inspect or cause to be inspected all buildings, premises, vacant lots and public thoroughfares for the purpose of ascertaining and causing to be corrected any condition liable to cause fire.

#### **Police Protection**

County residents rely solely upon the Storey County Sheriff's Office for police protection. There are no municipal police departments in the county. In addition to the central Sheriff's Office in Virginia City, there are two Resident Deputies at the Lockwood/River district, one Resident Deputy in Virginia Highlands and one Resident Deputy in Mark Twain Estates. The paving of Six Mile Canyon would benefit the Sheriff's Department allowing for quicker access to the Mark Twain Estates.

## **6.2 Education**

In the 1980's Storey County school enrollment increased by almost 50%. The annual growth rate was approximately 4%. During this time all Lockwood area elementary students attended Washoe County Schools. However in the 1991-92 school year these children attended the Storey County school district and had a significant impact on enrollment. These additional students combined with an expected growth of the River District result in an 8% projected growth rate in the 1990's.

The District's education facilities as of October, 1993 are:

<u>NAME</u>	<u>GRADE</u>	<u>STUDENTS</u>
Hugh Gallagher Elementary	K-5	175
Hillside Elementary School	K-6	50
Virginia City Middle School	6-8	98
Virginia City High School	9-12	132
Total		455

The District owns the property on which the elementary, middle and high schools are located. Other property owned consists of the lot to the south of Saint Mary in the Mountains Catholic Church (SCAPN 01-144-01) and the lot between C & D Streets on which the gymnasium is located to the west of the middle school (SCAPN 01-074-01). An addition to Hugh Gallagher Elementary School was completed in September of 1992 providing four new classrooms.

Anticipated facilities needed during the next decade include:

<u>SITE</u>	<u>YEAR NEEDED</u>	<u>ITEM</u>
District 1993		Bus Maintenance Facility
VCHS 1994		Additional Classrooms
VCHS 1994		Performing Arts space
District 1995		Athletic/recreational site
VCHS 1996		Complete basement class
VCMS 1994		Renovation of basement
VCMS 1996		New Addition

**Recommendations:**

1. Create direct road from Virginia City to the Lockwood area:
  - Will unify that portion of the county with Virginia City.
  - Will allow school district to transport Lockwood students to Virginia City.

- Will increase the possibility of students variance due to transportation to return to the schools.
- Will address the problem of Washoe County School District no longer accepting Storey County secondary students.

2. Provide support to the District in obtaining the lands adjacent to the high school for athletic and recreation areas from the Bureau of Land Management:

- Will allow the District to offer additional athletic opportunities and activities for all students
- Will create potential for additional county parks and recreation activities.
- Will provide a site for outdoor community activities in addition to those offered by Miners Park.

3. Deed property in Mark Twain for future school site:

- Will provide a link to Virginia City via the educational program.
- Will provide relief to the overcrowded classroom situation at Hugh Gallagher Elementary School.

4. Improve the Six Mile Canyon Road:

- Will unify that portion of Storey County with Virginia City.
- Will allow the District to more efficiently and safely transport Mark Twain students to Virginia City.
- Will increase the possibility of students on variance due to transportation to return to Storey County schools.

5. Create a community recreational complex to include running track, softball/baseball fields, football/soccer with permanent seating and rest room facilities and picnic and play areas.

### **6.3 Parks and Recreation**

Storey County provides public lands in the public interest for health, safety, and welfare. Certain areas should be designated for future neighborhood parks and facilities in Storey County. Currently there are four park districts:

**Miners Park:** Serves Virginia City and Gold Hill with a picnic area, lighted baseball field, swimming pool, tennis courts and BBQ area. The Storey County Senior Citizens' Center is located within the park.

**Virginia Highlands Park:** Picnic and recreational area. Future development is needed to provide rest rooms and fresh water.



The widely separated cities of Virginia City, the Virginia Highlands, Mark Twain and the River District are connected by a two lane state highway, improved and unimproved roads.

The major transportation route to Virginia City is State Highway 341 which connects with U.S. Highway 395 near Steamboat, about 4 miles south of downtown Reno, on the north and U.S. Highway 50 near Mound-house, about 10 miles east of Carson City, on the south. South of Virginia City is State Route 342, which connects the communities of Gold Hill and Silver City, and provides a shorter but steeper route to Highway 50.

U.S. Interstate 80 runs mostly along the northern bank of the Truckee River in Washoe County, only 3/4 mile is in Storey County. Interchanges and bridges at Lockwood, Mustang, Patrick, Tracy/Clark and Painted Rock provide access to communities, ranches and other development along the southern bank which is part of Storey County known as the River District. Although there are a couple rough, unimproved 4-wheel jeep trails linking the River District to Virginia City travelers must use Interstate 80, U.S. Highway 395 and Nevada State Route 342 for access to and from Virginia City.

Six Mile Canyon road, a two lane improved and maintained gravel road, connects Virginia City with the community of Mark Twain and continues to intersect U.S. Highway 50 about 6 miles northeast of Dayton in Lyon County. Within Mark Twain are paved and unpaved roads maintained by the county.

Virginia Highlands residents are five miles away from Virginia City. Access is provided by State Highway 341. Within the Highlands area local and collector paved and unpaved roads are maintained privately.

## **7.2 Other Transportation**

The Southern Pacific Railroad right-of-way crosses back and forth across the Truckee River on the county's northern boundary. Although there are no scheduled passenger stops in the county, there is an industrial siding at Clark Station.

The restored Virginia & Truckee Railroad at Virginia City is the only other rail line in the county. The V & T is operated solely as a tourist attraction. A recent extension of the road crosses State Route 342 to connects with the Gold Hill depot. Future extensions may continue the line to American Flat and Mound House on U.S. Highway 50. This extension of the V & T will have an increasingly significant impact on the economies of both Gold Hill and Virginia City. The Tri-County Railroad Commission has been established to raise money, condemn land, and provide extensions of V & T Railroad through Lyon County to the northeast area of Carson City.

Except for these two limited services, there are no bus, railroad, taxi or air transport services located within the country. An Elderly/Handicapped Transportation program in Virginia City is sponsored

by the Senior Citizens of Storey County.

Carson City provides scheduled bus service and has an airport without scheduled airline service; there are also a few freight trucking firms. Reno provides scheduled bus, airline, freight, and rail facilities. Several charter bus companies in Reno provide tourist related transportation for Virginia City visitors.

### **7.3 Vehicle Registration**

In 1990 there were 2,893 vehicles registered in Storey County. Of this total, 54% or 1,553 were passenger cars and 31% or 891 were trucks. Data from the 1980 Census indicate that 96% of all households in the county have access to at least one motor vehicle and 68% had access to two or more vehicles. (Table 7.1)

### **7.4 Areas of Concern**

**Six Mile Canyon Road** - This road is the fastest route between Mark Twain and Virginia City. However, it is a dirt and gravel road that is often steep, curvy, and narrow. Inclement weather can create dangerous driving conditions. Because of this many commuters are forced, and school buses required, to take the paved roads that add seventeen miles of travel at considerable time and cost.

**Virginia Highlands Area** - Steep grades and sharp and blind corners are a problem, especially for school buses, in some sections of the Virginia Highlands. Poor weather conditions can create hazardous driving conditions. Many cul-de-sacs do not have sufficient turn around space for emergency vehicles.

**Virginia City Parking** - The main street in Virginia City is "C" Street and has long been identified as having insufficient parking for tourists and residents.

**Accessibility** - Most of the area of Storey County is inaccessible to automobile traffic, and perhaps, given the existing potential and perceived need for development in the county, this situation may be desirable. However, two paved roads are definitely needed and have been recommended in various planning documents for the past twenty years. For socio-political reasons it is absolutely necessary that the Six Mile Canyon road from Virginia City to the Mark Twain area be paved and an all-year road be constructed from State Route 341 to the River District linking the north and south ends of the county. Both the growth in the Mark Twain area and the tedious and round-about linkage now afforded through Dayton point to the need for improving the Six Mile Canyon Road.

Construction of a road to link Virginia City with Lockwood is also recognized as necessary, though no group has put forth sufficient energy to see its fulfillment. The existing Largomarsino Road is only passable part of the year. It follows a tortuous route over rough topography and would thus require major reconstruction. In view of the complete absence of any suitable road link within



In 1961, the Secretary of the Interior designated the Virginia City National Landmark under the Historic Sites Act of 1935. In 1966, the National Historic Preservation Act passed and the Virginia City National Landmark was listed in the National Register of Historic Places. The designation of the Virginia City National Landmark remains a federal designation with federal laws and regulations administered by the National Park Service.

The Virginia City Historic District Act was established in 1969 and amended in 1971 to the Comstock Historic District Act (N.R.S. 384) to include all of the Comstock, Dayton, and Sutro. In 1981, the Comstock Act was again amended regarding trailers, mobile homes and recreational vehicles. In 1990, the boundaries of the Comstock Historic District were refined and outlying properties with no significant historic integrity were eliminated.

The District presently contains 28,120+ acres.

The Comstock Historic District Commission (CHDC) was established 20 years ago to promote the knowledge and preservation of the cultural resources of the Comstock Historic District. The CHDC provides specific information for property owners regarding the maintenance, rehabilitation, stabilization and restoration of historic structures within the District and encourages property owners of commercial buildings to utilize federal tax-credit programs.

The CHDC is charged with reviewing all permits for structures to be erected, reconstructed, altered, restored, moved or demolished within the District boundaries. Persons who wish to do such work must obtain a Certificate of Appropriateness from the CHDC prior to commencing work. Nevada Revised Statute 384 established the definition, board make-up, functions and powers under which the CHDC operates.

In its review process, the CHDC determines whether the proposed action is appropriate to "the interests of the historic district and congruous with the aspects of the surrounding historic environment of the district" (N.R.S. 384.10) The criteria the CHDC considers in evaluating applications for Certificates of Appropriateness include the following:

- Historic and architectural value and significance;
- architectural style;
- location of the lot;
- position of the structure in relation to a public way and visibility from a public place;
- general design, arrangement, texture, material, color and size of the exterior architectural features and the relationship of building to others in the neighborhood;
- relation of a structure's exterior architectural features to the recognized styles of early western architecture of the late 19th and early 20th centuries.

The CHDC provides free brochures on construction standards and design guidelines for the district.

All major applications are reviewed in an open public meeting, allowing for public input. Only through public meetings can residents or other members of the public express their feelings about the actions of the CHDC. The members of the board also need to have public opinion to provide them with direction regarding the attitudes of the people who are interested in the management of the resource.

The CHDC has an inspector/clerk that is responsible for:

- Reviewing certain exterior changes to buildings/structures which do not necessarily require CHDC review. The inspector/clerk reserves the right to refer any project to the CHDC for review.
- Makes recommendations to the CHDC on agenda items.
- Establishes the agenda for the monthly meetings.
- Maintains the official records of the CHDC.
- Develops education programs for the area.
- Assists other agencies with preservation projects.

Other functions provided for in N.R.S. 384 are establishing and maintaining an office which houses the library and the official records of the CHDC. The office provides a location where people can review proposed projects with the staff. The CHDC is also charged with policing the district for violations of any of the provisions of N.R.S. 384.

The CHDC and the Storey County Board of Commissioners have developed permit review guidelines which minimize conflicts. Most pertinently, a building project must have prior approval by the CHDC before the County Building Department will issue a building permit.

### **Resource Inventory History**

Various inventories of buildings, historic and prehistoric sites, and other resources within the District have been undertaken since the 1939 Historic American Building Survey. Most of these efforts have been focused on architectural resources in and around Virginia City since they are perceived to be the most prominent cultural elements on the Comstock. A 1979 partial inventory of buildings by Heather Hallenberg led to the establishment of new construction and rehabilitation project design guidelines for Comstock Historic District buildings.

The first comprehensive inventory of historic buildings and structures known as the HAER Inventory was undertaken in 1980 by the Department of the Interior's Heritage Conservation and Recreation Service. The resulting work constitutes an important resource for the Comstock Historic District Commission in making decisions concerning the conservation of historic buildings. The project also provided initial archaeological and economic planning studies, walking and driving tour guides and further developed design guidelines for buildings and their environment in the District.

T. Allan Comp and his associates conducted a survey and inventory of buildings and structures. This survey known as "Project 85" focused on Virginia City and constitutes a total survey of all buildings within the town as of September 1985. Gold Hill, and the "Divide" area between Virginia City and Gold Hill, Silver City, and Dayton were surveyed in 1987. This project also proposed a cultural resources management plan and pointed toward the development of the Virginia City Tourism Authority to encourage cultural tourism. The 1987 survey information led to an amendment of the Virginia City Historic District nomination on file at the National Register of Historic Places in Washington D.C. Due to the survey, the period of significance has been extended to 1942 for this historic district.

In response to a request by the Storey County Board of Commissioners, Archaeological Research Services, Inc. (ARS) contracted to do archival and field studies. Prepared by archaeologist Ronald L. Reno, these findings were reported in the Sensitivity Study of the Storey County Portion of the Comstock Historic District. This report also contained a summary of previous planning recommendations, an outline of an archaeological mitigation plan, and an archaeological inventory of Cottonwood Spring and vicinity. The product of this work is a set of five sensitivity maps designed to summarize location and potential significance of landscape, historic archaeological, prehistoric archaeological, architectural and mineral resources.

Both the Comstock Historic District Commission and the Storey County Planning Commission utilize these sensitivity maps in evaluating architectural changes and construction within the district.

### **Areas of Concern:**

Considerable concern has been expressed regarding the impact of surface mining on existing cultural resources. The CHDC's area of responsibility is presently limited to review of exterior architectural features and does not include review of land altering activities. The CHDC will review such projects if formally requested by the local government, state or federal agencies. Recent mine development plans have included cultural resource surveys, protection and preservation of buildings and sites and mitigation of negative impacts where disturbance is unavoidable. For further information and recommendations see the "Sensitivity Study of the Storey County Portion of the Historic District" as prepared by Ronald L. Reno, July 16, 1990 (see appendix).

Because of the historical significance of many areas of Virginia City, the CHDC is responsible for maintaining their historical integrity. This creates a necessity for the District Commission to have some involvement in land use planning.

Because tourism is essential to Virginia City's economy, preservation of the Historic District is appropriate and should attempt to present an accurate portrayal of the Comstock Lode's past.

## **8.2: Outside the Comstock Historic District**

## 8.2.1 Introduction

This section, produced by Lawrence E. Meeker of the Department of Geological Sciences, Geological Engineering Division, Mackay School of Mines, University of Nevada, Reno, discusses mine sites (both active and inactive) and archaeological sites in the county. This information is given to assist in decisions regarding land use planning, as well as decisions regarding resources lying outside the Comstock Historic District boundaries.

## 8.2.2 Data Presentation

Data on mine sites has been obtained from current sources available from the Mackay School of Mines Library at the University of Nevada, Reno and United States Geological Survey (USGS) topographic quadrangle maps. When dealing with specific land use proposals planning officials should consult the Storey County possessory and patented claim maps available in the Storey County Assessor's Office.

Data on archaeological sites have been obtained from the Nevada State Museum and U.S. Bureau of Land Management. Most sites have been field checked for accuracy, however, locations of specific development proposals may warrant additional field or archival research to evaluate the cultural resources affected.

### Mine Sites

Active mines are those that indicated activity in 1988. A total of nine different active mines are indicated by this measurement. Inactive (abandoned) or status-not-indicated mines may be reopened and worked depending upon factors which affect the ability of the mine owner to bring the mine into production. A total of 47 different 'inactive' or 'status-not-indicated' mines are in this category.

If abandoned, state law requires owners of these mines to erect fences or other safeguards around mine workings. It is the responsibility of the Board of County Commissioners to oversee public protection of abandoned mines. Owners of record are notified of existing unsafe conditions and required to mitigate the hazard. If the owner cannot be found or refuses to comply, the county has the responsibility to fence or otherwise mitigate the situation and assess the owner accordingly.

### Archeological Sites: Historic and Prehistoric

A total of 63 archeological sites have been determined. Historic sites relate to the intrusion of the culture of United States citizens and include such features and artifacts as town sites, buildings and building sites, railroad structures and abandoned mine sites in addition to those sites depicted as inactive or abandoned mine sites.

Prehistoric sites are generally aboriginal in origin and include such features as rock art, nomad camp sites, trash locations and sites containing primitive tool, bone or other indications of land uses prior to the contact of European and indigenous American cultures. These sites are protected by U.S. federal law which prohibits the release of specific locational site information in a public document. Presently Storey County owns 80 acres of an archeological site and should consider making this a State Park. When and if the occasion arose, the county would work with adjacent property owners to further protect this and other historical sites. County officials should be aware of the conflict which this policy represents and be prepared to deal with it accordingly. Projects presented to planning officials could have a significant impact upon existing cultural resources. When land use development proposals are presented which are located on culturally sensitive lands, planning commissioners should request advice from the State Historic Preservation Officer, Nevada Division of Historic Preservation and Archeology, Department of Conservation & Natural Resources, Carson City. A review procedure will be initiated to identify impacts upon the significant, identifiable cultural resources existing in the county outside the boundaries of the Comstock Historic District.

### **8.3 The Arts**

The Arts have always been an important part of the history of Storey County and continue to play an integral part in its development. Some of the most recognized programs and institutions include:

**Artists' in Residence Program** sponsored by the Nevada State Council of the Arts. This program brings professional artists to visit the schools.

**Pipers Opera House** in Virginia City. This building needs to be restored so it can be enjoyed again by the community.

**The Virginia City Theater Muckers** which combines both amateur and professional talent.

**Saint Mary's Art Center**, one of the oldest active arts centers on the West Coast.

For more information about the Arts in Storey County, contact the Comstock Arts Council.

## **CHAPTER 9: LAND USES**

### **9.0 Introduction**

This chapter concerns the existing land uses in the four major districts of Storey County as well as current water considerations. The interior of the county, its ownership and uses are also discussed. Public lands and concerns for public lands are defined.

### **9.1 Existing Land Uses and Community Design**

#### **9.1.1 Virginia City/Gold Hill/American Flat**

This section deals with Virginia City, Gold Hill and American Flat. Although these three areas lie within the same population district, each has its own land use needs and will be addressed separately within this section.

#### **Virginia City**

Virginia City was originally designed in a square platted grid pattern with little recognition of the

topography of the mountain slopes on which it was built. With some modifications, the town has retained this pattern. Residential construction was primarily built by individual owners with little planned unit development. Although there are several apartment units dispersed throughout the town, there is a recognizable need for zoning and construction of additional multi-residential units.

The main thoroughfare in Virginia City is "C" Street, which also forms part of State Route 341. Land uses along "C" Street are mixed (residential, commercial and public buildings) and there are a number of vacant lots suitable for future development. Above "C" Street is "B" Street which is mostly residential, single and multi-family units. "B" Street does include several commercial establishments as well as the Storey County Courthouse. "A" Street, and the area above it, is exclusively single family residential and retains much of the flavor of the 19th Century upscale district. "D" Street, below "C" Street, and the remaining area downhill, reflect a mix of residential, public and industrial development with some commercial and religious establishments.

Virginia City does have some small hotels and motels but the number of rooms all total is only sixty-three.

The zoning challenge offered by existing land use patterns is to direct future growth in these mixed use areas without unduly imposing upon the property rights of existing land owners.

### **Gold Hill**

The 1863 Official Plat of Gold Hill shows a town and lot layout based upon the steep contours of upper Gold Hill Canyon and the boundaries of mining properties. The town's namesake was reportedly a reddish-yellow hill north of the Virginia & Truckee Railroad depot where the "Houston" pit was dug. In general Gold Hill's fragmented townsite lots appear to have been haphazardly located according to the squatters' code of first come first serve. The 1863 Plat was drawn four years after Gold Hill became populated. Historic photographs show Gold Hill used to be a densely built area with mixed land uses. However, today there are a number of vacant lots and relatively few buildings with development limited to the upper Gold Hill area. With a few exceptions, commercial activity exists on State Route 342 below the recently rebuilt Virginia & Truckee Railroad crossing. The only expected industrial establishment is the Crown Point Mill. This 1930's era gold and silver ore processing facility has recently been renovated at considerable expense and, depending upon a number of factors, could be put back into operation.

Residences are scattered throughout the community and include upscale homes, apartment houses and small shacks. Gold Hill has one hotel and one lodge with a total number of rooms being twenty-seven. Future development of Gold Hill is constrained by topography, access, water and sewage facilities and numerous conflicts regarding property ownership rights. Based upon current land use, future zoning districts will also reflect historical patterns.

## **Virginia City/Gold Hill Water Considerations**

Up until about 1964, Gold Hill included American Flat lying the west of Gold Canyon at the base of Mt. McClellan. Actions taken by the Board of County Commissioners excluded American Flat from the Townsite of Gold Hill. This act effectively limited the area to be served by the Storey County Water System to that area of the townsite adjacent to State Route 342 in Gold Canyon. Due to the limited financial resources of the system, this may have been considered necessary at the time. However, in current water supply negotiations with the State of Nevada, it appears to be detrimental to the future interests of the Virginia City/Gold Hill area.

The water received by Virginia City and Gold Hill is supplied and sold by the state owned Marlette Water System to the Storey County Water System. This water originates in the Sierra Nevada mountains between Lake Tahoe and Washoe Valley and is transported to and stored in various facilities in the Franktown Creek drainage area. It is then transported to Five Mile Reservoir, above American Flat, through an inverted syphon originally constructed in the early 1870's. The Comstock communities are completely dependent upon this water supply as there are no ground water additions (wells) to the system. According to the adjudicated Franktown Water Decree, which is a statement of law regarding its distribution, the water can be used within the cities of Virginia City, Gold Hill, Silver City, and Carson City. Carson City is currently the only community not served by the Storey County Water System.

One of the factors taken into consideration in negotiating water contracts and rates is the potential of an area for future development. By excising American Flat from the Townsite of Gold Hill the Board of County Commissioners in their 1964 action precluded the use of water purchased from the state for development at American Flat. There are almost 900 acres of developable land in American Flat. At maximum density and excluding support infrastructure, this represents a potential buildout of 6,700 single family residences.

Analysis of the potential buildout of the Storey County Water Company service area and resulting water requirements was the subject of a memo written in December 1990 (see Appendix). The following data is included in that memo:

### **Parcel Count:**

Virginia City	796 parcels
<u>Gold Hill</u>	<u>327 parcels</u>
Total	1123 parcels

### **Potential Buildout Water Requirement:**

Low estimate:	
Virginia City	972 acre feet/year

<u>Gold Hill</u>	<u>93 acre feet/year</u>
Total	1065 acre feet/year

High Estimate:	
Virginia City	1128 acre feet/year
<u>Gold Hill</u>	<u>229 acre feet/year</u>
Total	1457 acre feet/year

While there is some concern for improving the economy in the Virginia City area, there would be little support for change that would adversely affect the historical integrity of the community. Most people appear to like what they have and want to retain the flavor of this unusual area. Thus, most growth and development would be encouraged in other parts of the county. Virginia City can be expected to continue to develop only when the development enhances the theme of the Comstock Historical District. An expanding list of activities and events that support the over 1 million tourists that visit Virginia City yearly will be encouraged.

### **American Flat**

American Flat has considerable land use potential which should be closely analyzed because of its inclusion in the Comstock Historic District and proximity to Virginia City. It is to be expected that the old mill buildings in the area will be removed in the future and land reclamation activities will be undertaken. This will result in an extremely desirable area for land development and such proposals will probably be forthcoming during the next decade. Two major constraints to future development are land ownership problems and, as discussed above, water availability. A large portion of the land is in public ownership and being managed by the Bureau of Land Management. Much of this portion was previously located under the mining law for mineral development. There are also several patented mining claims and several fee simple private parcels. Since Storey County excised American Flat from the Townsite of Gold Hill, sufficient quantities of water for development may be difficult to obtain. At present most of the water available in the area has been appropriated by a private company which pipes it to Mound House in Lyon County for industrial and residential use. By rescinding the action which removed American Flat from Gold Hill, the Board of County Commissioners would effectively enable development in American Flat. At present, approximately 1/2 of the water used by the Storey County Water System in meeting its commitments under the Franktown Water Decree. The excess water could be used to develop American Flat.

Future development will include the extension of the Virginia & Truckee Railroad along its historic right of way through American Flat to Highway 50 in Mound House. At present, the most viable land use zoning classification for American Flat is "recreational". Should land ownership conflicts be resolved and water become available, either residential or an industrial park development is foreseeable.

### 9.1.2 **Virginia Highlands**

The Virginia Highlands area is a rural residential subdivision three miles to the north of Virginia City. There are 1,169 one acre parcels, 506 ten acre parcels and 441 forty acre parcels in the subdivision. Deed reservations on all properties and proposed construction must be cleared through a community Architectural Review Committee before building permits are approved by the county. Mobile Homes and modular homes are not allowed in this area. Minimum requirement for new wells is eight gallons per minute for all parcels.

As of June 1991, the only non-residential developments in the area are a single four-bay fire department building and a six acre park. Recently the community rejected a proposal for a small commercial development at the junction of the main access road and State Route 341. It should be anticipated that with continued growth in the Highlands additional proposals will be presented to the planning commission.

The potential buildout of this area is significant and the ramifications require a study which explores the impact. Less than 10 percent of the lots in the subdivisions have been built upon. Utility service has been provided on 131 lots, therefore the county can expect the construction of a minimum 131 new residences in the immediate future. Water availability is a crucial factor in the growth of the area. When and if potential buildout is achieved, there will be an additional 1920 homes in the Highlands area. At the existing ratio of 2.7 persons per household, this represents a population increase of 5,184 persons.

### 9.1.3 **Mark Twain**

The Mark Twain area is located about six miles due east of Virginia City at the base of Six Mile Canyon Road. Development is almost exclusively limited to the Mark Twain Estates subdivision which accounts for approximately one-third of the developable area. (Additional area that is not yet developed is a 365 acre parcel on the boundary of Lyon County.) There are 347 individual parcels of land in the subdivision. 218 parcels have been developed; 32 have site built residences and 160 have mobile homes; 129 parcels are vacant. There is no commercial development in the community and the closest stores are in Dayton, 4 miles to the southwest. There is a volunteer fire department and a reserve deputy sheriff.

### 9.1.4 **The River District**

The River District is the most complex of the four districts within the county. Stretching over 25 miles along the south bank of the Truckee River, existing land uses include agricultural, recreational, residential, industrial and commercial development. Because the width of the riparian zone varies, some locations are not suitable for development. Although most development has occurred in the riparian zone, major projects have been constructed several miles from the river.

The development potential of this district is enhanced by its proximity to the Truckee River, Reno/Sparks metropolitan area, Interstate 80 and a major transcontinental railroad line. To further enhance development potential strong consideration must be given to upgrading water supplies and road systems. A sub-area land use plan should be undertaken to thoroughly identify and analyze the resources and limitations of each developable area within the River District. For example, over 100,000 acres east and south of Eagle-Picher are under developmental planning by owners at this time for industrial development.

Residential development is generally located in the Lockwood-Mustang area and to a lesser extent, the Patrick area and in some agricultural areas. Zoning in the Lockwood area should conform to the existing agricultural and residential land uses. In addition, an area for limited commercial development providing basic goods and services should be considered. A new elementary school has been constructed adjacent to the new county park, and the need for a middle and high school is anticipated. Directly east of the park is an abandoned quarry which requires reclamation both for its negative visual impact and the safety hazard it presents to both adults and children. Within a mile of this hazard is a waste incineration site which has, in the recent past, experienced problems with its incineration processing facility.

At various locations on both banks of the river are sand and gravel pits which have been supplying construction projects in the expanding Reno/Sparks metropolitan area. The area east of Chalk Bluff is a level riparian area where the McCarran Ranch and the Tracy Power Plant are located. The Tracy Power Plant occupies a prime location in which further industrial development can be expected to occur. There is low density residential on the McCarran Ranch and cooling ponds adjacent to the power plant. This area represents a challenge because it is presently zoned industrial, primarily used as agricultural, with the Painted Rock area wishing to remain residential.

At the Tracy Power Station, Sierra Pacific Power Company is planning to expand their facility. A generating plant capable of using several different fuels, in order to minimize the negative financial impacts of fluctuating fuel prices, is on the drawing board. Environmental, economic, technological and other impacts of this project, requiring critical analysis, will have to be reviewed by Storey County.

East of Tracy is a diatomaceous earth industrial processing plant at the Clark railroad siding. The extracting pits for this operation are located about five miles to the east of the plant. Although located on a rather narrow strip of land next to the river, there is sufficient area for further industrial development. Two miles beyond Clark is Derby Dam where water is diverted from the Truckee River to Lake Lahontan via the Truckee Canal. Heading east, the canal hugs the northern edge of the Virginia Range and parallels the river for seven miles to just west of Fernley in Lyon County where the canal turns to the south and the river turns to the north and Pyramid Lake. There is minimal scattered land development in this area. A small portion of the Pyramid Lake Indian Reservation, adjacent to the river, is located in the northeast extremity of the county; this portion of the county is not included in the present land use plan.

### 9.1.5 **The Great Interior**

The Largomarsino Canyon area directly south of Lockwood is the location for mineral extraction operations and leads to a defense industrial zone. Long Valley Creek running through Largomarsino Canyon is severely polluted as it approaches Lockwood and is in need of restoration. Utilizing the resources of appropriate state and/or federal agencies, the county should determine the cause and source of the pollution and initiate whatever action is necessary for cleaned up.

To the southwest of Lockwood (between Lockwood and Hidden Valley on the east side of Truckee Meadows) is an area of rolling hills which could be residentially developed in the future. Access from Largomarsino Canyon would need to be provided and any planned projects would probably require the importation of water. While development in this area is probably beyond the time frame of the present plan, county officials should be aware of the area's development potential.

Approximately two miles southeast of Lockwood is a waste disposal site which was recently approved to accept imported solid wastes. Local criticism regarding truck access to this site through the Lockwood community has prompted officials to investigate alternative routes. The Mustang I-80 interchange, an old bridge crossing at Hafed, and a relatively smooth incline approaching the facility appear to offer the most practical resolution of this access problem.

A short distance beyond the disposal site is the turnoff to the Aerojet of Nevada facility, which is at the end of a winding two lane road. This hi-tech explosives manufacturing and testing facility is intentionally located in an area four miles from any other development. As such it provides an unusual planning and land use opportunity. With the existing two-plus mile buffer around it, consideration should be given to classifying the area a "high risk industrial" zone. The "high risk industrial" classification could be defined to include similar facilities. Property tax rates for this classification would reflect costs related to providing additional services. It is likely that many firms involved in the same or similar types of manufacturing and/or testing would be interested in relocating to an area which already had the necessary regulatory framework in place.

East from Tracy and south from Clark, adjacent to the road to the Gooseberry Mine, are several expansive areas of gently sloping hills which offer numerous sites for industrial development. The major constraint for such development of these areas is an apparent lack of water. However, the ground water resources in the region have not been adequately defined and it is quite possible that sufficient quantities for low water use industry is available. At the southern extreme of the maintained dirt road giving access to this area is the Gooseberry Mine, a steady gold producer.

## **9.2 Public Lands**

### 9.2.0 **Introduction**

In 1983, the Nevada Division of State Lands prepared the Nevada Statewide Policy Plan for Public Lands. This report gives a county by county description of existing land uses, concerns regarding federal land management and related policy statements developed by citizens and local government officials regarding the use of public lands. This report should be referred to when deciding the future use of public lands.

### 9.2.1 **Land Ownership**

During the discovery period of the Comstock mines, all of the land containing mines was owned by the Federal Government. After the establishment of the 1866 and 1872 mining laws, title to a large amount of this mining land passed to the mining companies. Almost all significant mining properties in the county are located in a relatively small area surrounding Virginia City and Gold Hill. An exception is the Gooseberry Mine located in the northeast corner of the county. Patented and unpatented mining properties are to be found throughout the Comstock Lode and along the Brunswick Lode which lies to the east of the Comstock.

The Federal Government administers 8% of the land in Storey County compared to 85% statewide. Although the percentage of federally administered land in Storey County is less than any other county in Nevada (see Table 9.2) county planning officials should review the concerns expressed and the policies established at the public workshop hearings. The individual county plans form a comprehensive set of policies and measures designed to increase the role residents have in determining the management of public lands owned by the Federal Government. In addition, federal land management agencies need to be in a better position to know and respond to the concerns and needs of Storey County residents.

### 9.2.2 **Recreation**

Recreational activities play an important role in the lifestyles and economy of Storey County. In planning the use of public lands, the impact on recreation should be strongly considered. As per table 9.3, recreational activity in Storey County is higher than the Nevada average.

### 9.2.3 **Mining**

Land ownership and the property rights attached to any specific parcel of land in a mining area can be extremely complicated. Mineral rights and surface rights have been separated in many parcels within the communities of Virginia City and Gold Hill. Adding to the general title confusion and conflicts resulting from the separation of the mineral and surface rights are tunnel patents, townsite grants, state school grant lands, old highway and utility rights-of-way, railroad grants, inconsistent and erroneous land surveys, etc. Finally, the rights conferred by, and language contained in federal deeds to local properties vary according to the date or period when the deed was written.

To further complicate land use issues, recently mining firms have shown increased interest in the

remaining Comstock ore reserves and a number of mining operations have been developed which have had a considerable impact on communities in Storey County.

The existence of precious mineral deposits in the areas that are popular to tourists has created numerous land use conflicts which are expected to continue. Mining and tourism are not necessarily incompatible. Specific elements can be included in a mining development plan which will result in an increased appreciation of the Comstock's past and present mining activity on the part of tourist and visitors. A major goal for county planning officials should be to consider developing guidelines that address this conflict in mining plans that are presented to them.

#### 9.2.4 **Concerns Regarding Public Lands**

The following are on-going concerns expressed at public land workshops:

1. Land currently managed by federal agencies should be retained in public ownership. Specifically, Mt. Davidson peak is recognized as an area which should not be transferred to private ownership.
2. A county owned parcel containing native American petroglyphs should be transferred to federal or state ownership for better protection.
3. County residents, particularly those in the Virginia Highlands area, express a desire to retain and protect wild horse herds.
4. Land ownership boundaries, specifically regarding mining and townsite properties, should be redefined by a federally sponsored resurvey of township and range baselines and federally patented lands where conflicts have developed.
5. Dangerous conditions resulting from previous mining activity should be remedied.
6. County officials should receive prior notification of future planned land use activity and policies on the part of federal agencies.

#### 9.2.5 **Public Land Policies**

1. Federal land management agencies should manage and utilize public lands on the basis of multiple use and sustained yield concepts in a manner that will conserve natural resources; protect, preserve and enhance the quality of the environment and ecological, scenic, historical and archeological values; protect and preserve wildlife habitat and certain lands in their natural condition; and provide for long term benefits for the present and future residents of Storey County.
2. Except as otherwise provided in law and to resolve land ownership conflicts, federally

managed lands in Storey County should not be disposed of but be retained in public ownership.

3. Federal land management agencies should at least once per year supply the county commission with an update of their policies and give prior notice of any significant matters affecting the land under their jurisdiction within the county.

4. Federal land management agencies should provide assistance to protect important resources within the county. Specific attention should be given to the Largomarsino petroglyph site.

5. Wild horses on public lands within the county should be managed at reasonable levels to be determined with public involvement. A viable wild horse population should be maintained where now in existence.

6. The Wild Horse and Burro Act should allow flexibility in adoption, management and disposal of wild horses on public lands.

7. Federal land parcels should be managed so as to assure preservation of native species.

8. Predator control programs should be managed so as to assure preservation of native species.

9. New agency regulations regarding land resources should not be adopted before being presented to county commissioners and the public for their advice and/or criticism.