

# CHAPTER 9

## Public Services & Facilities



## 9.1 Chapter Introduction

Planning for public services and facilities is necessary for the orderly and efficient development of the county and the services it provides. This element describes public services and facilities provided by Storey County and other entities in the county, and areas where improvements or extra planning may be needed. Specific goals, objectives, and polices to address those issues are contained in the conclusion of this chapter.

## 9.2 Discussion

A wide-range of public services and facilities are provided in Storey County including for:

- Roads, transportation, and pedestrian ways
- Water and wastewater systems
- Gas distribution systems
- Schools
- Library services
- Primary healthcare
- Neighborhood parks
- Reginal parks and special use facilities
- County staffing, services, and facilities
- Telecommunications facilities
- Flood mitigation
- Truckee-Carson Irrigation District Canal (Painted Rock) monitoring
- Public safety including fire, emergency services, and law enforcement
- Solid waste management

Most of these services are provided by Storey County, the Storey County Fire Protection District, and the Storey County School District. General improvement districts, homeowners associations, and non-profit organizations not related to the foregoing entities also provide related facilities and services where needed in the county.

A number of county departments and other agencies are responsible for providing public services and facilities and have developed planning and implementation documents to implement the element.

## 9.2.1 Municipal and private facilities and services

### Water systems

Municipal water and wastewater services are provided in Gold Hill, Virginia City, Lockwood, and McCarran. The Storey County Water System is the service provider for Gold Hill, Virginia City, and Silver City (Lyon County), while the Canyon General Improvement District and the Tahoe-Reno Industrial Center General Improvement District respectively provide water service to Lockwood and McCarran. Storey County's remaining communities are self-served by private wells and septic systems. The following discusses attributes and challenges of each system, and provides the number of customers, annual usage, capacity, and total annual water usage in each of the existing municipal systems.

#### *Gold Hill and Virginia City*

The Storey County Water System, operated and funded by Storey County pursuant to Nevada Revised Statute 354 (enterprise special revenue funds), is the municipal water service provider for Virginia City, Gold Hill, and Silver City (Lyon County). The utility obtains raw bulk water from the Marlette Hobart Water System, which is owned and managed by the State of Nevada, and treats and distributes it throughout its area of jurisdiction.

The Marlette Hobart Water System was constructed in the late 1870s and operates to this day similarly as it did over a century ago. Raw water is collected from Marlette Lake, Hobart Reservoir, and natural drainages along the east slope of the Carson Range and is conveyed to the Virginia Range east of Washoe Valley through an inverted syphon. The syphon runs through the base of Washoe Valley to a location near Ophir Summit on the Virginia Range. Water there is stored at Five Mile Reservoir and several holding tanks before it reaches the Storey County Water System treatment plant at the Divide near Gold Hill. Treated potable water is distributed by the Storey County Water System to residential and commercial users throughout each Comstock community. Water usage is metered and all users are billed a base rate plus amounts exceeding that rate.

Parts of the original 1870s water system had been damaged or have fallen into disrepair over the past century. However, significant rehabilitation and improvements were made to the Marlette Hobart Water System by the State of Nevada and the Storey County Water System by the county over the past decade. In 2013 and 2014, Storey County installed automated air-release valves along the east siphon and pipeline, and rehabilitated and added significant water holding capacity to Five Mile Reservoir and Divide Reservoir. Storey County is also working on engineering and environmental studies in order to replace sections of the pipeline from Lakeview Saddle in Washoe Valley to Five Mile Reservoir, and from that point to the water treatment plant at the Divide (Shamburger, 1969).

Water rights for the Marlette Hobart System are ordained by the Franktown Creek Decree (1960). The Storey County Water System contracts with the State of Nevada every 15 years to determine raw water allocations, costs, and other considerations that will apply to the local water purveyor (Contract between the State of Nevada and Storey County to Supply Raw Water from the Marlette Hobart Water System, 2002).

The existing purchase agreement permits the Storey County Water System to purchase up to 448 acre-feet of raw water from the Marlette Hobart Water System in 2015. The agreement sets forth incremental annual allotment increases to the purveyor each year until 2024, at which the allotment

is capped at 519 acre-feet. The Storey County Water System in 2015 used approximately 300 acre-feet of water, well below its allotted amount. At the high estimated capacity shown in Table 9.1, the system may be capable of serving approximately 700 additional residential units, if each unit were allotted two acre-feet water per year. This estimate, however, does not account for commercial and other non-residential uses to which the water may be allocated.

<b>Figure 9.2-1</b>			
<b>Virginia City Water System Population and Water Demand (2015)</b>			
<i>Users</i>	<i>Customers</i>	<i>Annual Usage</i>	<i>Capacity</i>
<b>Active Users</b>	837	95,436,118*	170,745,924 gal. (524 acre-ft.)
<b>Total build-out</b>	1,200	Variable	170,745,924 gal. (524 acre-ft.)
<b>Parcel Count</b>			
Virginia City		796 parcels	
Gold Hill		327 parcels	
<b>TOTAL</b>		1123 parcels	
<b>Potential Build-out Water Requirement</b>			
<i>Low Estimate</i>			
Virginia City		316,727,172 gal. (972 acre-ft.)	
Gold Hill		30,304,143 gal. (93 acre-ft.)	
<b>TOTAL</b>		347,031,315 gal. (1,065 acre-ft.)	
<i>High Estimate</i>			
Virginia City		367,559,928 gal. (1,128 acre-ft.)	
Gold Hill		74,619,879 gal. (229 acre-ft.)	
<b>TOTAL</b>		474,764,907 gal. (1,457 acre-ft.)	

\*Amount includes approximately 13,584,948 gallons of raw untreated water sold to Comstock Mining, LLC for processing and operations uses in 2015). Source: Storey County Public Works Department, 2015; Franktown Decree, 1960



**Figure 9.2-2:** Marlette Lake (left) and Hobart Reservoir (right) are two of the three principal sources of water feeding the Marlette Hobart Water System. Remaining water, and sometimes a majority of water serving the system comes from Franktown Creek and its nearby springs along the east slope of the Carson Range. Source: (left) Storey County Planning Department, 2015; (right) Carson Water Subconservancy District, 2014.



Figure 9.2-3 Marlette-Hobart Water System Map. Source: Farr West Engineering, 2016

***Lockwood and Mustang***

The Canyon General Improvement District is the water service provider for Lockwood. The district owns and maintains the municipal water system which includes four wells, three water tanks, and a water distribution and metering system that covers the entire developed area of Lockwood. The purveyor also has jurisdiction throughout the adjacent Mustang area; however, there is no general improvement district water infrastructure in place for that area at this time. Expansion of infrastructure and service to Mustang is likely to occur in the near future as commercial and industrial development occurs in that area.

Water provided by the Canyon General Improvement District is metered and each user is billed a base rate plus amounts exceeding that rate. The district has rights to approximately 174 acre-feet of groundwater to serve its area of jurisdiction. Estimates suggest that the water system at full capacity may support approximately 350 additional residential units with each allocated 0.5 acre-feet per year. This estimate, however, does not account for commercial and other non-residential uses that consume higher rates of water and to which water may be allocated.

<b>Figure 9.2-4</b>			
<b>Canyon GID Population and Water Demand</b>			
<i>Users</i>	<i>Customers</i>	<i>Annual Usage</i>	<i>Capacity</i>
<b>Active Users</b>	542	56,800,000 gal.	113,600,000 gal. (174 acre-ft.)
<b>Parcel Count</b>			
Residential parcels		512 parcels	
Non-residential/commercial parcels		30 parcels	
<b>TOTAL</b>		542 parcels	
<b>Potential Build-Out Water Requirement</b>			
<i>Low Estimate</i>			
<b>TOTAL</b>		56,800,000 gal. (174 acre-ft.)	
<i>High Estimate</i>			
<b>TOTAL</b>		100,000,000 gal. (306 acre-ft.)	

Source: Canyon General Improvement District, 2015

***McCarran***

The Tahoe-Reno Industrial Center General Improvement District is the water service provider for McCarran and the Tahoe-Reno Industrial Center. The district owns and maintains the municipal water system which includes three wells, six million gallons of storage tank capacity, and a water distribution and metering system that covers most of McCarran and all of the Tahoe-Reno Industrial Center.

Water provided by the district is metered and each user is billed a base rate plus amounts exceeding that rate. The district has rights to approximately 5,300 acre-feet of ground water to serve its area of jurisdiction. Three additional wells are being developed and are expected to be online in 2016. The system also utilizes treated secondary effluent and 1,800 acre-feet of allotted surface water from the Truckee River for industrial applications, landscape irrigation, and other non-potable uses.

The period of potential build-out of the district water system is difficult to estimate because the service area is reserved exclusively for build-to-suit industrial and commercial users, each with different and unpredictable water needs. However, the district carefully manages its issuance of will-serve letters according to its allotted water rights and estimated demands of prospective users.

<b>Figure 9.2-5</b>			
<b>TRI-GID Users and Water Demand</b>			
<i>Users</i>	<i>Customers</i>	<i>Annual Usage</i>	<i>Capacity</i>
<b>Active Users</b>	130	293,265,900 gal.	521,361,600 gal. (1,600 acre-ft.)
<b>Total build-out</b>	Variable	Variable	Variable

Note: Numbers shown are for potable water systems. Non-potable water systems that will serve industrial processing are under construction. Total build-out and capacity are dependent on future economic and other expansion in a build-to-suit environment. *Source: TRI General Improvement District, 2015*

### ***Mark Twain and the Highlands***

Water availability is the foremost concern in the Highlands and the Mark Twain Estates in Mark Twain. Residents in these communities obtain water via private domestic wells. Many of these wells oftentimes produce unreliable or inadequate flows or iron-rich water requiring costly filtration treatment. Wells in these communities range from approximately 200 to 1,700 feet in depth, and many wells have required deepening one or more times over the past decade. In 2015, there were 684 domestic wells in the Highlands and 338 in the Mark Twain Estates. There are approximately 1,363 vacant parcels in the Highlands and 36 in the Mark Twain Estates, each of which under existing conditions will be served by private domestic well when developed.

A hydrological study should be conducted in both communities to determine water availability until the point of anticipated build-out. The findings and recommendations from the studies should be used to develop a comprehensive plan for both communities that will guide local residents and community leaders in remedying the situation. The plan should consider the benefits and limitations of forming a general improvement district in both communities to acquire water and develop local infrastructure to manage its distribution. The plan should also consider other preventative measures including sharing services with outside jurisdictions, reducing housing density through regulation and incentives, and providing for transfer of development rights to parts of the county where population growth may be more appropriate.

### **Wastewater systems**

Municipal wastewater services are provided in Gold Hill, Virginia City, Lockwood, and McCarran. The Storey County Water System provides these services to Gold Hill and Virginia City, while the Canyon General Improvement District and the Tahoe-Reno Industrial Center General Improvement District respectively serve Lockwood and McCarran. Storey County's remaining communities are self-served by private wells and septic systems.

The outlook for municipal wastewater capacity in the future is positive. In 2015, the U.S. Department of Agriculture Rural Development program awarded the Storey County Water System approximately \$20 million toward the planned comprehensive rehabilitation and expansion of the Gold Hill and Virginia City wastewater treatment and collection system. For Lockwood and McCarran, the two

general improvement district wastewater systems have significant capacity to meet existing and anticipated future demands. The Tahoe-Reno Industrial Center General Improvement District plans to double its capacity by 2017 in preparation for an influx of potential new businesses at the industrial center.

Septic systems throughout the county appear to adequately and safely serve the communities in which they are located. There are no known areas where septic system densities or groundwater leaching from septic systems exceed Nevada Division of Environmental Protection standards. However, the county should continue to monitor groundwater quality data provided by the NDEP in order to prepare for corrective action that is needed. Corrective action alternatives to be considered include engineered private septic systems or the development of community sewer systems to which users in affected areas would be required to connect.

<b>Figure 9.2-6</b>			
<b>Users and Wastewater Demand</b>			
<b>Virginia City and Gold Hill (Virginia City Water System)</b>			
<i>Users</i>	<i>Customers</i>	<i>Annual Usage</i>	<i>Capacity (year)</i>
<b>Active Users</b>	604	26,795,400 gal.	73,000,000 gal.
<b>Total build-out</b>	Variable	Variable	73,000,000 gal.
<b>Lockwood (Canyon GID)</b>			
<i>Users</i>	<i>Customers</i>	<i>Annual Usage</i>	<i>Capacity (year)</i>
<b>Active Users</b>	542	20,000,000 gal.	35,000,000 gal.*
<b>Total build-out</b>	Variable	Variable	40,000,000 gal.*
<b>McCarran (TRI-GID)</b>			
<i>Users</i>	<i>Customers</i>	<i>Annual Usage</i>	<i>Capacity (year)</i>
<b>Active Users</b>	90	350,000 gpd.	1,200,000 gpd.
<b>Total build-out**</b>	350	1,200,000 gpd.	1,200,000 gpd.

\*The Canyon GID system has a capacity of 35,000,000 gallons with a total expansion build-out capacity of 40,000,000 gallons. \*\*Variable conditions subject to changes in a build-to-suit environment.

Sources: Storey County Public Works, 2015; Canyon General Improvement District, 2015; TRI General Improvement District, 2015

### **Gas transmission and distribution systems**

There are no permanent public utility gas systems in Storey County, except for within portions of McCarran where natural gas is provided by NV Energy via the Tuscarora gas transmission line. In Lockwood, NV Energy distributes and meters liquid natural gas to Rainbow Bend residents from a consolidated tank near the subdivision in Lockwood. A similar but separate system is used to serve Lockwood residents outside of Rainbow Bend, except that system distributes liquid propane gas from twelve local tanks maintained by a private vendor under contract with the Canyon General Improvement District. There are no other local gas utility systems in the county. Residents and businesses in Virginia City, Gold Hill, Highlands, Mark Twain, and other areas purchase truck-delivered propane, heating oil, and other fuels from area vendors.

Residents and businesses in the county have asked county officials to study the costs, benefits, other factors determining the feasibility of building infrastructure throughout the county from which natural gas regulated by the Public Utilities Commission may be transmitted and distributed. A preliminary study conducted by the county in 2015 found that the cost of installing needed transmission to the Comstock may cause the price of the utility to exceed the current cost of truck-delivered private-vendor propane gas. However, the study was not exhaustive and it did not include the Highlands, Mark Twain, or other communities outside of the Comstock. The potential for future natural gas transmission and distribution, especially in the Mark Twain Estates which is located in close proximity to the Southwest Gas distribution system in Dayton, should be considered.

### **Electric utilities**

#### *Electric transmission and distribution systems*

NV Energy is the sole electric utility provider in Storey County and much of Northern Nevada. The company provides electric service to much of northern Nevada (see Figure 9.1) and California from its Frank A. Tracy Generating Station complex at McCarran. This generating station produces up to 885 Megawatts of power – enough electricity to serve more than a half million households – and it uses multi-technology, clean-burning natural gas to run its power generators. Figure 8.2 illustrates existing above-ground electric utility transmission lines in Storey County.

#### *Aboveground utility corridors*

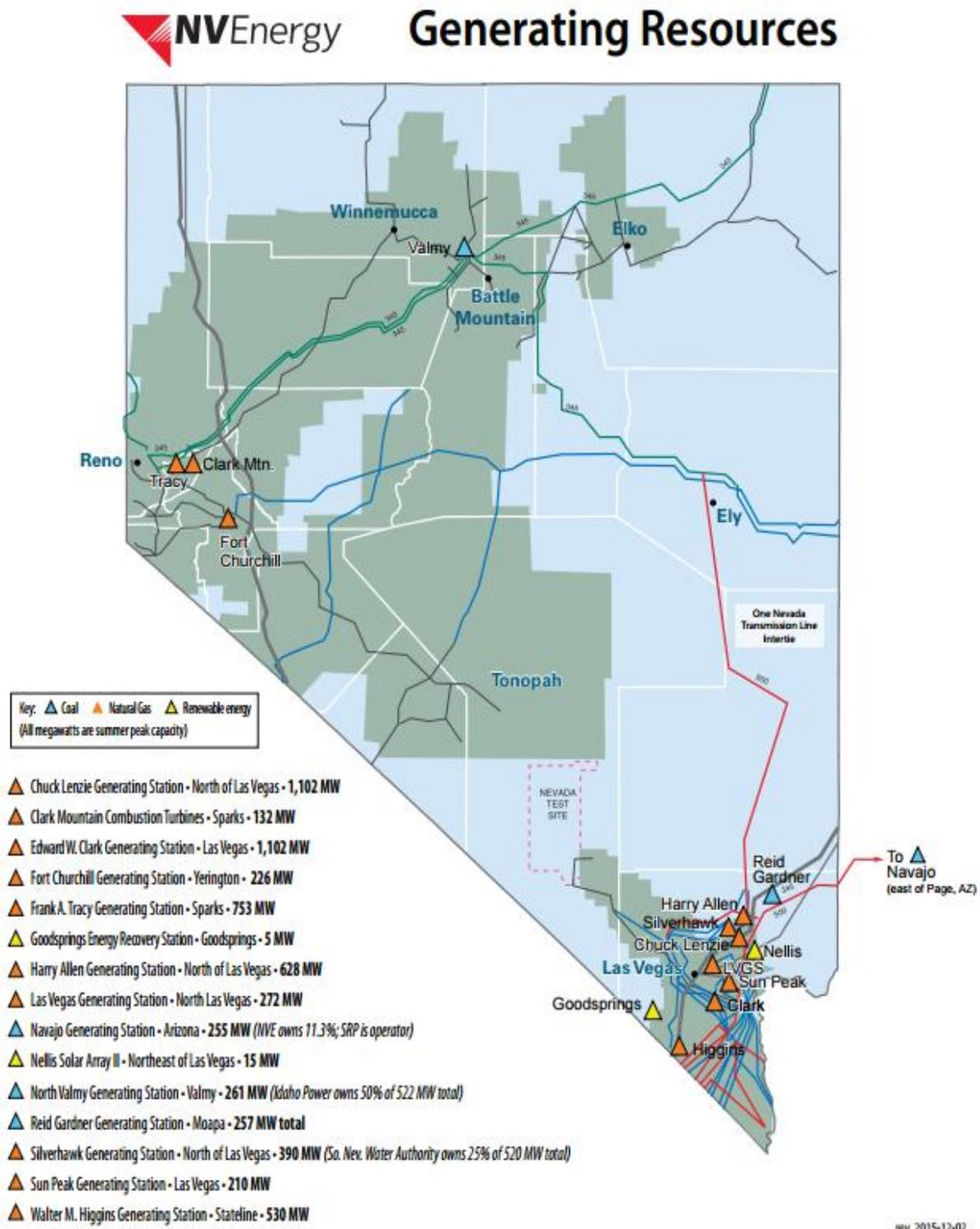
Nevada Revised Statute 278.0103 defines an “aboveground utility” as an electric transmission line which is designed to operate at 200 kilovolts or more and which has been approved for construction after October 1, 1991, by the state and federal government or a governing body.” Nevada Revised Statute 278.165 requires each county to adopt an above-ground utility plan that must: (a) provide a process for the designation of corridors for the construction of above-ground utility projects; (b) be consistent with plans prepared by the Nevada State Office of Energy; (c) ensure continuity of transmission corridors, are consistent with above-ground utility plans of adjacent jurisdictions; and (d) be consistent with the Bureau of Land Management’s resource management plan.

Storey County adopts, as part of this master plan, the maps on file with the Nevada State Office of Energy and the Bureau of Land Management depicting corridors for aboveground electric transmission lines as presently depicted and as may be amended. Figure 9.2-9 demonstrates both the Nevada Office of Energy and the U.S. Bureau of Land Management various recognized corridor, but those listed as over 200 kV will need to be verified through the Office of Energy, the U.S. Bureau of Land Management, and Storey County Planning Department. Transmission lines under 200kV, or not recognized by the Nevada Office



**Figure 9.2-7:** Frank A. Tracy Generating Station complex at McCarran, Storey County, Nevada. *Source: NV Energy, 2016*

of Energy or the U.S. Bureau of Land Management, as applicable, are required to follow the county special use permit process in Storey County Code Title 17 Zoning. The width of the corridor may vary across U.S. Bureau of Land Management districts or regional management plans so verification of the easement width may be required. As required by Nevada Revised Statute 278.160, and upon request from a developer of an aboveground utility project, amendments may be proposed to create, amend, or delete utility corridors as designated in this section.



**Figure 9.2-8:** NV Energy serves a 45,592 square-mile service territory that stretches north to south from Elko to Laughlin and provides a wide-range of energy services and products serving more than 2.4 million citizens and state tourist populations exceeding 40 million annually. (Source: NV Energy, 2016)

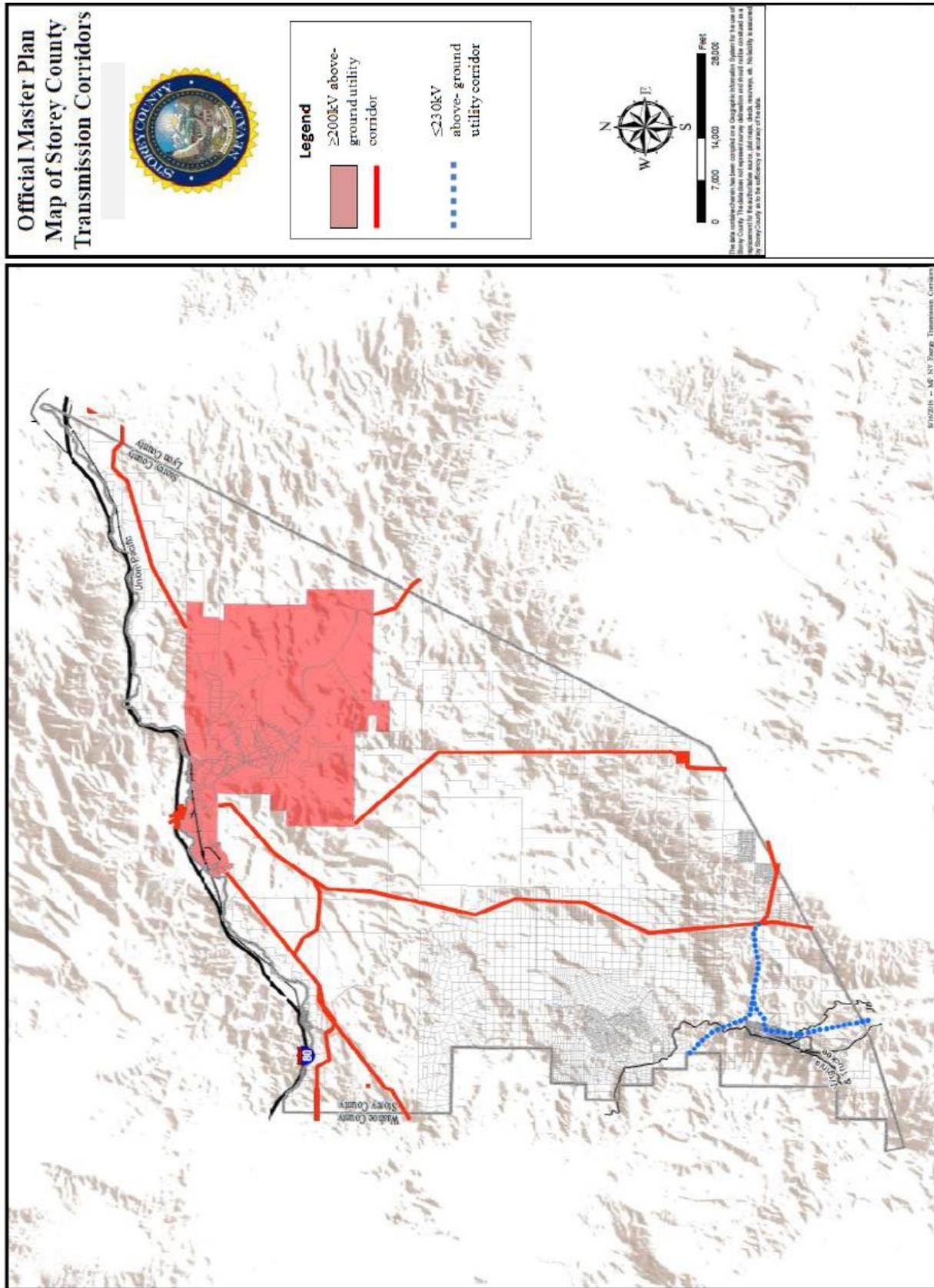


Figure 9.2-9: Aboveground Utility Corridors in Storey County

## Schools

The Storey County School District provides kindergarten through 12th grade education services throughout all of Storey County. There are currently no private or charter schools in the county. Kindergarten through 5th grade students in Gold Hill, Virginia City, the Highlands, and Mark Twain attend Hugh Gallagher Elementary in Virginia City, and primary grade students in the county's north communities, including Lockwood and Painted Rock, attend Hillside Elementary located in Lockwood. All secondary grade students attend Virginia City Middle School and Virginia City High School, both located in Virginia City.

In 2013, the school district had 415 students. The following enrollment was found this year for each school: Virginia City High School, 132; Virginia City Middle School, 92; Hugh Gallagher Elementary School, 139; and Hillside Elementary School, 52. Overall school enrollment has declined significantly between 2003 and 2013.

	<i>2003-04</i>	<i>2004-05</i>	<i>2005-06</i>	<i>2006-07</i>	<i>2011-12</i>	<i>2012-13</i>	<i>Percent Change 03/04 – 12/13</i>
District	468	478	450	454	408	415	-11.3
VCHS	137	152	150	155	133	132	-3.6
VCMS	122	118	114	117	93	92	-24.6
HGES	143	140	127	123	131	139	-2.8
HES	66	68	59	59	51	52	-21.2

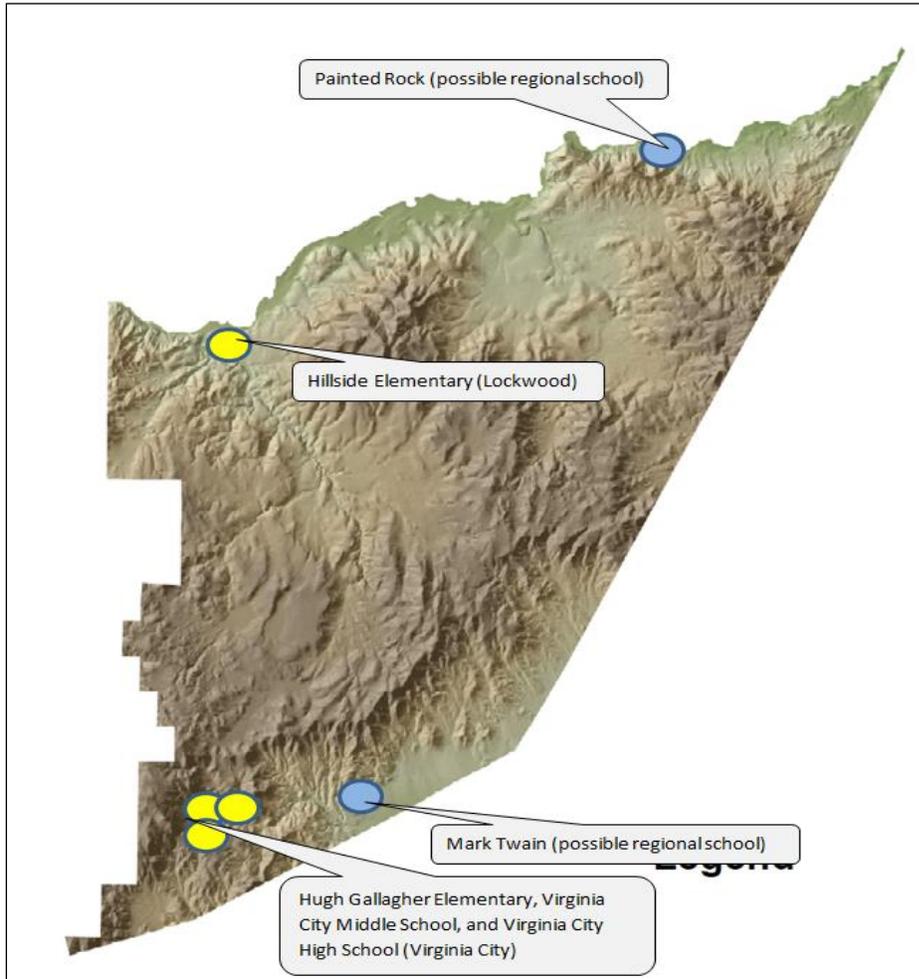
*Source: Storey County School District, 2013*

The school-aged population in Storey County has trended downward over the past two decades. The trend is consistent for each school-year, and across primary and secondary grades. Between 1990 and 2013, the percentage of school-age children to overall county population decreased 27 percent while 55 years-old and above populations increased over 100 percent (see Chapter 5 Population). This pattern under the existing conditions in the county is expected to continue into the foreseeable future. However, influencing social and economic factors discussed in Chapter 5 Population, including continued economic growth at McCarran and the potential for residential and mixed-use development at Painted Rock, may significantly influence and potentially reverse this trend.

Storey County School District officials reported in 2015 that existing schools appear to have adequate capacity to meet current student population needs. The population trends discussed in Chapter 5 Population also suggests that its existing facilities may be adequate to serve population demands into the foreseeable future.

However, the county and school district discussed the potential need for a K-12 school serving the county's northern communities at such time when significant population growth in that area occurs. This master plan recognizes that such a public school in Painted Rock may also become the principal school serving the county's northern communities, and that vocational education and possibly post-secondary education services may also be provided at the future facility. Chapter 4 Land Use also briefly discusses potential interest in constructing a secondary and vocational education school in the Mark Twain area that would serve Storey County and the immediate northern Nevada region.

County and school officials should continue to collaborate and develop specific plans for addressing potential growth-based education needs in the county, as well as the potential for regional vocational and post-secondary learning, including that which may inter-related to high-tech and other commercial uses in the county's industrial centers.



**Figure 9.2-11: Existing and potential schools.** The image shows existing and potential school sites in Storey County. New school sites shown in blue will be largely driven by growth in their respective areas and/or efforts to provide regional education opportunities for Storey County and its neighboring jurisdictions.

**Library services**

In 2013, Storey County and the Community Chest, Inc., a local non-profit community services organization, entered into an inter-local agreement to fund and provide library, internet access, and other access to information to residents across the county. Under this agreement, the non-profit organization houses the county's base library at its community center in Virginia City and rotates book inventory and other resource tools to various locations in the county, including the Lockwood Senior Center and Mark Twain Community Center. The library is funded together under the agreement by Storey County and the Community Chest, Inc.

**Primary healthcare**

Storey County and the Community Chest, Inc., a local non-profit community services organization, entered into an inter-local agreement to fund and provide primary healthcare services to residents across the county. Through Nevada Health Centers, a Federally Qualified Community Health Center, the Community Chest provides family-care, preventative health and wellness, child checkups, sick visits, sports physicals, immunizations and health management, and other primary care services regardless of patients' ability to pay. These primary care services are extended to Lockwood residents via scheduled home visits. Dental and mammogram services are also provided to all county residents via the Ronald McDonald mobile care program.

**Neighborhood parks**

Storey County maintains a neighborhood park in each of its communities. They include Miner's Park in Virginia City, the Virginia City Highlands Park in the Highlands, Peri Ranch Park in Lockwood, and the Mark Twain Park in Mark Twain. The parks in Virginia City, the Highlands, and Lockwood each serve roughly 1,200 residents, and the park in Mark Twain serves roughly 550 residents.

Storey County and the Storey County School District through inter-local agreements share grounds and responsibilities for park and recreation facilities in Lockwood and Virginia City. In Lockwood, Hillside Elementary School uses Peri Ranch Park for physical education and extra-curricular activities during its hours of operation. In Virginia City, the school district developed a baseball field on grounds adjacent to Miner's Park which are owned by the county and leased by the school district. To the mutual benefit of the county and school district, some non-school-related uses of the baseball field are allowed.

Funds for the construction of neighborhood parks are provide for in Storey County Code requiring park construction tax revenue to be derived from an assessment on new residential units built in the county. The rate of tax is \$200 per residential dwelling unit or mobile home lot. Nevada Revised Statute 278 mandates this revenue to be dedicated to the acquisition and construction of new parks. Maintenance and management of the parks is provided by the Public Works Department from other revenue funds.

**Regional parks and special use facilities**

Regional parks are different than community parks. Their purpose is to conserve and enhance open space and unique nature features, such as riverfront, stream corridors, and other riparian areas; wetlands and water bodies; cultural and historic resources sites; trail corridors; other significant natural environments. Regional parks are usually large in area (sometimes exceeding 100 acres) and provide for a wide-range of public interests, including open space areas and special facilities providing for outdoor shelter and assembly, including for individual and group camping and picnicking, and other recreation. Each regional park may be unique in having its own particular facilities not necessarily found in other regional parks.

Special use facilities are also provided for public benefit. These facilities typically serve a particular activity or group of activities, such as tennis courts, swimming pools, shooting ranges, golf courses, sports fields, and other specific types of activities. A regional trail may also be considered a special use facility. A regional trail is defined as a linear park established for the recreational activity of walking, bicycling, horseback riding, and other such uses.

Storey County provides neighborhood parks in each of its communities; however, there are presently no regional parks in the county. The county has engaged in cooperation with outside agencies and non-profit organizations that have or are in the process of developing regional parklike facilities. Projects and their managing entities include the Tahoe-Pyramid Bikeway which is constructing a regional bicycle path from Verdi to Pyramid Lake; and the Nature Conservancy which has restored riparian areas, complete with passive recreation areas, along the Truckee River.

The county does, however, provide and maintain special use facilities to its residents and visitors, and it is actively engaged in collaborative efforts with various outside entities in planning and providing for facilities to meet current and anticipated demands. Special use facilities include the following:

- Visitors' picnicking area and restrooms located at the north end of "C" Street.
- Coming Black & Howell Pocket-Plaza located at the corner of "C" and Taylor Streets.
- Storey County community swimming pool.
- Fourth Ward School Museum; Engine Company Number 1 Fireman's Museum; Saint Mary's Art Center (former Saint Mary's Hospital) Artists' Retreat;
- Virginia City and Lockwood Senior Centers; Highlands Community Center (shared with Fire Station 72); Mark Twain Community Center; and Gold Hill Train Depot multi-purpose facility.
- It should be noted that Piper's Opera House and Miner's Park Baseball Field are special purpose facilities provided with collaborative involvement between Storey County and the Storey County School District.



**Figure 9.2-12:** The sharing of Louise Peri Park between Lockwood residents and Hillside Elementary School exemplifies how county facilities are utilized to their full potential. *Source: Storey County Planning Department, 2015*

### **Staffing levels and public services**

Staffing in nearly all Storey County offices was reduced during the downturn of the economy between 2007 and 2010. Public services since then have been adversely impacted, and the county's remaining employees have assumed additional responsibilities in an endeavor to maintain core public services. The region since the recession, however, has experienced significant economic growth and a resurgence of population and associated activity.

The county and its affiliates will need to make adjustments to provide an appropriate level of staff to meet the needs of residents, businesses, and stakeholders. The county, however, should exercising caution and restraint in its staffing plan and opt for job sharing, flexible position arrangements, use of contractors, and building inter-local partnerships with neighboring jurisdictions in its pursuit to meet public services demands.

### **Public Works maintenance facilities**

Public Works materials, equipment, and machinery are stored and dispatched from the Storey County Public Works facilities in in Virginia City and McCarran. The Virginia City facility serves all of central and southern Storey County including the Highlands, Mark Twain, Virginia City, Gold Hill, and the areas between. Lockwood, McCarran, and Painted Rock are serviced from the maintenance facility located within the McCarran Government Complex at McCarran. Materials, equipment, and personnel are dispatch from both facilities for a myriad of Public Works projects, routine maintenance, and infrastructure emergencies pertaining to roads, water and sewer utilities, buildings and grounds, and snow removal. Full-serve vehicle and equipment maintenance and repair are provided exclusively at the Virginia City facility.

The existing maintenance facilities meet Public Works needs across the county. New facilities or upgrades to existing facilities should be considered and prioritized in accordance with land use pattern changes and growth in each community. Changes to the use of land do not necessarily mean

that the number of maintenance facilities must be increased to ensure adequate services; however, it may be necessary to add, expand, or relocate them accordingly. Applications involving substantial amendments to or assignments of land use or zoning designations should require an evaluation of Public Works facility needs to ensure that such facilities remain adequate.

### **County administrative facilities**

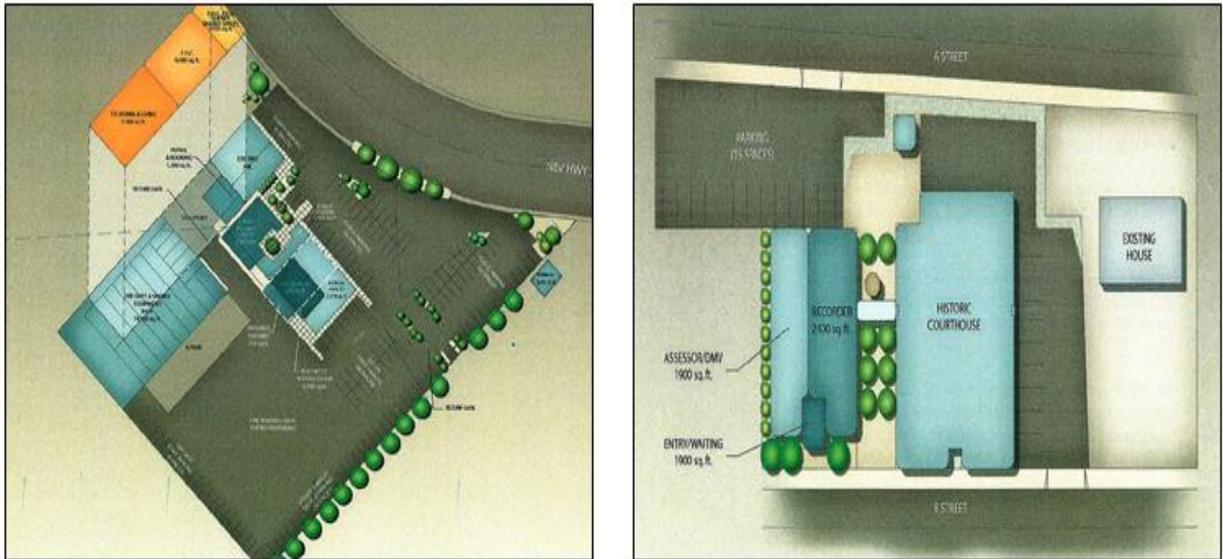
Most of the county's general administrative offices reside at the Storey County Courthouse and several other buildings in Virginia City. The county also maintains satellite offices within the McCarran Government Complex at McCarran.

Unprecedented industrial and commercial growth at McCarran, and increased demand for administrative services across the county, has caused growth and the need for increased efficiency and level of service to the public. The courthouse and other county offices are at full-capacity, are not capable of accommodating much if any additional growth, and do not ideally facilitate efficient customer service.

Consolidating administrative offices into one or two centralized facilities is considered desirable toward improving efficiency and department coordination, and enhancing service to residents and businesses. Repurposing existing courthouse offices; adding space adjacent to the courthouse and acquiring property necessary to accommodate growth; developing a county administrative complex at the south side of Virginia City along State Route 341 (current site of the county jail); and repurposing other county-owned buildings are potential options for increasing office space and improving service efficiency and accessibility for the customer.

Providing public services to residential and commercial customers at the northern parts of the county, including the Tahoe-Reno Industrial Center, will become increasingly important as growth and economic activity occur in that area. The McCarran Government Complex was designed to flexibly accommodate county administrative services in addition to Public Works, Fire District and Emergency Services, and law-enforcement needs. Relocating county administrative offices and functions principally to McCarran is not likely, nor appropriate. However, the facility is expected to become a significant secondary access point for county administrative, judicial, and other government services for residents and businesses throughout northern Storey County.

When assessing existing and future capacity and functionality of county administrative facilities and planning for building capital improvement plans, county officials should also consider collaborating with the Storey County School District to best utilize all available resources.



**Figure 9.2-13:** A study was conducted in 2002 assessing the need and feasibility of expanding county administrative offices. The potential two options illustrated above include adding an additional annex building immediately south of the existing Courthouse, and expanding onto the existing jail facility on State Route 341. *Source: Construction, 2009*

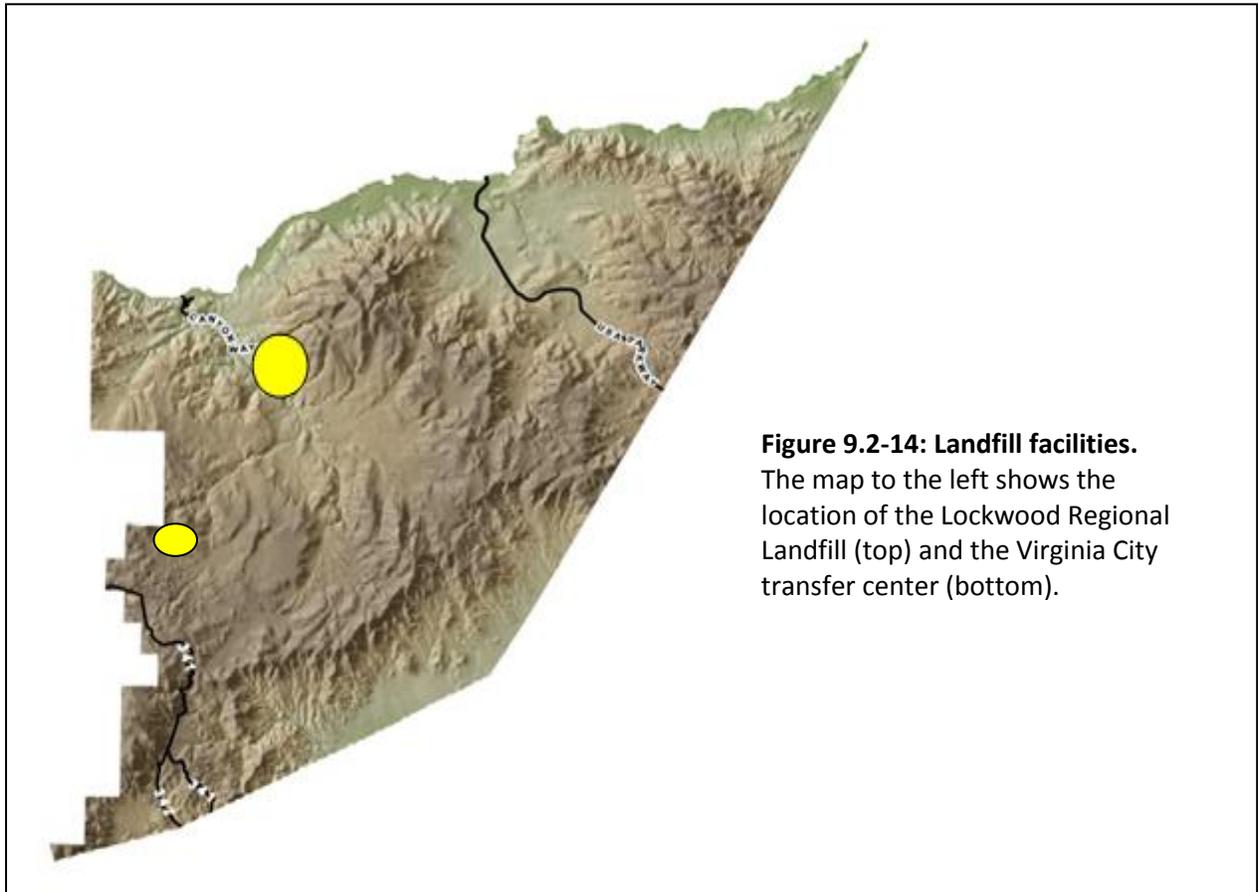


**McCarran Government Complex, McCarran.** *(Source: Storey County Planning Department, 2014)*

**Solid waste management**

The Storey County Solid Waste Management Plan was updated in 2011 pursuant to Nevada Administrative Code 444.658 which mandates that each municipality in the state submit a solid waste plan for approval by the Nevada Division of Environmental Protection. The 2011 plan serves as an update to the 1991 plan and provides for a systematic approach to the planning, reviewing, permitting, operation, management, and maintenance of solid wastes and solid waste management facilities in Storey County.

In addition to federal, state, and local regulations, the franchise agreement between Storey County and Waste Management, Inc., owner and operator of the Lockwood Regional Landfill at the north end of the county, weighs heavily on how solid wastes and disposal facilities are managed in the county. The solid waste plan, therefore, provides in-depth discussion and analyses of the franchise agreement in addition to other applicable permitting, entitlements, and regulations.



**Figure 9.2-14: Landfill facilities.**  
The map to the left shows the location of the Lockwood Regional Landfill (top) and the Virginia City transfer center (bottom).

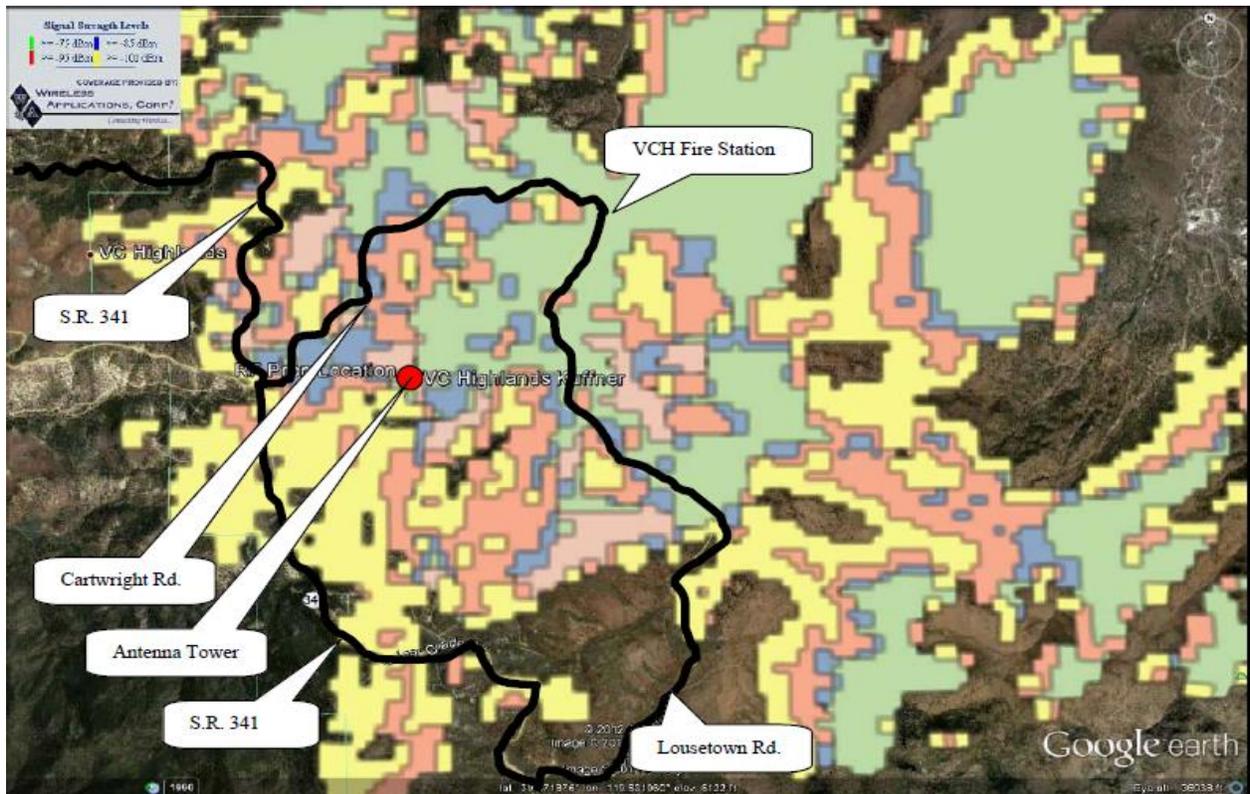
**Telecommunications Facilities**

Each community in Storey County is provided data and voice data telecommunications access by various private-sector service carriers. However, reliable and affordable access to these services is limited in many parts of the county, especially in the Highlands where a majority of the area includes no land-line or wireless telephone or communications infrastructure.

For more than a decade, residents in the Highlands, as well as Virginia City and Gold Hill, expressed their need and desire for high-speed and reliable wireless voice and data services. In 2012, the county commission with recommendation by the planning commission approved a special use permit application for a private company to install and operate an 80' wireless communications "mono-pine" tower in the Highlands at the end of Saddleback Road. In 2015, the tower was constructed and its owner informed county officials that several wireless service carriers expressed interest in signing contracts to locate on the tower.

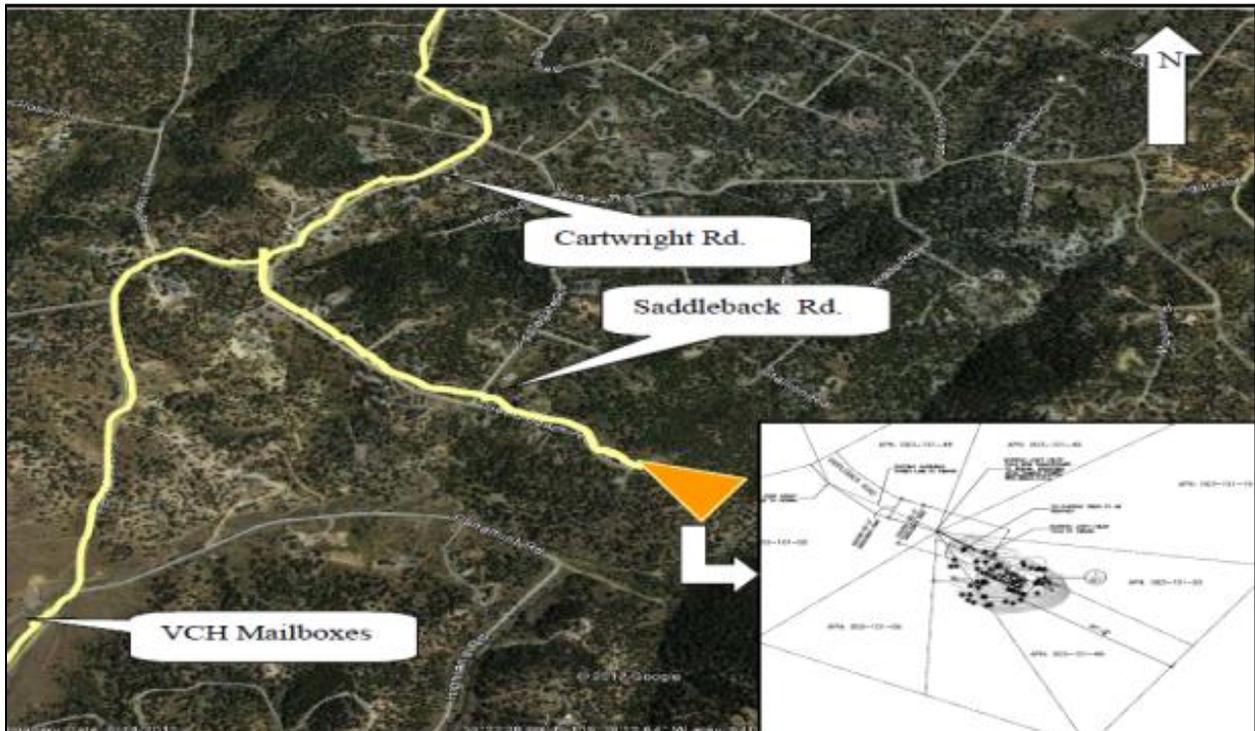
Even with carrier service located on the tower, significant areas within the Highlands will remain shadowed from its service as a result of local topography. The potential for a second proposed commercial communications facility serving areas shadowed by local topography should be considered if made to conform to area aesthetic character.

When reviewing future applications for commercial wireless communications facilities, planning staff and county leadership should recognize rules under the Federal Telecommunications Act that allows the local jurisdiction to require an applicant to demonstrate a good-faith effort to identify and evaluate the least intrusive alternatives, including site placement, tower design, and antenna placement, for providing service to rural areas (*Pittsburgh Ltd. Partnership v. Penn Tp.*, 196 F.3d 469, 480 (3d Cir. 1999)). The federal regulations also allow for local denial of new proposed facilities when capacity for additional service carriers remains on existing approved facilities.



**Figure 9.2-15: Wireless communications in the Highlands.**

The image portrays cell tower location and expected signal strength. (Source: Storey County Planning Department, Development Application No. 2012-014, Vista Towers, LLC., 2012)



**Flood Mitigation***Mark Twain Flood Mitigation*

The Mark Twain Estates watershed area has been identified as one of the more flood prone areas in the county. This is due to the grid pattern type development built with no consideration to local alluvial topography or floodways. Local flooding conditions are exacerbated by limited capacity of existing infrastructure and limited area vegetation.

The Mark Twain Estates basin has numerous paved residential roads which provide access to just over 400 homes. Area residents experience reoccurring issues with flooding at roadways crossing as well as property damage from area ditches that become overwhelmed during storm events.

A comprehensive county-wide flood control study was conducted in 2011 by Farr West Engineering. The study was initiated by county officials in order to establish valid findings and recommendations for improving flood conditions in each of the county's communities, including the Mark Twain Estates.

The report includes findings and recommendations related to flooding and flood mitigation in the Mark Twain Estates and its immediate surrounding area. The report recommends specific improvements to area ditches and culverts to reduce flooding damage from minor storms. It also recommends major regional stormwater detention basins, particularly along the north slope of the community, that may significantly lessen flooding impacts and reduce the level of downstream infrastructure needed to manage flows and sediment load (Farr West Engineering, Comprehensive Storey County Flood Control Plan, 2011, pp. 78-85).

Challenges to improving capacity and alignment of area drainage ways, culverts, and detention basins include construction costs, acquiring needed land, and negotiating easements with existing land owners.

Following two major storm events in the summer of 2015, county officials initiated a concerted effort toward short- and long-term flood planning and infrastructure improvements in the Mark Twain Estates.

Working collaboratively with area residents to improve local drainage systems, including within county right-of-ways and on private properties if allowed by their respective owners, is a major component of the effort. County officials also continue to explore means by which vacant property to the north of the community may be utilized for alluvial stormwater detention systems.

In addition to discussing findings and recommendations for the Mark Twain Estates, the Farr West Engineering report includes brief discussion and findings related to Six Mile Canyon Road which connects Mark Twain and Virginia City. The road is described as containing significantly undersized drainage ways and culverts along its entire alignment, thus causing frequent instability and washouts.

Similar to its recommendations for the Mark Twain Estates, the report recommends significant shoulder and culvert improvements along the roadway as well as the construction of upstream detention basins to reduce flows in the canyon. Improvements to the existing bridge are cited as needed.

*Lockwood Flood Mitigation*

Portions of Lockwood and Rainbow Bend are located in the Federal Emergency Management Agency designated flood zone. Frequent flooding in this area occurs from the Truckee River during winter months and late spring when abnormally high temperatures and heavy rain in the watershed cause accelerated snowmelt. Additionally, during high stage flooding of the Truckee River, backwatering occurs at the Long Valley Creek outlet which impedes creek drainage into the Truckee River and exacerbates flooding in the adjacent community. There are two significant storm events recorded in Storey County, one in 1997 and the other in 2005, when extensive community flooding occurred along the banks of the Truckee River and Long Valley Creek.

A comprehensive county-wide flood control study was conducted in 2011 on behalf of Storey County by Farr West Engineering. The study was initiated by county officials in order to establish valid findings and recommendations for improving flood conditions in each of the county's communities, including Lockwood and Rainbow Bend.

The report includes findings and recommendations related to flooding and flood mitigation along Long Valley Creek and its terminus outlet into the Truckee River. The report recommends improvements to upstream culverts and bridges over the creek to improve its efficiency, and improvements to the creek's outlet point into the Truckee River that may lessen backwatering into the abutting residential community. The report also notes that stormwater flows in the area may be significantly lessened by developing detention basins upstream of Long Valley Creek.

The cost of developing needed infrastructure in the area remains the primary challenge to permanently resolving flooding along the banks and at the Truckee River and Long Valley Creek.

Regional contributors to flooding along the banks of the Truckee River throughout Storey County are also being reviewed by county officials. A joint effort between the cities of Reno and Sparks and Washoe County creating the Truckee River Flood Management Authority, and the U.S. Army Corps of Engineers, was organized to develop a long-term solution to Truckee River flooding in the Truckee Meadows upstream of Storey County.

While not a member of the Flood Management Authority, and while the project is not for the direct benefit of Storey County, county officials have served on its technical advisory committees and liaised between it and Lockwood residents to assure that impacts in Storey County, with special attention to Lockwood, are mitigated in an acceptable manner. As of 2015, potential mitigation alternative being considered for Lockwood and Rainbow Bend by the parties included:

- Elevating flood affected homes in Rainbow Bend above the Federal Emergency Management Agency base flood elevation;
- Installing floodwalls or raised levies between residences and the Truckee River; and
- Providing for provisional barriers that would be employed only during flood events.

The regional project only addresses flooding along the Truckee River. Long Valley Creek flooding is not part of the project, except as it may be affected by flooding at the creek's outlet.

The county should continue to seek funding and other resources to improve flooding conditions along Long Valley Creek, and it should also continue to work closely with the regional flood management authority to assure that impacts caused by its flood project in the Truckee Meadows are mitigated at no cost and to the satisfaction to Storey County and its residents and businesses. The county should also consider the benefits and limitations of working with private and public entities for upstream flood mitigation, including flood detention basins.

### Truckee-Carson Irrigation District Canal at Painted Rock

Built in 1932 by the United States Bureau of Reclamation, the Truckee-Carson Irrigation District Canal runs from the Truckee River diversion at Derby Dam to Newlands Project agricultural developments in Fallon. Portions of the canal are antiquated and run directly adjacent to residences in Painted Rock. Potential safety concerns have been expressed to the district by local residents and Storey County, particularly following the 2008 canal levy breach disaster in Fernley.

The district has been forthright with Storey County and federal regulators, and has remained proactive in addressing potential safety issues, such as by lining portions of the canal in Storey County near recently observed water seepage near a residence. County officials and area residents should remain watchful for signs of seepage along the canal and continue to communicate their observations and concerns to Storey County, the Truckee-Carson Irrigation District, and other appropriate authorities.



**Figure 9.2-16:**  
**Truckee-Carson Irrigation District Canal Adjacent to Residence.** The image illustrates a segment of the Truckee-Carson Irrigation District Canal next that was in 2014 lined with concrete after a minor leak had occurred.



**Figure 9.2-17:**  
**Derby Diversion Dam at Painted Rock:** Derby Dam was completed in 1905 and to this day diverts water from the Truckee River to the Truckee-Carson Irrigation District Canal to Lahontan Reservoir 32 miles to the south in Silver Springs. It continues to provide irrigation water for the Newlands Project that irrigates approximately 73,000 acres of cropland in the Lahontan Valley near Fallon. *Source: National Park Service U.S. Department of Interior. Bureau of Reclamation Historic Dams and Water Projects: Managing Water in the West, 2014*

**Public Safety*****Hazard mitigation***

Hazard mitigation is defined in 44 C.F.R. Section 206.4014 (2008) as “any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards”. As such, hazard mitigation is any work done to minimize the impacts of any type of hazard event before it occurs. It aims to reduce losses from future disasters. The implementation of mitigation actions, which include long-term strategies that may include planning, policy change, programs, projects, and other activities, is the end result of this process.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended by the Disaster Mitigation Act of 2000, provides the legal basis for state, tribal, and local governments to undertake risk-based approaches to reducing natural hazard risk through mitigation planning.

The plan addresses ways by which to access and organize resources, assess risks, develop strategies for mitigation, and monitor hazards for the following natural and human caused hazards.

**Natural Hazards**

- Avalanche
- Drought
- Earthquake
- Epidemic
- Expansive Soils
- Flash Flood
- Hail Storm
- Riverine Flood
- Severe Winter Storm
- Wildfire
- Wind

**Human-Caused Hazards**

- Dam Failure and Ditches
- Hazard Materials
- Mine Collapse
- Terrorism

Developing hazard mitigation plans also enables the participating jurisdictions to:

- Enhance education and awareness related to threats, hazards, and vulnerabilities;
- Build partnerships to address known threats, hazards, and vulnerabilities;
- Engage in long-term planning;
- Align risk reduction with the objectives of neighboring jurisdictions;
- Direct resources appropriately to address risk; and
- Communicate priorities and sources of funding.

The local jurisdictions are required to develop and adopt Federal Emergency Management Agency approved hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance, including funding for mitigation projects. Hazard mitigation planning is also an important element toward the county's participation in the National Flood Insurance Program. The Board of Storey County Commissioners adopted the local hazard mitigation plan in 2011 and, therefore, is in compliance with Section 409 of the Stafford Act and Section 322 of the Disaster Mitigation Act of 2000.

The jurisdictions must update their hazard mitigation plans and re-submit them to the Federal Emergency Management Agency for approval every five years in order to maintain eligibility for grants and other assistance. The federal agency offers planning grants that support local jurisdictions in developing and updating their plans. Storey County updated its hazard mitigation plan in 2015.

#### ***Fire protection, prevention, and emergency medical services***

In Storey County, fire protection and emergency medical services (EMS) are provided by the Storey County Fire Protection District (fire district).

The fire district is an all-risk fire and EMS agency that provides services through a combination of career and volunteer forces. The district answers approximately 2,000 calls for services annually to an area of approximately 262 square miles. The district serves a population of approximately 4,000 residents. The district also serves approximately 4,000 additional population including employees at the Tahoe-Reno Industrial Center that work in Storey County but live elsewhere. Station 75, located at McCarran, exclusively serves this subpopulation. Other impacts to call volunteers are heavily influenced by special events, regularly occurring tourism, and alternate access routes between Reno, Carson City, and Dayton. The largest of these factors is the approximately one million tourists visiting Virginia City and Gold Hill each year.

Mutual-aid agreements have been made with the Truckee Meadows Fire Protection District to provide seamless response along the Interstate 80 corridor between Storey and Washoe Counties. This is provided for in the north county as fire stations in Lockwood and McCarran are the closest resources to respond to incidents. Throughout the state and specifically the region, all parties have agreed to use the closest forces concept in emergency response. The agreement with Truckee Meadows Fire Protection District carries over to Geiger Grade (State Route 341 north of Virginia City) as well. In this area, Truckee Meadows and Storey County Fire Districts mutually respond to all incidents until the appropriate resources arrive to the incident.

Virginia City and Gold Hill have automatic aid agreements with the Central Lyon County Fire Protection District for aid. Run-cards indicating boundary drop are established, and each district blends resources on a regular basis to assure that the nearest responding unit attends to the subject. This agreement carries over to the Mark Twain area of Storey and Lyon Counties. This area has a true boundary drop and it is a seamless shared response to every incident which occurs.

There was a Storey County fire station on the Storey County side of Mark Twain which has been closed and converted into a community center. Resources from the former fire station were moved to Central Lyon County Fire Station 38 in Mark Twain. This consolidation has been vetted through the Insurance Services Organization with a zero change to the area's ISO Class 3 Rating. This agreement has proven to reduce operational costs, increase volunteer response and assure that citizens are getting the closest response possible to emergencies in Mark Twain regardless of the fire district responding.

In addition to local government agreements, including for regional EMS, regional ambulance

subscription, regional hazardous materials, and the Central Lyon and Storey technical rescue team agreements, there are state and federal agreements in place. These agreements allow for resources to move seamlessly amongst local, state and federal cooperators. The agreements were developed through the Nevada Department of Emergency Management, the Lake Tahoe Regional Fire Chiefs (thereby giving us direct access to resources from California), and the Sierra Front Wildfire Cooperators.

An important agreement to mention for the purposes of planning is the cost coverage of incidents agreement by and between the Storey County Fire Protection District and Nevada Division of Forestry. This agreement is funded through the fire district directly to the division. The contract has been termed the Wildland Fire Protection Program.

As a combination fire agency, the fire district provides a variety of services, including structural firefighting; wildland firefighting; technician-level rope rescue; hazardous material mitigation and response; technical-level vehicle extrication rescue; operations-level water rescue; basic, intermediate, and advanced life support and transport; internal training; regionalized external training; fire safety inspections; code enforcement; plans review; and public education and outreach.

### ***Response districts***

The district is subdivided into smaller response districts, providing for the closest unit to respond to requests for assistance. Each of these districts represents a different level of hazards and response need. Each response district is staffed full-time with career fire and EMS staff. Station 71 in Virginia City is also intermittently staffed with volunteer personnel. Storey County and Central Lyon Fire Protection Districts in 2013 entered into mutual agreement to unify service for the Mark Twain/Carson Plains region out of Central Lyon Fire Protection District Station 38 in Lyon County. Figure 9.1 illustrates the location of each response district.

### ***SCFD master plan***

The Storey County Fire Protection District is currently in the process updating their district master plan. It is recommended that the adopted plan be appended to this chapter when it is completed.

### ***30 foot clearance inspections***

In 2014 the fire district performed 30-foot wildland fire fuels clearance assessments in the Highlands, Mark Twain, and Painted Rock areas. These voluntary inspections inform residents of potential fire hazards and ways to minimize risk from wildland fires. Homeowners were advised during these inspections to clear fire-prone vegetation 30 feet from structures and ten feet from propane tanks, maintain addresses visibility from the street, and to maintain sufficient emergency vehicle access.

Medical conditions and other potential concerns of the residents during a potential evacuation were also noted during the visits. The information will be used to help the fire district identify priority need residents during an emergency evacuation.

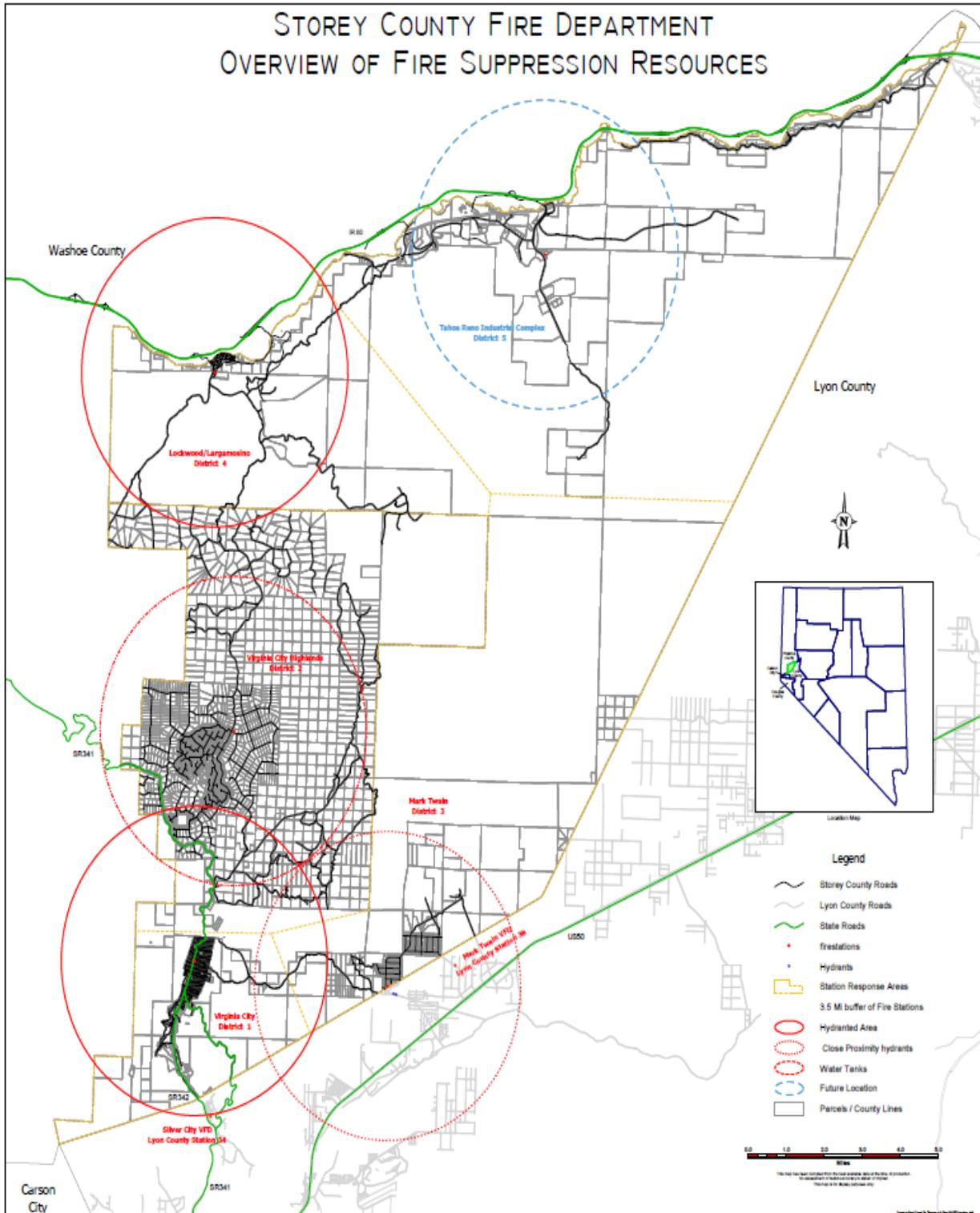
Property assessment findings and other conditions were entered into Computer Aided Design systems for future access by the fire district and communications department (dispatch 911) during emergencies. These programs provide public and fire personnel safer means to preserve life, property and the environment.

### ***Fuels reduction programs***

The fire district secured in 2013 and 2014 approximately \$3.2 million in funds from the federal government and Nevada Division of Forestry for the purpose of clearing fire fuels across the county.

The grant funds were used to remove hazardous fuels alongside State Route 341 Geiger Grade, certain roadside areas in the Highlands, and in Six Mile Canyon.

The fire district also maintains the “You-Call-We-Haul Program” which provides empty utility trailers to residents across the county who need assistance hauling away cleared vegetation. After the resident fills the trailer, the fire district at no-cost hauls the material away to an appropriate disposal site where it is burned or chipped into mulch. In 2014, nearly 80 utility trailer deliveries were made to residents across the county, resulting in significant fuels reduction in and around residences.



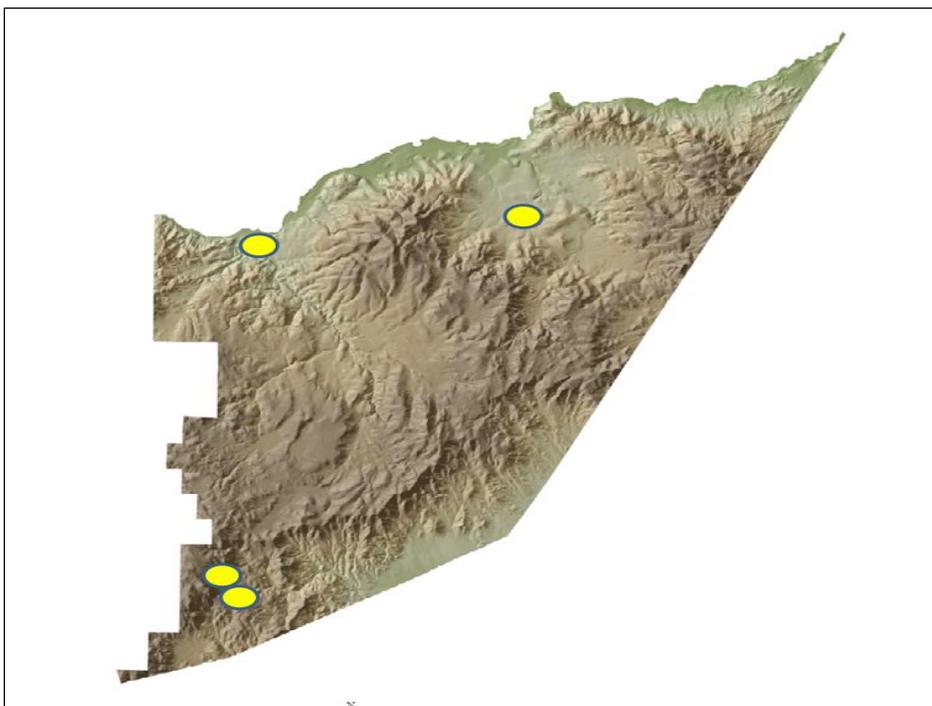
**Figure 9.2-18:** Each fire station generally serves a five-mile radius area as shown in this map.  
 Source: Storey County Fire Protection District, 2006

**Law enforcement**

The Storey County Sheriff's Office serves as the county's only law enforcement agency. The Sheriff's Office is divided into four divisions: Administration, Investigations, Patrol, and Jail. In 2015, the office employed three sergeants (including one acting chief investigator), 12 patrol deputies, four corrections officers (jailers), and four reserve deputies.

There are approximately 4.75 career officers per 1,000 residents in the county. The national average is 2.5 officers per 1,000 residents in urban areas, and 3.7 for jurisdictions under 10,000 in population (Federal Bureau of Investigation, 2011). The average response time for all calls of services is ten minutes. The office issues about 750 citations, responds to approximately 3,100 calls for services, and investigates about 81 traffic accidents per year. The Sheriff's Office also manages specialized services including search and rescue, school safety intervention, youth education programs, and senior citizen support services. Mutual-aid agreements are made with neighboring jurisdictions that provide the Sheriff's Office with Special Weapons and Tactics (SWAT), Crisis Negotiation, Bomb Squad, K-9, and other specialized services. The Sheriff's Office also serves as the county coroner under NRS and investigated ten death investigations between 2010 and 2015.

The main Sheriff's Office administration building is centrally located on "C" Street in Virginia City, and a Sheriff's administrative substation is located on Canyon Way in Lockwood. The county's only jail is located at 911 State Route 341 in Virginia City. Plans are underway to add an additional substation within the McCarran Government Complex at McCarran. The substation will initially house administrative facilities for patrol units in the industrial center. However, it is anticipated that the substation will include temporary holding cells in the foreseeable future. Figure 9.2 illustrates the location of Storey County Sheriff's Office facilities.



**Figure 9.2-19:**  
**Location of existing**  
**Sheriff's Office**  
**facilities**

**Dispatch and communications**

Dispatch service is provided by the Storey County Communications Department. The center provides full-time 24-7 dispatch service to the Storey County Fire Protection District, Emergency Management Department, Storey County Sheriff's Office, and numerous other non-direct service agencies. Center call statistics by year (calendar year) are as follows:

<b>Figure 9.2-20</b>		
<b>Emergency Dispatch Call Statistics 2013-2015</b>		
<i>Year</i>	<i>Related jurisdiction</i>	<i>Number of calls</i>
2015	Fire District	1,400
	Sheriff Office	13,700
2014	Fire District	1,320
	Sheriff's Office	12,200
2013	Fire District	1,260
	Sheriff's Office	12,700

Note: Numbers are approximate. *Source: Storey County Communications Department, 2013-2015*

**9.2.2 Regional approach to providing services**

The substantial growth in Storey County that has occurred over the past years has added strain to its public facilities and resources. County officials increasingly looked to regional partnerships with neighboring jurisdictions, federal and state agencies, and for-profit and non-profit entities to maintain the needed level of services for its residents and stakeholders. This approach has also been taken to improve economic development and other conditions in the county. The following services are being met through some level of inter-local cooperation:

- Fire protection and emergency medical services
- Fire protection and emergency medical services facilities use
- Public Works projects and equipment sharing
- Parks and recreation facilities
- Meeting and conference facilities
- Library services
- Adult and youth social services
- Geographic Information Systems (GIS) mapping and data services

## 9.3 Goals and objectives

### 9.3.1 General practices

**Goal 1**      **Develop regional approaches to providing public services and facilities in Storey County in coordination with general improvement districts, federal and state agencies, for-profits and non-profits, and other jurisdictions**

Policy 1      By cooperating with other services providers to encourage the use of common improvement standards, to coordinate the time of capital projects, to ensure that requirements of adequacy and concurrency are met, and develop programs to reduce the cost of providing public services and facilities

**Goal 2**      **Plan and provide for the services necessary to implement this master plan by updating the capital improvement plan on a consistent basis**

Policy 1      By including in the capital improvement plan capital projects that conform to the master plan and all of its elements

Policy 2      By evaluating potential capital projects according to an established criterion to determine their importance in relation to the master plan's goals and policies. Priorities in the capital improvement plan should be based on the project's importance to the master plan implementation.

Policy 3      By using the capital improvement plan to repair and replace existing public facilities

**Goal 3**      **Provide levels of services to maintain, at a minimum, the current quality of life for citizens and businesses in the county**

Policy 1      By selecting specific capital improvements needed to achieve and maintain standards for existing and future population and businesses

Policy 2      By planning for adequate public facilities by constructing needed capital improvements which: (1) repair or replace obsolete or worn-out facilities; (2) eliminating existing deficiencies; and (3) meet the needs of future development and redevelopment caused by previously issued and new development permits. The ability to provide needed improvements will be demonstrated by maintaining a financially feasible schedule of capital improvements.

**Goal 4**      **Ensure that new development pays an equitable share of cost for public services and facilities needed to serve the development**

Policy 1      By pursuing development agreements in situations where it is necessary to ensure that new development pays its equitable share for needed public services and facilities

### **9.3.2 Emergency services, hazard mitigation, and law enforcement**

#### **Goal 1 Provide professional fire protection and emergency medical services to residents, workers, and visitors in the county**

Policy 1 By continuing to implement, test, and update when necessary the Storey County Fire Protection District Standards of Cover

Policy 2 By continuing to work toward addressing the goals and objectives in the Fire District's strategic plan

Policy 3 By reviewing and updating the goals and objectives in the Fire District's strategic plan

Policy 4 By continuing and expanding mutual-aid agreements with neighboring jurisdictions to provide most effective and efficient services

Policy 5 By planning and providing the services and facilities necessary to protect citizens, businesses, visitors, and other stakeholders in the county now and in the future

#### **Goal 2 Protect the public health, safety, and welfare with professional law enforcement services**

Policy 1 By planning for and providing the services and facilities necessary to protect the citizens, businesses, visitors, and other stakeholders in the county

Policy 2 By enhancing the quality of life and security of all, by providing fair, consistent, effective and professional law enforcement services

#### **Goal 3 Provide residents and visitors direct conduit to emergency services**

Policy 1 By utilizing the Quad-County microwave infrastructure and providing more efficient and reliable emergency radio coverage throughout the county

Policy 2 By collaborating with partners in the Quad-County area to improve radio communications in an emergency event

Policy 3 By dedicating a communications channel to connect the Quad-County area dispatch centers together and provide radio interoperability

Policy 4 By utilizing, enhancing, and upgrade when available Phase 2 wireless Next Generation 911 service. This will allow the county to keep up with national standards and ultimately provide residents and visitors the ability to text 911 and stream video via 911 calls to the communications center.

#### **Goal 4 Protect the public health, safety, and welfare through mitigation of hazards**

Policy 1 By maintaining and updating every five years the county Hazard Mitigation Plan in order to reduce or eliminate the long-term risk to human life and property from natural hazards including, but not limited to, earthquakes, wildland fire, flooding, severe storm events, and human caused hazards including, but not limited to,

hazardous materials, terrorism, mines, and failures of dams and ditches

Policy 2 By ensuring that the county Hazard Mitigation Plan conforms to Federal Emergency Management Agency requirements as a condition for receiving certain type of non-emergency disaster assistance, including funding for mitigation projects and participation in the National Flood Insurance Rate Program

Policy 3 By developing hazardous mitigation plans that enable participating jurisdictions to: enhance education and awareness and building partnerships related to the mitigation of threats, hazards, and vulnerabilities; engaging partners in long-term planning; aligning risk reduction with the objectives of neighboring jurisdictions; directing resources appropriately to address risks; and communicating priorities and funding sources for risk mitigation

### **9.3.3 Aboveground Utilities**

**Goal 1 Coordinate the creation or amendment of aboveground utility corridors**

Policy 1 By continuing to work toward underground utility lines whenever possible. Minimize the number of overhead transmission line corridors through coordination and upgrades to existing corridors. Ensure that new overhead transmission lines are located in accordance with all applicable criteria.

Policy 2 By cooperating with adjacent jurisdictions, the Nevada State Office of Energy, and the U.S. Bureau of Land Management to ensure that the aboveground utility plan is consistent with any resource management plan prepared by the U.S. Bureau of Land Management, any transmission plan adopted by the Nevada State Office of Energy, or any aboveground utility plan of any adjacent jurisdiction

Policy 3 By considering and applying appropriate setbacks of proposed aboveground utility corridors to any school, hospital, and residential area

Policy 4 By coordinating with electric transmission service providers within Storey County; adjacent jurisdictions; the Nevada State Office of Energy; and the U.S. Bureau of Land Management

Policy 5 By holding at least one public workshop to discuss the location of the aboveground utility corridors and provide information to the public about proposed changes to this section of this master plan

### **9.3.4 Telecommunications**

**Goal 1 Provide residents and visitors reliable access to high-speed internet and broadband services, and other communications technologies**

Policy 1 By considering commercial wireless communication facilities where needed when they are designed to be compatible with the area in which they are located

Policy 2 By allowing the development of additional wireless communication facilities in the Highlands, Virginia City, and other areas once existing devices meet their full carrier capacity

Policy 3 By facilitating limited no-cost internet access to tourist visitors in Virginia City

### **9.3.5 Schools, education, and community programs**

**Goal 2 Provide residents with services, resources, and programs designed to stimulate imagination, satisfy curiosity, and create young readers**

Policy 1 By contributing community support and education programs such as before-and-after school programs; summer programs; school dropout remediation; mobile classrooms such as Classroom-on-Wheels Bus (COW-Bus); service-learning and cultural exchange programs; tutoring services; counseling services; food and thrift store access; and job training and placement.

Policy 2 By engaging in inter-local agreements that help provide resources and facilities necessary for the Storey County School District and certain non-profit organizations to fulfill their mission of bettering the local community

**Goal 3 Provide adequate school facilities for residents in response to growth**

Policy 1 By utilizing the planning guides, standards, and criteria used by the Storey County School District to estimate and project student populations in each of the county's communities

Policy 2 By maintaining close communication and cooperation between county and school district staff to estimate the location of needed future school facilities

Policy 3 By requiring developers of planned unit developments to dedicate to the county and/or school district land necessary for construction of public schools and public services facilities. The location and quality of land must meet the standards of this master plan and not cause undue strain on county/school district resources.

Policy 4 By requiring developers of planned unit developments to build and dedicate to the county school district, as agreed between the developer and the school district, K-12 school facilities adequate to serve area populations, as well as other needs determined appropriate by the school district for the subject area

### **9.3.6 Public Works maintenance facilities**

**Goal 1 Maintain adequate Public Works maintenance facilities across the county**

Policy 1 By requiring applications involving amendments or assignments of land use or zoning designations to be evaluated for facility needs to ensure that maintenance facilities remain adequate

### **9.3.7 Administrative facilities**

**Goal 1 Maintain adequate public services to residents, businesses, and others throughout the county**

Policy 1 By continuing to provide safe, efficient, and adequate office and meeting spaces in different parts of the county for government and public service functions

Policy 2 By assessing the existing capacity and planning for future capacity of county administrative facilities in all parts of the county

- Policy 3 By utilizing the McCarran Government Complex to expand public services including, but not limited to, administrative, court, and emergency services, proportional to growth in the northern parts of the county
- Goal 2 Increase the capacity and efficiency of the Storey County Courthouse**
- Policy 1 By preserving the historic layout, design, and integrity of the Storey County Courthouse in any decisions affecting its use
- Policy 2 By repurposing spaces in the courthouse to increase office space and efficiency
- Policy 3 By considering adding an administrative office extension to the courthouse building or constructing a separate building adjacent to the courthouse for this purpose
- Policy 4 By considering use of properties adjacent to the courthouse to accommodate needed expansions

**Goal 3 Consider alternative location(s) for certain county administrative offices**

- Policy 1 By considering expansions to the county jail facility at 911 State Route 341 and relocating certain administrative offices to that facility
- Policy 2 By considering other county-owned buildings in Virginia City to be repurposed for county administrative offices
- Policy 3 By collaborating with the Storey County School District to co-locate use of existing and future county and school district facilities

**Goal 4 Maintain the Storey County Courthouse in its existing functional capacity**

- Policy 1 By maintaining the Storey County Courthouse for the purpose of court, statutory administrative offices, and other key county administrative functions

### **9.3.8 County-owned historic structures**

**Goal 1 Preserve the historic integrity of county-owned historic structures for the enjoyment of residents, visitors, and scholars**

- Policy 1 By conforming to Nevada Revised Statute 384 Comstock Historic District requirements in decisions affecting architecture, materials, colors, and design elements of county-owned historic structures
- Policy 2 By establishing and maintaining inter-local agreements with non-profit and other organizations for the preservation and enhancement of county-owned historic structures

### **9.3.9 Water and wastewater management**

**Goal 1 Protect public health by complying with all state and federal water regulations**

- Policy 1 By creating incentives to encourage existing development to connect into existing municipal water systems

- Policy 2 By requiring new planned unit developments and land subdivisions to connect into municipal water systems or have densities which cause no adverse impact on area underground water resources
- Goal 2 Minimize high-water demand on public and private landscaping areas**
- Policy 1 By encouraging low-water-consumption vegetation and efficient irrigation systems in all new developments
- Policy 2 By serving as a role-model in the community by applying xeriscaping to all public buildings landscaping where feasible
- Policy 3 By educating residents, businesses, and school-age children the principles, practices, and benefits of xeriscaping
- Policy 4 By requiring xeriscaping provisions in all planned unit developments and private-public development agreements
- Policy 5 By providing economic and other incentives by adjusting the water rights dedication requirements to reflect the reduced water demand of water conservation landscaping and fixtures
- Goal 3 Reduce non-point water pollution sources and improve groundwater recharge through Low-Impact-Development processes**
- Policy 1 By requiring comprehensive Low Impact Development practices in all planned unit development approvals
- Policy 2 By providing economic or other incentives for Low Impact Development retrofits to existing developed properties and small-scale developments
- Policy 3 By education residents, businesses, and school-aged children the principles, practices, and benefits of Low Impact Development practices
- Goal 4 Reduce water consumption for new buildings and developments**
- Policy 1 By adopting new building standards for water conservation devices in the county code
- Policy 2 By encouraging and promoting gray-water conservation systems
- Policy 3 By requiring installation of water conservation devices in occupied units of all planned unit development and subdivision approvals
- Goal 5 Improve the quality and quantity of water in the Highlands and Mark Twain**
- Policy 1 Provide education and other assistance that helps each community develop its own general improvement districts
- Policy 2 Consider inter-local cooperation with adjacent jurisdictions to provide access to their municipal water systems where needed

**Goal 6 Provide adequate community wastewater facilities**

- Policy 1 By completing the Gold Hill and Virginia City wastewater rehabilitation project within the timeframes allowed by the awarded 2015 U.S. Department of Agriculture grant
- Policy 2 By encouraging the reuse and repurposing of effluent wastewater at the Tahoe-Reno Industrial Center for industrial and other non-potable uses
- Policy 3 By monitoring Nevada Division of Environmental Protection groundwater quality data for the Highlands and Mark Twain in order to provide needed time to help the communities plan for wastewater treatment needs if they arise
- Policy 4 By requiring all golf courses to be irrigated exclusively with secondary effluent
- Policy 5 By remaining vigilant in reporting to the State suspected domestic well withdraws exceeding two acre-feet per year

**Goal 7 Prevent individual sewage disposal systems in rural areas from degrading groundwater quality**

- Policy 1 By requiring new planned unit developments and land subdivisions to connect into municipal wastewater systems or have densities which cause no adverse impact on underground water resources
- Policy 2 By allowing rural areas to be served by individual septic systems if groundwater quality will conform to with federal, state, and county standards
- Policy 3 By utilizing state standards to evaluate new septic systems on the basis of site susceptibility to groundwater pollution by septic effluent
- Policy 4 By ensuring that location, design, construction, and inspection of on-site sewage disposal systems (i.e. septic systems and engineer systems) comply with county codes and Nevada Administrative Code 444, "Regulation Governing Individual Sewage Disposal Systems"
- Policy 5 By continuing to monitor areas with high septic system densities for signs of groundwater contamination
- Policy 6 By requiring abandonment of failed septic systems and corrective action that conforms to federal, state, and county standards

**9.3.10 Flood and stormwater management****Goal 1 Minimize flooding and flood damage****Objective 1 To evaluate existing infrastructure and flooding conditions and making improvements based on those factors**

- Policy 1 By developing a comprehensive flood and drainage study for the Lockwood area, and by developing a list of solutions based on the findings of the study
- Policy 2 By participating in regional cooperative efforts for floodplain management and planning in the Lockwood

- Policy 3 By applying the recommendations of the 2011 flood and drainage study to area drainage ways and improvements
- Policy 4 By actively engaging with the Truckee River Flood Management Authority (Truckee River Flood Project) to assure that regional flood projects cause no adverse impact on Lockwood and area properties
- Policy 5 By developing and implementing floodplain building codes regulating building in known floodplains and floodways
- Policy 6 By improving Long Valley Creek flows through Lockwood and to the Truckee River
- Policy 7 By cooperating with land owners in upstream Lagomarsino Canyon to mitigate downstream flooding in Lockwood
- Policy 8 By requiring regional flood mitigation for any development that occurs in Lagomarsino Canyon upstream of Lockwood
- Policy 9 By educating residents about best development practices in and near floodways and floodplains

**Goal 2 Minimize flooding and flood damage**

- Objective 1 To evaluate existing infrastructure and flooding conditions and making improvements based on those factors
- Policy 1 By developing a comprehensive flood and drainage study for the Painted Rock area, and by developing a list of solutions based on the findings of the study
- Policy 2 By participating in regional cooperative efforts for floodplain management and planning in the Painted Rock area
- Policy 3 By actively engaging with the Truckee River Flood Management Authority (Truckee River Flood Project) to assure that regional flood projects cause no adverse impact on Painted Rock and area properties
- Policy 4 By actively communicating with to the Truckee-Carson Irrigation District any known leakages or potential compromises to the Truckee-Carson Irrigation District Canal
- Policy 5 By developing and implementing floodplain building codes regulating building in known floodplains and floodways, or prohibiting construction in floodways and floodplains
- Policy 6 By requiring planning and construction of appropriate stormwater drainage and on-site detention of any planned unit development
- Policy 7 By educating residents about best development practices in and near floodways and floodplains
- Policy 8 By replacing the Painted Rock Road Bridge over the Truckee River, or by raising it above the Federal Emergency Management Agency base flood elevation

**9.3.11 Parks, recreation, and common open space**

- Goal 1 Identify and acquire land which should be preserved for public community parks and recreation**

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- Policy 1 By using this master plan as a guide for determining the potential future need for community parks and common open spaces
- Policy 2 By requiring the dedication or reservation of community parks, recreation facilities, trailheads, trail systems, and common open spaces in all planned unit development approvals
- Policy 3 By requiring substantial or total financial contribution by the developers of all planned unit developments to the construction of parks, recreation facilities, trailheads, trail systems, and common open spaces in the developments
- Policy 4 By adopting a county ordinance establishing the minimum percent of a planned unit development to be dedicated to common open space
- Policy 5 By coordinating parks planning with other recreation providers such as the school district
- Policy 6 By working with private, state, and federal entities to coordinate and exchange information for the planning and development of community parks
- Goal 2 Consider developing Divide Reservoir as a community park**
- Policy 1 By exploring the costs, risks, and feasibility of developing the Divide Reservoir and its immediate surrounding premises to accommodate outdoor public recreation, including fishing and/or swimming
- Goal 3 Consider developing a dog park in Lockwood**
- Policy 1 By exploring the costs, feasibility, and best location for developing a dog park
- Goal 4 Renovate and improve existing parks and recreation areas**
- Policy 1 By assessing specific improvements to recreation facilities are desired by local residents
- Policy 2 By maintaining area parks so that they remain safe, attractive, and otherwise desirable for recreation and other outdoor uses
- Goal 5 Include parks, recreation, and education as part of large-operations mining**
- Policy 1 By requiring special use permits for large-operations mining to include a public information and education element, mandating the development of centers or kiosks at or adjacent to the large operations mine from which the public may view and learn about the history and other information about mining on the Comstock as well as the subject active mine.
- Policy 2 By requiring special use permits for large-operation mining to include regional park facilities, recreation, and education integration into post-mining reclamation plans when not in conflict with state or federal regulations and agency jurisdictions
- Goal 6 Maintain and improve access to area trails and federal public lands**
- Policy 1 By actively engaging with the U.S. Bureau of Land Management and the local

- property owners associations to maintain public access to BLM lands within and adjacent to Mark Twain
- Policy 2 By better utilizing the riparian areas of the Truckee River for public access and recreation

**Goal 7 Enhance the interface between the Truckee River and Lockwood and Mustang**

- Policy 1 By improving local access to the Truckee River
- Policy 2 By improving recreation opportunity along the Truckee River
- Policy 3 By improving and facilitating natural landscaping and flora along the banks of the Truckee River
- Policy 4 By encouraging natural waterway and riparian area restoration projects

**Goal 8 Utilize vacant spaces in downtown Virginia City for public use**

- Policy 1 By exploring the costs, risks, and feasibility of utilizing certain vacant parcels and other spaces in downtown Virginia City for interim or permanent public “pocket parks” and recreation spaces

**9.3.12 Lagomarsino petroglyphs improvement facilities**

**Goal 1 Maintain interim efforts to protect the Lagomarsino petroglyphs site**

- Policy 1 By working with local residents and volunteer groups to casually monitor and exhibit presence at the site
- Policy 2 By constructing and maintaining motor vehicle barriers at site access points
- Policy 3 By educating the public about the site’s importance as a cultural resource
- Policy 4 By refraining from the dissemination of maps and directions to the site in this master plan and in other official documents until appropriate permanent monitoring of the premises is established
- Policy 5 By preventing area road and access improvements around the petroglyphs site

**Goal 2 Establish long-term protection of the Lagomarsino petroglyph site**

- Policy 1 By helping the appropriate agencies establish permanent security at the site
- Policy 2 By collaborating with volunteer organizations, such as the Nevada Rock Art Foundation, and local residents and stakeholders to develop a comprehensive master plan detailing goals, objectives, and benchmarks for site improvement and long-term security and management
- Policy 3 By maintaining a position to the Nevada State Historic Preservation Office, Nevada Division of State Lands, and other state agencies to designate and manage the site as a managed and secure state park

Policy 4 By continuing to seek grants and other funding sources to improve the site with full-time security staffing and long-term management

### **9.3.13 Solid waste management**

**Goal 1 Provide solid waste management processes that promote recycling and alternative uses of the waste stream**

Policy 1 By maintaining and updating every five years the Storey County Solid Waste Management Plan pursuant to Nevada Revised Statutes requirements

Policy 2 By ensuring that the services provided under franchise agreements are cost effective for county residents, businesses, and stakeholders