

DOUGLAS COUNTY 2020 MASTER PLAN

ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS ON DECEMBER 9, 2020



A COMMUNITY TO MATCH THE SCENERY



PREFACE

Pursuant to NRS 278, the Douglas County Master Plan with the accompanying tables, diagrams, figures and charts consists of eight elements and represents the County's comprehensive long-term plan for growth and development. The 2020 Update was prepared with the assistance of Wood Rogers.

Special Note: This Master Plan was prepared while Douglas County and the Nation were in the midst of the COVID-19 pandemic and constraints were imposed on the process as a result. It remains uncertain what potential changes in the conduct of business and society our county will experience. As such, county officials should be encouraged to reexamine changing data and behavior, and support revisions in the Master Plan as warranted.

MASTER PLAN AMENDMENTS

Master Plan amendments can be initiated by the Douglas County Community Development Department (as in the case of five-year updates), or by individual property owners. Master Plan Amendments are required for any proposals to change the future land use designation on the future land use maps, to change water or wastewater service boundaries or the urban service area boundary, as well as to change any goals, policies, or actions in the adopted Master Plan.

To amend the Master Plan, an applicant must meet the four findings specified in Section 20.608.040 of the Douglas County Code:

1. The proposed amendment is consistent with the policies embodied in the adopted master plan and the applicant has demonstrated the amendment proposes the overall goals and objectives of the master plan and has demonstrated a change in circumstances since the adoption of the plan that makes it appropriate to reconsider one or more of the goals and objectives or land use designations.
2. The proposed amendment is based on a demonstrated need for additional land to be used for the proposed use, and that the demand cannot be reasonably accommodated within the current boundaries of the area.
3. The proposed amendment would not materially affect the availability, adequacy, or level of service of any public improvement serving people outside of the applicant's property and will not be inconsistent with the adequate public facilities policies contained in Chapter 20.100 of Title 20.
4. The proposed amendment is compatible with the actual and master planned use of the adjacent properties and reflects a logical change to the boundaries of the area in that it allows infrastructure to be extended in efficient increments and patterns, it creates a perceivable community edge as strong as the one it replaces, and it maintains relatively compact development patterns.

The Planning Commission is responsible for reviewing Master Plan Map and Text Amendments and forwarding a recommendation of approval or denial to the Board of Commissioners. A two-thirds majority vote is required for approval.

ACKNOWLEDGEMENTS

2020 Acknowledgements

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ACRONYMS

ADA	Americans with Disabilities Act
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CASA	Court Appointed Special Advocates
CDBG	Community Development Block Grant
CDP	Census Designated Place
CHAS	Comprehensive Housing Affordability Study
CIP	Capital Improvement(s) Program/Plan(s)
CLG	Certified Local Government
CRS	Community Rating System
CVTA	Carson Valley Trails Association
CWSD	Carson Water Subconservancy District
DCC	Douglas County Code
DCIS	Design Criteria and Improvement Standards
DCSO	Douglas County Sheriff's Office
DCPW	Douglas County Public Works
EFFPD	East Fork Fire and Paramedic Districts
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FMR	Fair Market Rent
GID	General Improvement District
GIS	Geographic Information Systems
HUD	Department of Housing and Urban Development
ISO	Insurance Services Office
JLEC	Judicial and Law Enforcement Center
LI	Low Income
LOS	Level of Service
MGSD	Minden-Gardnerville Sanitation District
MPDF	Multiple Property Documentation Form
MSW	Municipal Solid Waste
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NRS	Nevada Revised Statutes
NTCD	Nevada Tahoe Conservation District
PAS	Plan Area Statement
SAFE	Special Advocates for Elderly
SHPO	State Historic Preservation Office
TDFPD	Tahoe Douglas Fire Protection District
TDR	Transfer Development Right
TMP	Transportation Master Plan
TRE	Topaz Ranch Estates
TRPA	Tahoe Regional Planning Agency
TTD	Tahoe Transportation District
USDA	United States Department of Agriculture
USFS	United States Forest Service
V&T Railway	Virginia and Truckee Railway
WNHC	Western Nevada HOME Consortium

OVERVIEW

The process to update the Master Plan began in 2016 and included extensive public outreach efforts. For this reason, the Board of County Commissioners and the Planning Commission decided to retain the public input and draft language from 2016 and use it as the basis for the text update in 2020. The matrix below contains the existing Master Plan elements from the 2011 adopted plan, the draft elements from 2016 and the proposed elements from the 2020 update.

Chapter Matrix for 2011 Master Plan to 2016 Master Plan to the 2020 Master Plan

2011 Master Plan Chapters (13)	2016 Draft Master Plan Chapters (12)	2020 Draft Master Plan Chapters (8)	What's new with 2020
1. Framework	Executive Summary 1. County Profile	Executive Summary & Community Profile	Background, Intro, new data collection
2. Land Use 3. Washoe Tribe Lands 10. Historic Preservation	6. Historic Preservation 8. Land Use	1. Land Use & Historic Preservation	Incorporate new map and revised community plans and descriptions, consolidate, improve messaging. Washoe Tribe Element reserved as Element 7 for joint planning.
7. Agriculture 8. Environmental Resources & Conservation	2. Agriculture 3. Conservation	2. Agriculture & Conservation	Consolidation, possible discussion/graphics on intro to TDR program related to conservation?
9. Economic Development	4. Economic Development	3. Economic Development	Consolidation, new recommendations
4. Housing 6. Growth Management	5. Growth Management 7. Housing	4. Growth Management & Housing	New Master Plan Map, improve discussion on TDR, consolidate and improve messaging
11. Parks & Rec 12. Public Services and Facilities	9. Parks and Rec 10. Public Facilities and Services	5. Public Facilities, Services & Recreation	Consolidation – will incorporate previous Public Facilities chapter as well as parks and rec chapters.
5. Transportation	Reserved	Incorporated by reference in 5. Public Facilities & Services	Essentially an Exec Summary of the Transportation Plan and key projects map, include airport.
12. Public Services and Facilities	11. Public Safety	6. Public Safety	Removed Public Safety from Public Services and Facilities.
13. Implementation	12. Implementation	8. Implementation	Summary of Goals/Policies, develop strategies for implementation.

In September, Douglas County staff in partnership with Wood Rodgers held four (4) in person and live streamed public workshops in September 2020, with approximately 20 attendees and 30 live stream viewers. The workshop presentations were also recorded and placed on the Master Plan Text Update website. To date, the presentations have been viewed 185 times. In addition, staff solicited feedback from the public on the proposed goals contained in the Master Plan beginning September 1st through September 30th. The survey received 1,518 views from the public, and generated input from 1,015 participants.

This document includes a preview of the proposed Master Plan format, the proposed goals as revised and presented in the workshops, and the newly proposed policies and actions based on feedback from the Board of County Commission, the Planning Commission and members of the public.

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Minden, NV, Douglas County seat

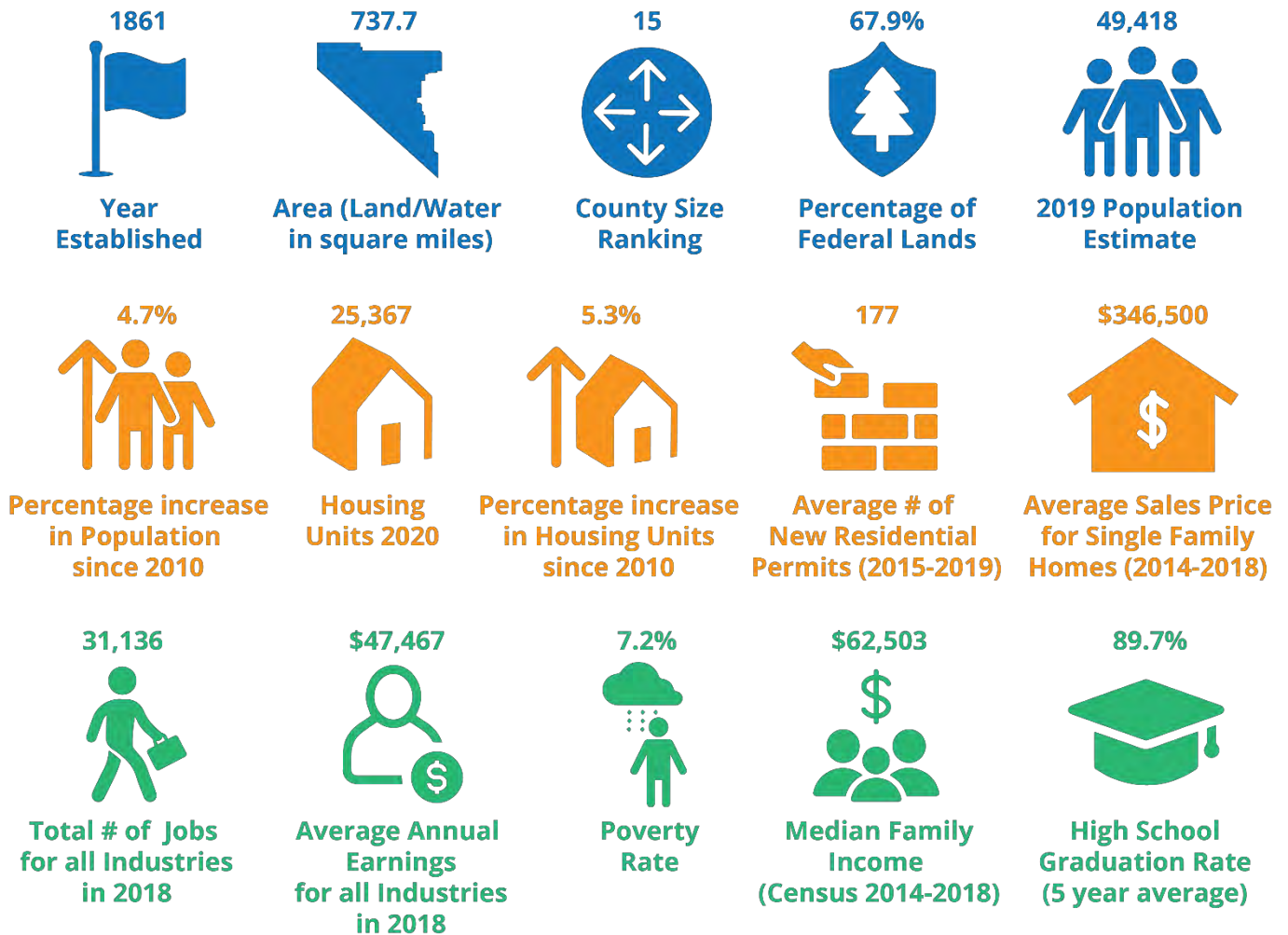


EXECUTIVE SUMMARY

Douglas County is one of the original nine counties established in 1861 as part of the Nevada Territory. Today, Douglas County is one of 17 counties in the State of Nevada and one of the smallest in the State, ranking 15th in size. There are three unincorporated towns in the County: Gardnerville, Genoa, and Minden. The Town of Minden has been the county seat since 1916. Figure ES1 provides a snapshot of Douglas County demographics and statistics.

Almost 70 percent of the land¹ in Douglas County is federally owned.

Figure ES1 - Douglas County, NV at a Glance

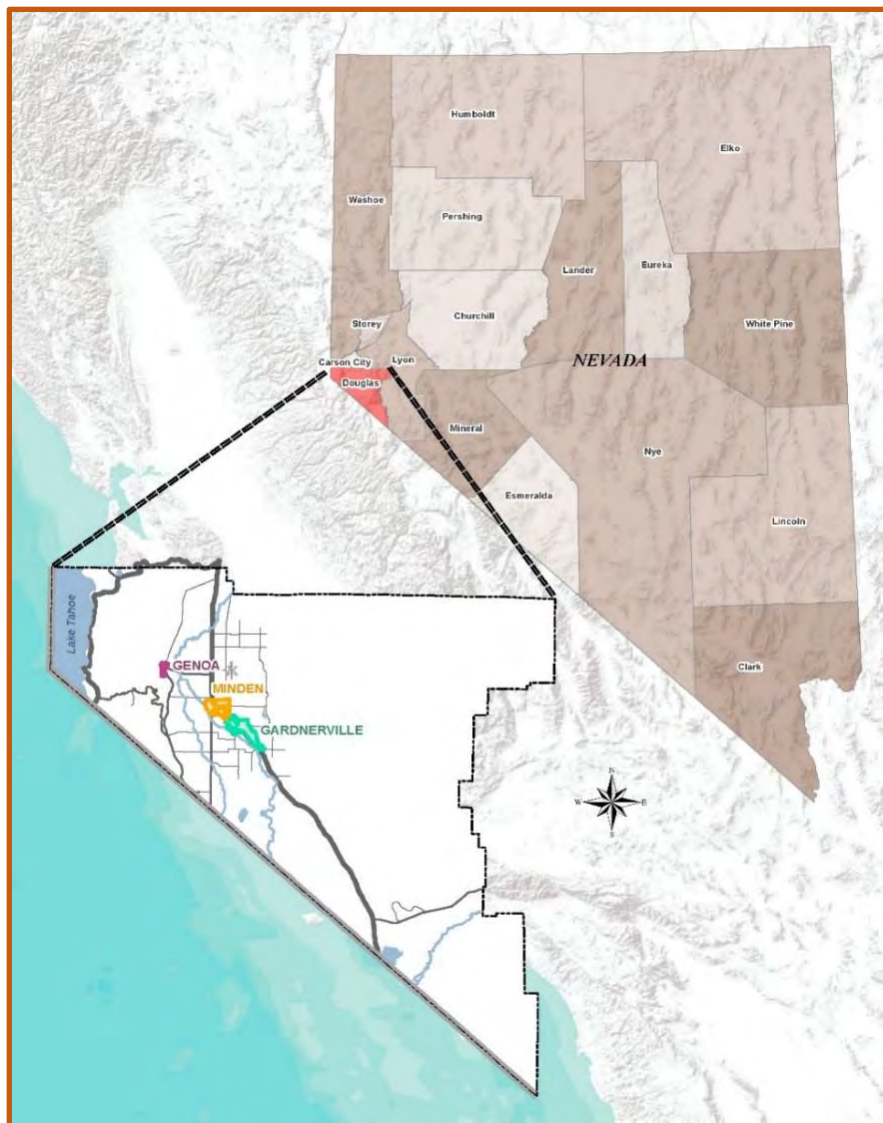


¹ "Land" refers to parcels and does not include rights-of-way or water bodies. Total land area includes 28,395 parcels with 455,275 acres.

GEOGRAPHY

Douglas County is located in the northwestern portion of Nevada and is bordered by the State of California to the west and southwest, the consolidated municipality of Carson City to the north, and Lyon County to the northeast and east (see Diagram ES1). The County is one of the smallest in the State of Nevada with a total area of 737.7 square miles or 472,133 acres. The terrain includes the Carson Range of the Sierra Nevada Mountains in the west and the Pine Nut Mountains in the east. The elevations in Douglas County range from 9,593 feet at East Peak to approximately 4,640 feet where the Carson River flows into Carson City. Most of the County is located in the Great Basin Desert and is characterized by an arid climate. The Carson Valley lies in the middle of the County and covers approximately 420 square miles. The Valley is a productive agricultural region that depends on the Carson River Watershed. Other water bodies in Douglas County include Lake Tahoe (shared with the State of California), Topaz Lake (shared with the State of California), and the Walker River.

DIAGRAM ES1 - DOUGLAS COUNTY VICINITY MAP





HISTORY

Douglas County contains ancestral lands belonging to the Washoe Tribe and former trading posts and settlements from the 1800s such as Double Springs and Mottsville.

The oldest non-indigenous settlement in the County and the State of Nevada is the Town of Genoa, established in 1851 and formerly known as Mormon Station. Genoa served as the first seat of government for Douglas County and has a local historic district. A portion of the Town is on the National Register of Historic Places.

The Town of Gardnerville, established in 1879, was named after John Gardner. The Town's history is heavily influenced by Danish and Basque settlers. "Because of its location along the route to the Esmeralda Mining District and Bodie (where a major gold strike in 1878 heralded a mining boom), Gardnerville soon came to serve as a feed stop for the 24-horse freight teams traveling between Carson City and the mining camps" (Town of Gardnerville).

The Town of Minden, established in 1906, was planned by the Dangberg family to serve workers in ranching and farming operations. The Dangberg Land and Livestock Company operated cattle and sheep ranches in Douglas County and Alpine County, California. Minden's growth was spurred with the extension of the Virginia & Truckee (V&T) Railway to Minden in 1906. Douglas County's history includes lumber barons such as Duane L. Bliss. Glenbrook was the site of a significant milling operation for his Carson Tahoe Lumber and Fluming Company.

Many of the civic and commercial buildings in Gardnerville and Minden, including the Douglas County Historic Courthouse in Minden and the Gardnerville High School (now the Carson Valley Museum and Cultural Center), were designed by Nevada architect Frederick DeLongchamps.

Senator Stephen A. Douglas (1813–1861)

Douglas County is named after Stephen A. Douglas, a U.S. Senator from Illinois, famous champion of the Mexican War—and powerful Chair of the Senate Committee on Territories. Douglas, a "popular sovereignty" Democrat, was largely responsible for the Compromise of 1850 and the controversial Kansas-Nebraska Act of 1854, which opened some previously prohibited territories to slavery and helped fuel the formation of the Republican Party. Douglas is also famously remembered for his lively senatorial debates with Abraham Lincoln in 1858, which lost him the popular vote.

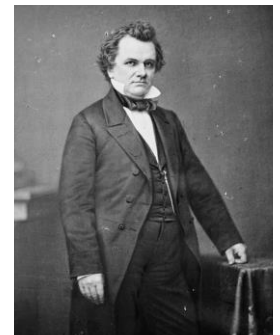
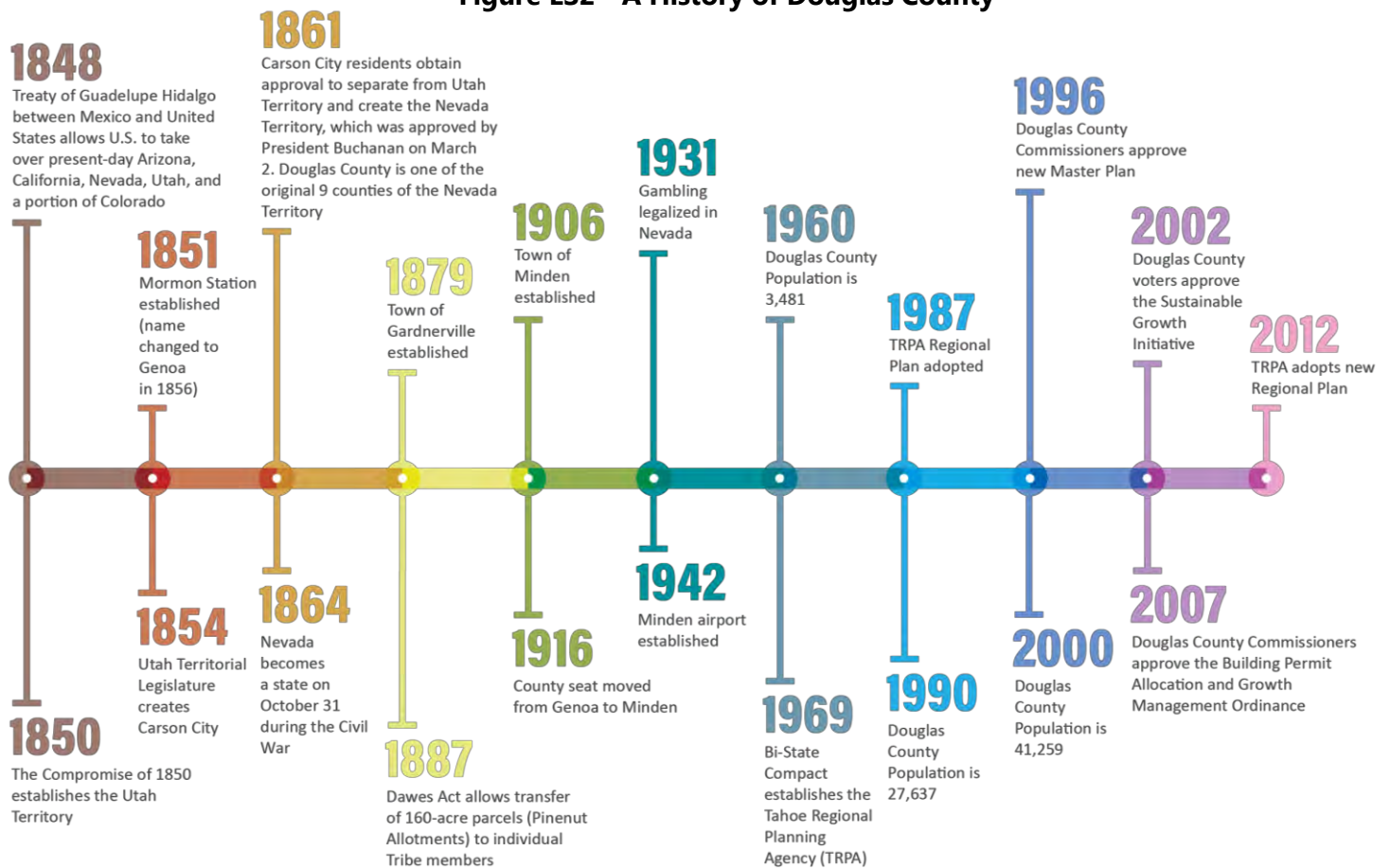


Figure ES2 - A History of Douglas County



GOVERNMENT

Douglas County is governed by a five-member elected Board of County Commissioners. Other elected officials include the District Attorney, Sheriff, Assessor, Recorder, Public Administrator, District Court Judges, Justices of the Peace, and Clerk-Treasurer. The General Fund budget for fiscal year 2019–2020 was approximately \$50.3 million, with a total annual budget for Douglas County of \$106.3 million. In fiscal year 2019–2020, there were 557.8 full-time employees in Douglas County (excluding the unincorporated towns of Gardnerville, Genoa, and Minden).

Each of the three unincorporated towns has an elected five-member town board as well as a Town Manager. There are 31 taxing districts in Douglas County, including 17 General Improvement Districts (GIDs). Douglas County has the highest number of GIDs in the State of Nevada. The GIDs include communities such as the Gardnerville Ranchos and Indian Hills in the Carson Valley and Kingsbury and Round Hill at Lake Tahoe.

The East Fork Fire and Protection Districts provide fire protection and paramedic services for the Carson Valley portion of Douglas County, and the Tahoe-Douglas Fire Protection District serves the Tahoe Basin portion. The U.S. Forest Service (USFS) and the Bureau of Land Management (BLM) are the primary respondents to fires on federal lands.

The County owns and manages the Minden-Tahoe Airport, which was established in 1942 to support military operations during World War II. Today, the airport serves as a general aviation airport and an aerial firefighting center (Sierra Front Interagency Dispatch Center). As of October 2020, there are approximately 430 aircraft based at the airport.

The county-owned Douglas Area Rural Transit (DART) provides local public transit services in the Carson Valley, with connections to regional express services by the Tahoe Transportation District.



LAND JURISDICTIONS

Similar to many counties in Nevada, most of the acreage in Douglas County is under the jurisdiction of the federal government. Federal lands account for 67.9 percent of the parcel acreage in Douglas County. Figure ES3 and Diagram ES2 display the amount and location of federal lands within the County. The Bureau of Land Management properties are located to the east in the Pinenut Region; the U.S. Forest Service properties are located to the west in the Carson Range of the Sierra Nevada Mountains and in the southernmost portion of the County.

Figure ES3 - Land Ownership in Douglas County (Acres)

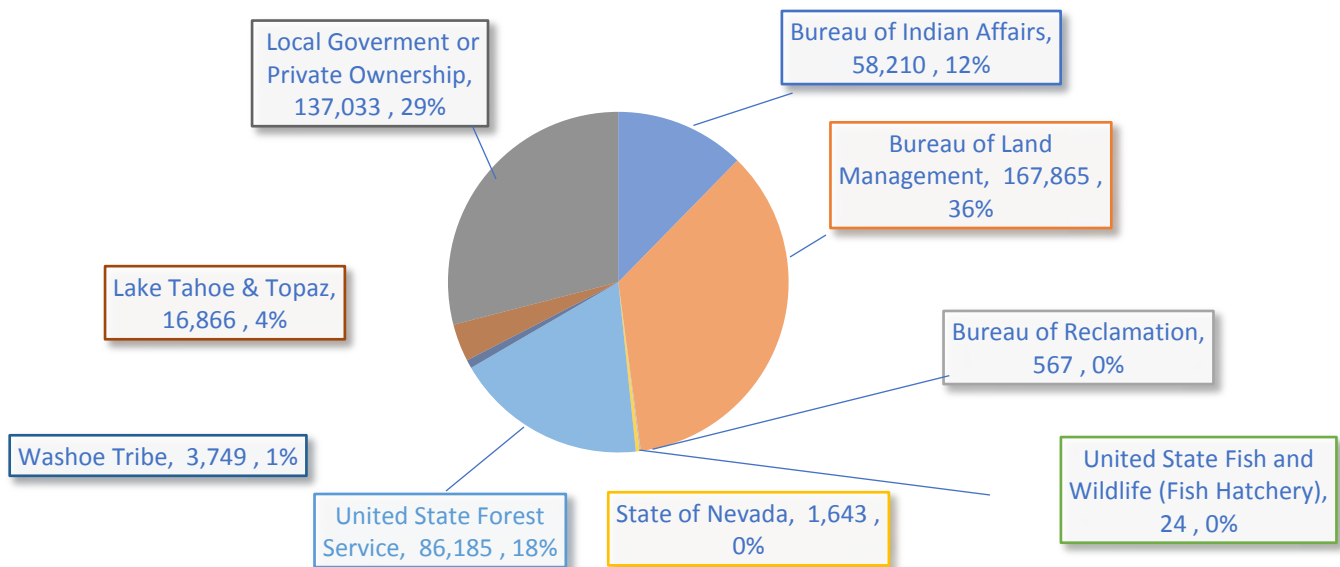
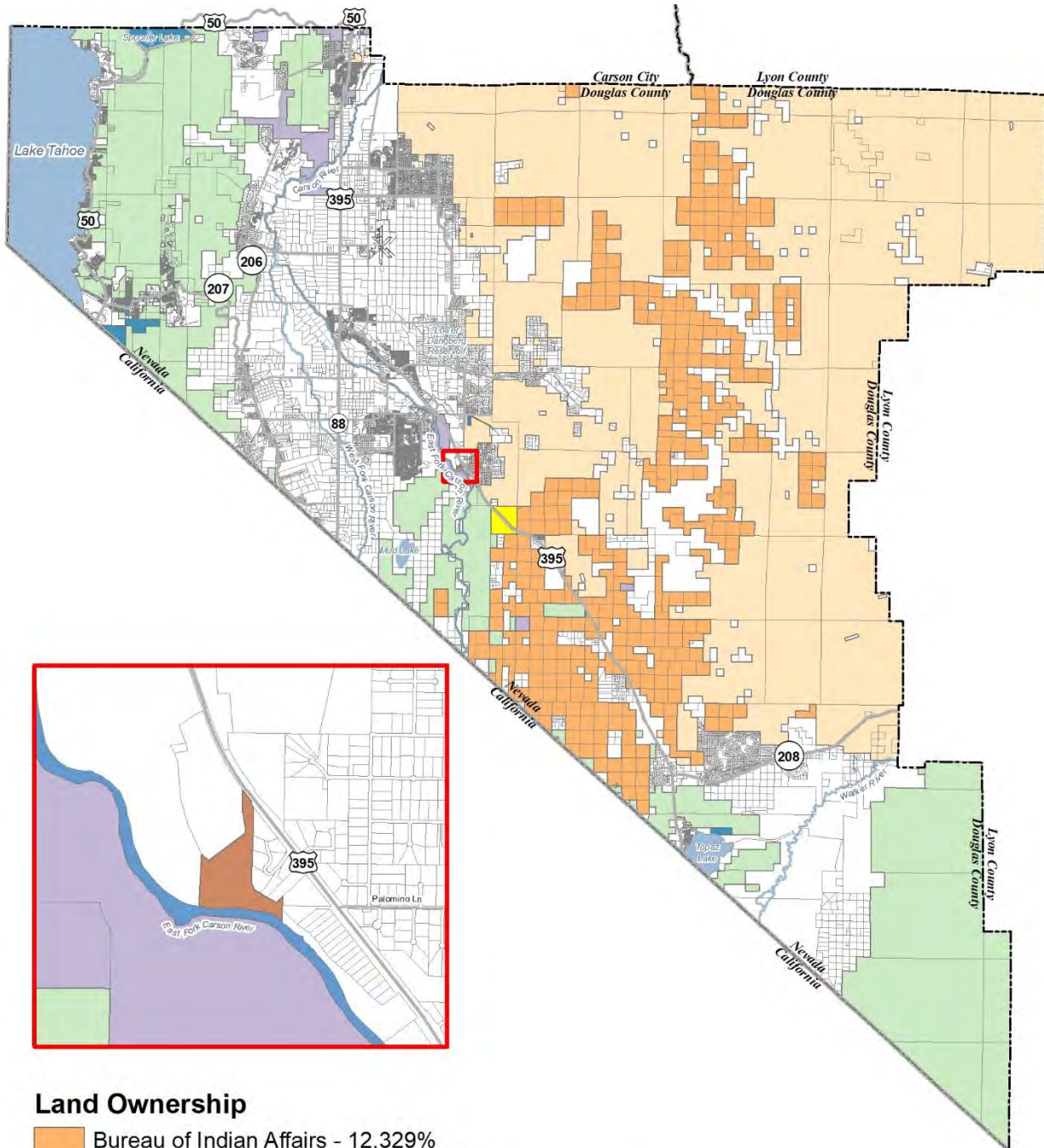


DIAGRAM ES2 - LAND OWNERSHIP IN DOUGLAS COUNTY



Land Ownership

- Bureau of Indian Affairs - 12.329%
- Bureau of Land Management - 35.554%
- Bureau of Reclamation - 0.12%
- State of Nevada - .348%
- U.S. Forest Service - 18.254%
- U.S. Fish and Wildlife (Fish Hatchery) - .005%
- Washoe Tribe - .794%



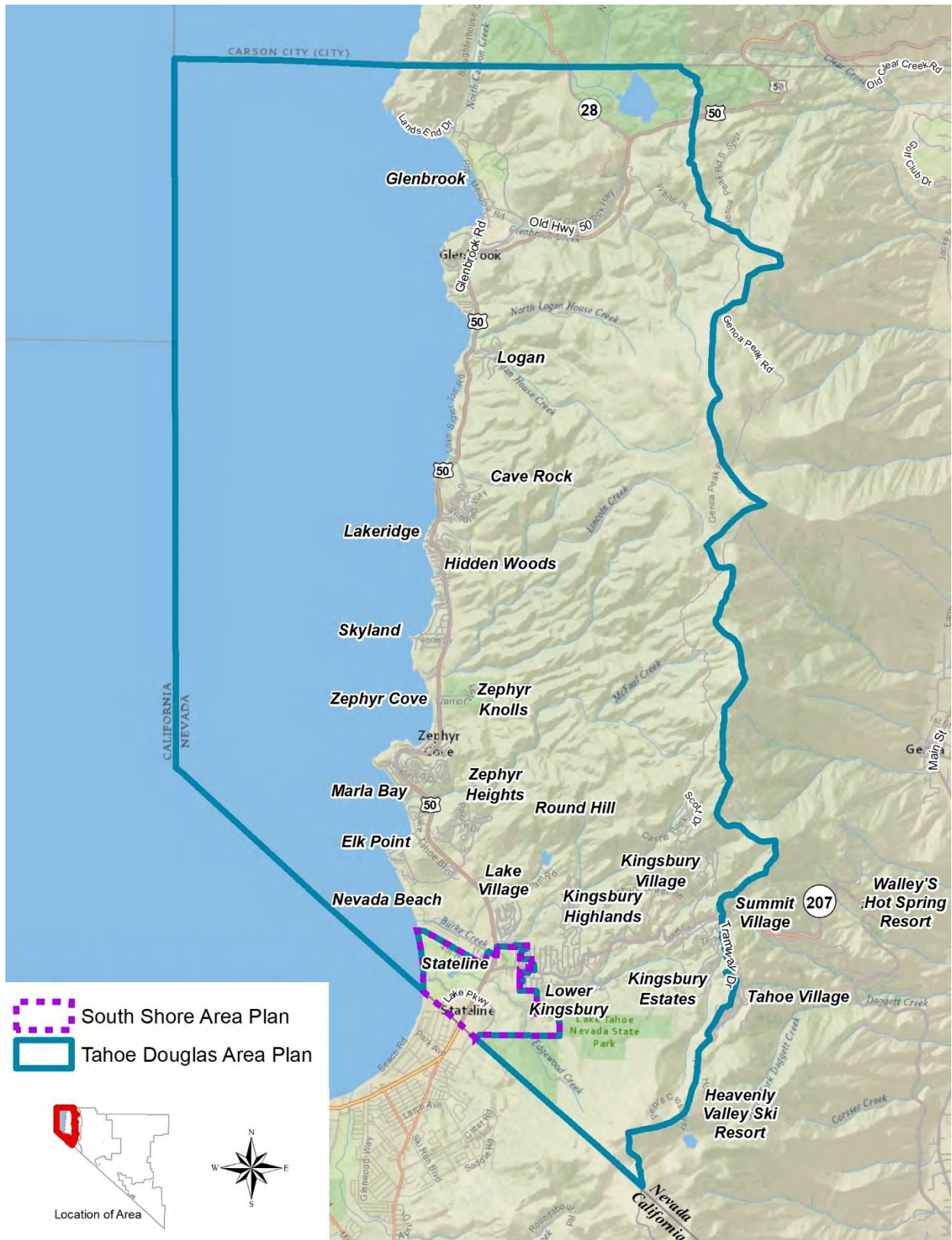
Private property outside of Tahoe Basin is regulated by Douglas County. In 2002, Douglas County voters approved the Sustainable Growth Initiative (SGI). Due to litigation, the SGI was never implemented, but the Board of Commissioners adopted a Building Permit Allocation and Growth Management Ordinance in 2007. The new ordinance created a residential allocation system for all of Douglas County except the Tahoe Basin. The Great Recession of 2007–2009 essentially stopped all growth in the County. As a result, many residential allocations were not used and were rolled over to the next quarterly allocation cycle, becoming “excess” allocations. Excess allocations, which were 560 in July 2011, increased to 882 in July 2016 and to 1,946 in September 2020.

TAHOE REGIONAL PLANNING AGENCY (TRPA)

The Tahoe Basin portion of Douglas County is under the jurisdiction of the Tahoe Regional Planning Agency. Following the adoption of the TRPA Regional Plan in 1987, a growth management system was put in place to limit development around Lake Tahoe. A new regional plan was adopted by TRPA in December 2012, and Douglas County was the first government member to adopt an area plan (South Shore Area Plan) that was consistent with the new TRPA Regional Plan.



DIAGRAM ES3 - TAHOE DOUGLAS AREA PLAN





POPULATION

As of 2019, Douglas County’s population was estimated at 49,418, according to the Nevada State Demographer. Between 2000 and 2010, Douglas County’s population growth slowed compared to historic growth rates.

Table ES1 - Douglas County Population (1970 to 2019)					
1970	1980	1990	2000	2010	2019
7,008	19,487	28,070	41,674	47,197	49,418

Source: Nevada State Demographer

Table ES2 presents the change in more recent population estimates by the Census Bureau for communities and population centers throughout the county between 2013 and 2018.

Table ES2 - Total Population Change by Census Tract (2013 to 2018)						
Year	Gardnerville CDP	Minden CDP	Stateline CDP	Douglas Co. Census Tract 16	Douglas Co. Census Tract 17	Douglas Co.
2013	5,669	3,313	955	1,006	1,722	47,035
2014	5,761	3,408	1,017	1,155	1,762	47,135
2015	5,636	3,180	1,160	1,173	2,009	47,259
2016	5,555	3,359	1,083	1,137	1,894	47,426
2017	6,034	3,185	981	1,221	1,730	47,632
2018	6,148	3,239	969	1,236	1,746	47,828
2013–2018 Annual Average Percent Change	1.6%	-0.5%	0.3%	4.2%	0.3%	0.3%
2013–2018 Total Percent Change	8.4%	-2.2%	1.5%	22.9%	1.4%	1.7%

Source: U.S. Census Bureau, 2013–2018 American Community Survey, 5-Year Estimates

Note: Census Tract 16 covers Glenbrook to Zephyr Cove; Census Tract 17 covers Round Hill.

The Nevada State Demographer Office’ projects that population growth in Douglas County will plateau between 2030 and 2031 at 50,675 and will begin to gradually decline between 2032 and 2038. “The residential population is expected to grow by an estimated annual average of 0.1 percent, or a total of 1,061 per year, and by 2.2 percent between 2018 and 2038—increasing from an estimated 49,070 in 2018 to an estimated 50,131 in 2038.

Table ES3 presents year-to-year projected changes in total population for Douglas County and various other communities and counties in northwestern Nevada between 2019 and 2038.



Table ES3 - Population Projections for Northwestern Nevada by County With Major Regional Employment Impacts (2019 to 2038)						
Year	Douglas County	Carson City	Lyon County	Mineral County	Storey County	Washoe County
2019	49,418	56,321	56,836	4,615	4,346	469,963
2020	49,695	56,546	57,987	4,561	4,465	479,336
2021	49,916	56,748	59,075	4,520	4,587	488,344
2022	50,110	56,960	60,112	4,498	4,715	496,955
2023	50,285	57,155	61,090	4,487	4,843	504,992
2024	50,416	57,325	61,992	4,489	4,972	512,264
2025	50,488	57,450	62,788	4,501	5,098	518,651
2026	50,532	57,547	63,512	4,513	5,228	524,466
2027	50,584	57,635	64,174	4,531	5,366	529,810
2028	50,626	57,707	64,770	4,549	5,499	534,585
2029	50,660	57,752	65,303	4,568	5,633	538,911
2030	50,673	57,790	65,788	4,584	5,759	542,877
2031	50,675	57,814	66,229	4,603	5,882	546,509
2032	50,656	57,828	66,616	4,625	6,000	549,838
2033	50,627	57,821	66,948	4,649	6,112	552,861
2034	50,581	57,805	67,240	4,668	6,219	555,585
2035	50,515	57,763	67,482	4,692	6,315	558,001
2036	50,414	57,697	67,676	4,712	6,405	560,085
2037	50,286	57,599	67,822	4,734	6,490	561,897
2038*	50,131	57,475	67,927	4,752	6,565	563,434
2019 to 2038 Annual Average Percentage Change	0.1%	0.1%	1.0%	0.1%	2.2%	1.0%

Source: Nevada State Demographer, Nevada County Population Projections 2019 to 2038, prepared October 1, 2019
 * Note: Nevada State Demographer Population Projections are only included through 2038.

Table ES4 presents four growth scenarios for Douglas County, which are consistent with the State Demographer and 2017 Transportation Master Plan projections. These include a very slow growth rate of 0.1 percent growth per year (as estimated by the Nevada State Demographer), slow growth rate of 1 percent per year, historic growth rate of 1.3 percent per year, and maximum growth rate of 2 percent per year. It should be noted that the slow growth rate of 1 percent per year was developed internally by Douglas County, the historic growth rate of 1.3 percent per year was based on 2010 and 2011 U.S. Census Data, and the maximum growth rate was established by Douglas County Title 20.

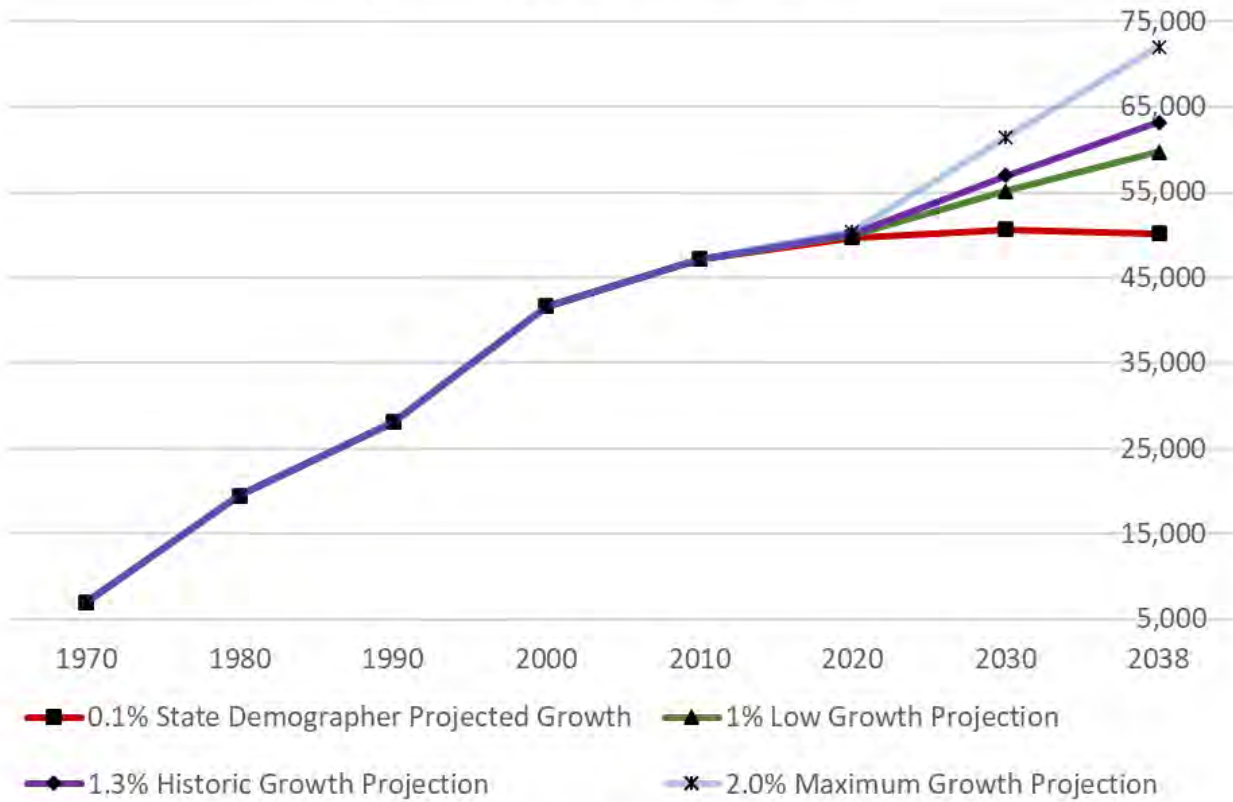
Figure ES4 is a graph depicting population projections under the proposed rates of growth (slow, historic, and maximum scenarios) through 2038.

Table ES4 - Douglas County Population Growth Scenarios			
Scenario	2020	2030	2038*
State Demographer (0.1%)	49,695	50,673	50,131
Low Growth (1.0%)	49,912	55,134	59,702
Historic Growth (1.3%)	50,060	56,963	63,163
Maximum Growth (2.0%)	50,406	61,445	71,993

*Note: Nevada State Demographer Population Projections only include 2019 through 2038.

Given the growth management strategies that Douglas County has in place, future growth will likely trend between the very slow (0.1%) and slow (1%) growth rates over the next 20 years, equating to a population of between 50,000 and 60,000 by 2038.

Figure ES4 - Douglas County Population Projections through 2038



Source: Nevada State Demographer and 2017 Douglas County Transportation Plan Projections

The median age of the residential population of Douglas County continued to increase between 2013 and 2018, rising from an estimated 47.9 years of age in 2013 to an estimated 51.5 years of age in 2018, a net increase of 3.6 years or 7.5 percent. The median age of the various communities and population centers throughout Douglas County experienced a mix of both increase and decline. Table ES5 provides more details on median age within Douglas County.

Table ES5 - Median Age Change (2013 to 2018)						
Year	Gardnerville CDP	Minden CDP	Stateline CDP	Douglas Co. Census Tract 16	Douglas Co. Census Tract 17	Douglas Co.
2013	43.0	50.0	39.2	57.4	45.6	47.9
2014	41.4	51.6	34.9	58.1	41.0	48.5
2015	46.5	53.7	35.1	60.2	40.9	49.4
2016	48.3	49.9	34.1	61.7	40.2	50.1
2017	43.8	53.9	34.4	61.8	42.9	50.8
2018	42.0	55.1	31.9	61.4	39.1	51.5
Percent Change	-2.3%	10.2%	-18.6%	7.0%	-14.3%	7.5%
Average	44.2	52.4	34.9	60.1	41.6	49.7

Source: U.S. Census Bureau, 2013–2018 American Community Survey, 5-Year Estimates

Note: Census Tract 16 covers Glenbrook to Zephyr Cove; Census Tract 17 covers Round Hill

Table ES6 presents the change in the median age for Douglas County compared to various other communities and counties in northwestern Nevada, including the change in median age for the State of Nevada and the United States between 2013 and 2018.

Table ES6 - Median Age Change (2013 to 2018)								
Year	Douglas County	Carson City	Lyon County	Mineral County	Storey County	Washoe County	State of Nevada	United States
2013	47.9	41.9	41.6	50.1	54.4	37.2	36.6	37.3
2014	48.5	42.3	42.6	47.1	54.2	37.5	36.9	37.4
2015	49.4	42.6	43.2	48.7	54.7	37.6	37.2	37.6
2016	50.1	43.1	43.7	49.2	54.4	37.9	37.5	37.7
2017	50.8	43.0	43.8	46.7	54.4	38.0	37.7	37.8
2018	51.5	42.8	44.1	50.1	52.9	38.1	37.9	37.9
Percent Change	7.5%	2.1%	6.0%	0.0%	-2.8%	2.4%	3.6%	1.6%
Average	49.7	42.6	43.2	48.7	54.2	37.7	37.3	37.6

Source: U.S. Census Bureau, 2013–2018 American Community Survey, 5-Year Estimates



HOUSING

Between 2013 and 2018, the total number of housing units in Douglas County, including owner-occupied and renter-occupied, increased by 561 units or 1.4 percent. The majority of this additional housing stock was added in the Gardnerville Census Designated Place (CDP) and the Minden CDP, whereas the Stateline CDP saw a decrease of 30 housing units. A CDP is a concentration of population defined by the United States Census Bureau for statistical purposes only.

Table ES7 presents the change in total number of housing units, both owner-occupied and renter-occupied, for Douglas County and various communities and population centers throughout the county between 2013 and 2018.

Table ES7 - Total Number of Housing Units (Owner-Occupied and Renter-Occupied, Studio through 5-Bedroom or More (2013 to 2018))						
Year	Gardnerville CDP	Minden CDP	Stateline CDP	Douglas County Census Tract 16	Douglas County Census Tract 17	Douglas County
2013	2,744	1,569	482	1,630	1,279	23,647
2014	2,688	1,617	454	1,646	1,262	23,677
2015	2,638	1,594	492	1,696	1,333	23,710
2016	2,706	1,616	468	1,710	1,291	23,810
2017	2,730	1,637	444	1,727	1,281	24,063
2018	2,842	1,662	452	1,704	1,273	24,208
2013–2018 Actual Change	98	93	-30	74	-6	561
2013–2018 Percent Change	3.6%	5.9%	-6.2%	4.5%	-0.5%	2.4%
2013–2018 Average	2,725	1,616	465	1,686	1,287	23,853

Source: U.S. Census Bureau, 2013–2018 American Community Survey, 5-Year Estimates

Note: Census Tract 16 covers Glenbrook to Zephyr Cove; Census Tract 17 covers Round Hill

Between 2014 and 2018, a significant majority of Douglas County’s housing stock was owner-occupied, at an annual average 58.7 percent. In the Carson Valley area, which includes the Gardnerville CDP and Minden CDP, the annual average was 65.7 percent. However, a significant minority of the housing stock in the Tahoe Basin area, including the Stateline CDP, Douglas County Census Tract 16, and Douglas County Census Tract 17, was owner-occupied, with an annual average of just 30.5 percent.



Table ES8 presents the change in the percentage of total housing stock identified as owner-occupied for Douglas County, the Carson Valley area, the Tahoe Basin area, the State of Nevada, and the United States between 2014 and 2018.

Table ES8 - Percentage of Housing Units Owner-Occupied (2014 to 2018)					
Year	Carson Valley	Tahoe Basin	Douglas County	State of Nevada	United States
2014	66.7%	29.7%	59.3%	47.2%	56.3%
2015	65.4%	28.2%	57.9%	47.0%	56.0%
2016	64.9%	30.0%	57.9%	47.0%	55.9%
2017	65.5%	31.9%	58.8%	47.7%	56.0%
2018	66.0%	32.6%	59.4%	48.6%	56.1%
2014-2018 Actual Change	-0.7%	2.9%	0.1%	1.4%	-0.2%
2014-2018 Annual Average	65.7%	30.5%	58.7%	47.5%	56.1%

Source: Center for Regional Studies, The College of Business, University of Nevada, Reno

Between 2014 and 2018, a significant minority of Douglas County’s housing stock was renter-occupied, at an annual average of 25.4 percent. In the Carson Valley area, the annual average was 26.5 percent, and in the Tahoe Basin area, the annual average was 21 percent. Comparatively, for the State of Nevada, an annual average of 38.3 percent of the state’s housing stock was renter-occupied.

During the same period, a significant portion of Douglas County’s existing housing stock remained vacant, at an annual average of 15.9 percent. In the Carson Valley area, the annual average was 7.8 percent, and in the Tahoe Basin area, the annual average was 48.6 percent.

Table ES9 presents the change in the percentage of total housing stock identified as renter-occupied for Douglas County, the Carson Valley area, the Tahoe Basin area, the State of Nevada, and the United States between 2014 and 2018.

Source: Center for Regional Studies, The College of Business, University of Nevada, Reno

In fiscal year 2020, there were an estimated 25,367 total housing units in Douglas County, with an estimated 19,787 housing units in the Carson Valley area and an estimated 5,580 housing units in the Tahoe Basin area. There was a 5.3 percent

5.3 percent increase in total housing units since 2010 from 24,095 to 25,367 (2020).

increase in total housing units. Single-family detached units remained the dominant type of housing stock available for Douglas County, the Carson Valley area, and the Tahoe Basin area.

Table ES9 - Percentage of Housing Units Renter-Occupied (2014 to 2018)					
Year	Carson Valley	Tahoe Basin	Douglas County	State of Nevada	United States
2014	25.0%	20.8%	24.1%	37.6%	31.2%
2015	26.1%	23.1%	25.5%	38.3%	31.7%
2016	27.0%	21.1%	25.8%	38.8%	32.0%
2017	27.3%	20.4%	25.9%	38.5%	31.8%
2018	27.2%	19.4%	25.6%	38.5%	31.7%
2014-2018 Actual Change	2.2%	-1.4%	1.5%	0.9%	0.5%
2014-2018 Annual Average	26.5%	21.0%	25.4%	38.3%	31.7%

Table ES10 presents the number of single-family detached, single-family attached, multi-family, and mobile home housing units for Douglas County, the Carson Valley area, and the Tahoe Basin area for fiscal year 2020.

Table ES10 - Total Number of Housing Units by Type of Structure (Fiscal Year 2020)						
Type of Structure	Carson Valley	Percent of Total	Tahoe Basin	Percent of Total	Douglas County	Percent of Total
Single-Family Detached	16,086	81.3%	2,911	52.2%	18,997	74.9%
Single-Family Attached	1,072	5.4%	2,109	37.8%	3,181	12.5%
Multi-family	1,049	5.3%	450	8%	1,499	5.9%
Mobile Homes	1,580	8.0%	110	2.0%	1,690	6.7%
Total	19,787	100%	5,580	100.0%	25,367	100%

Source: Center for Regional Studies, The College of Business, University of Nevada, Reno

Douglas County’s housing stock has continued to significantly age; 23.6 percent was built between 1990 and 1999, 20.4 percent was built between 1970 and 1979, and 19.8 percent was built between 2000 and 2009. Approximately 50.5 percent of all housing units (owner-occupied, renter-occupied, and vacant) in Douglas County will have reached the end of the state’s required 50-year depreciation schedule for the purposes of estimating assessed value and final *ad valorem* property tax revenue within the next 10 to 19 years. Although a residual 25 percent taxation will remain at the end of this 50-year depreciation schedule, this represents a significant erosion of Douglas County’s

property tax base. Approximately 83 percent of the Tahoe Basin area’s total housing stock will reach the end of the state-mandated 50-year depreciation schedule within the next 10 to 15 years.

Table ES11 presents the estimated year of construction by group for all housing (owner-occupied, renter-occupied, and vacant) for the Carson Valley, the Tahoe Basin area, and Douglas County for fiscal year 2020.

Table ES11 - Year Built, All Housing Units (Owner-Occupied, Renter-Occupied, and Vacant), Fiscal Year 2020						
Year Group	Carson Valley	Percent of Total	Tahoe Basin	Percent of Total	Douglas County	Percent of Total
Built 2016 or Later	849	4.3%	113	2.0%	962	3.8%
Built 2010 to 2015	518	2.6%	59	1.1%	577	2.3%
Built 2000 to 2009	4,604	23.3%	417	7.5%	5,021	19.8%
Built 1990 to 1999	5,599	28.3%	373	6.7%	5,972	23.6%
Built 1980 to 1989	3,638	18.4%	1,330	23.8%	4,968	19.6%
Built 1970 to 1979	3,306	16.7%	1,861	33.4%	5,167	20.4%
Built 1960 to 1969	668	3.4%	855	15.3%	1,523	6.0%
Built 1950 to 1959	179	1%	241	4.3%	420	1.7%
Built 1940 to 1949	118	0.6%	90	1.6%	208	0.8%
Built 1939 or Earlier	283	1.4%	238	4.3%	521	2.0%
Total	19,762	100%	5,577	100.0%	25,339	100%

Source: Center for Regional Studies, The College of Business, University of Nevada, Reno; Data provided by the Douglas County Assessor’s Office



ECONOMY

Table ES12 presents median household income, median family income, and per capita income for Douglas County, various other communities and counties throughout northwestern Nevada, the State of Nevada, and the United States for 2013 to 2018.

Table ES12 - Median Household Income, Median Family Income, and Per Capita Income (2013 to 2018)								
Year	Douglas County	Carson City	Lyon County	Mineral County	Storey County	Washoe County	State of Nevada	United States
Median Household Income								
2013	\$60,100	\$51,957	\$46,137	\$35,017	\$61,573	\$53,040	\$52,800	\$53,046
2018	\$62,503	\$52,034	\$55,493	\$41,163	\$62,284	\$61,155	\$57,598	\$60,293
Median Family Income								
2013	\$67,597	\$63,883	\$52,918	\$61,226	\$64,173	\$64,556	\$61,359	\$64,719
2018	\$74,741	\$66,904	\$65,817	\$52,336	\$69,327	\$75,054	\$68,700	\$73,965
Per Capita Income								
2013	\$34,123	\$26,264	\$21,757	\$23,146	\$33,472	\$28,670	\$26,589	\$28,155
2018	\$36,390	\$29,767	\$26,855	\$22,897	\$35,887	\$33,546	\$29,961	\$32,621

Source: U.S. Census Bureau, 2013–2018 American Community Survey, 5-Year Estimates

Since the Great Recession, median household incomes, median family incomes, and per capita (mean) incomes for Douglas County have grown significantly. For all of Douglas County, median household income has increased from an estimated \$60,100 in 2013 to an estimated \$62,503 in 2018, which is a net increase of \$2,403 or 4 percent. Between 2013 and 2018, the annual average median household income in Douglas County was \$60,171, second only to the annual average median household income in Storey County (\$63,773) of all communities and counties in northwestern Nevada.

Median family income in Douglas County increased from an estimated \$67,597 in 2013 to an estimated \$74,741 in 2018, which is a net increase of \$7,144 or 10.6 percent. Between 2013 and 2018, the annual average median family income in Douglas County was \$69,513, which was the single largest annual average median family income for all of northwestern Nevada during that period. Only Washoe County, with an annual average median family income of \$68,585, and Storey County, with an annual average median family income of \$67,382, had comparable annual average median family incomes between 2013 and 2018.

Per capita income in Douglas County increased from an estimated \$34,123 in 2013 to an estimated \$36,390 in 2018, which is a net increase of \$2,267 or 6.6 percent. Between 2013 and 2018, the annual average per capita income in Douglas County was \$34,772,

the second largest annual average per capita income for all of northwestern Nevada during that period. Only Storey County, with an annual average per capita income of \$35,507, had a higher annual average per capita income.

Table ES13 presents the change in the estimated civilian unemployment rate for Douglas County, various other communities and counties throughout northwestern Nevada, the State of Nevada, and the United States for 2013 to 2018.

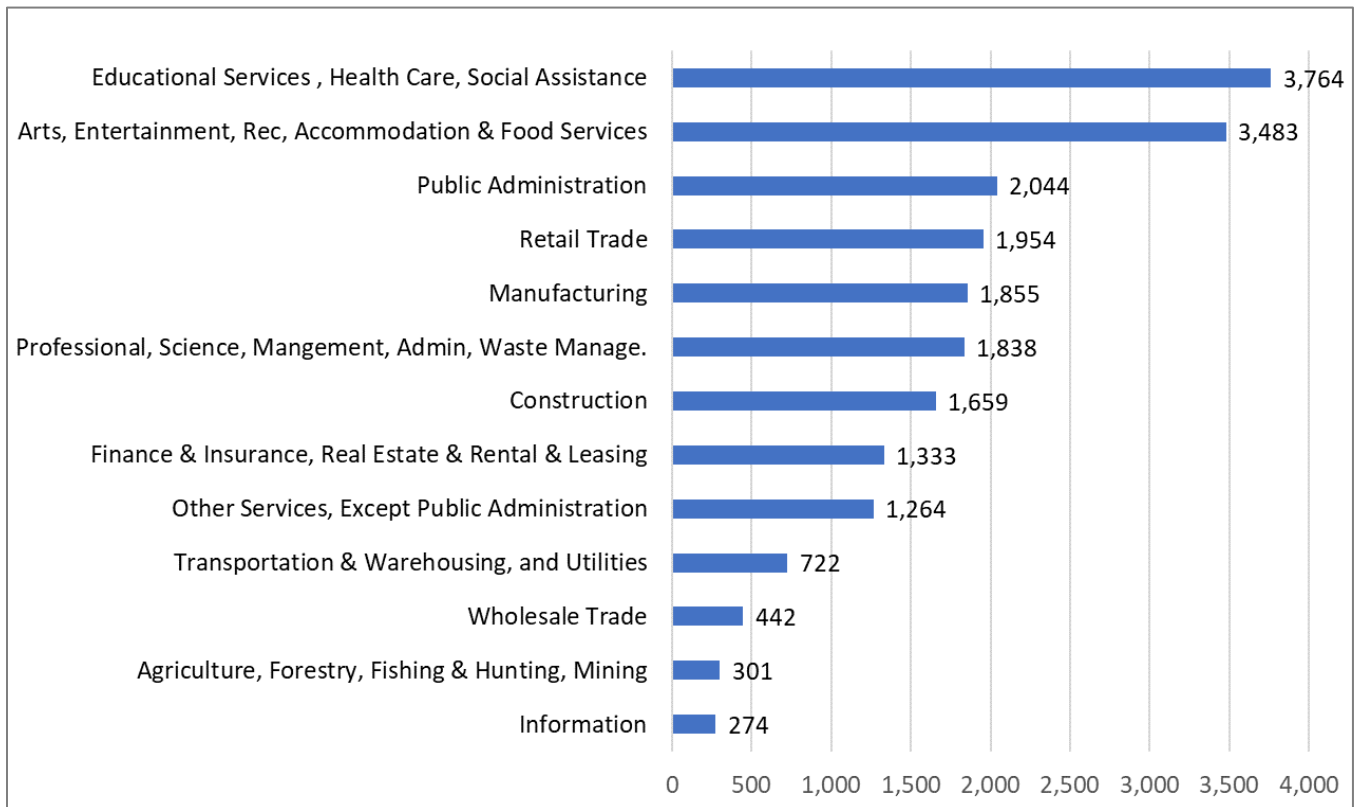
Table ES13 - Civilian Labor Force Unemployment Rate (2013 to 2018)								
Year	Douglas County	Carson City	Lyon County	Mineral County	Storey County	Washoe County	State of Nevada	United States
2013	10.8%	17.5%	17.7%	15.9%	15.2%	11.1%	12.5%	9.7%
2014	9.5%	14.5%	15.6%	16.2%	13.0%	10.6%	11.8%	9.2%
2015	8.5%	11.3%	13.6%	15.4%	10.3%	9.1%	10.5%	8.3%
2016	7.5%	9.5%	11.8%	13.0%	4.1%	8.0%	9.3%	7.4%
2017	6.2%	7.7%	9.8%	20.6%	4.2%	6.8%	8.0%	6.6%
2018	5.2%	6.2%	8.7%	14.8%	4.3%	5.6%	6.9%	5.9%
2013–2018 Actual Change	-5.6%	-11.3%	-9.0%	-1.1%	-10.9%	-5.5%	-5.6%	-3.8%
2013–2018 Percent Change	-51.9%	-64.6%	-50.8%	-6.9%	-71.7%	-49.5%	-44.8%	-39.2%
2013–2018 Average	8.0%	11.1%	12.9%	16.0%	8.5%	8.5%	9.8%	7.9%

Source: U.S. Census Bureau, 2013–2018 American Community Survey, 5-Year Estimates

Between 2013 and 2018, Douglas County’s civilian labor force unemployment rate declined significantly, from an estimated 10.8 percent in 2013 to an estimated 5.2 percent in 2018. Its annual average civilian labor force unemployment rate of 8 percent was the lowest of all communities and counties throughout northwestern Nevada. This was significantly lower than the average annual civilian unemployment rate for the State of Nevada, which was 9.8 percent between 2013 and 2018, and the average civilian unemployment rate for the United States, which was 7.9 percent between 2013 and 2018.

Figure ES5 presents total employment by major industry for the civilian employed population 16 years and over for Douglas County in 2018.

Figure ES5 - Total Employment by Major Industry Sector for Douglas County (2018)



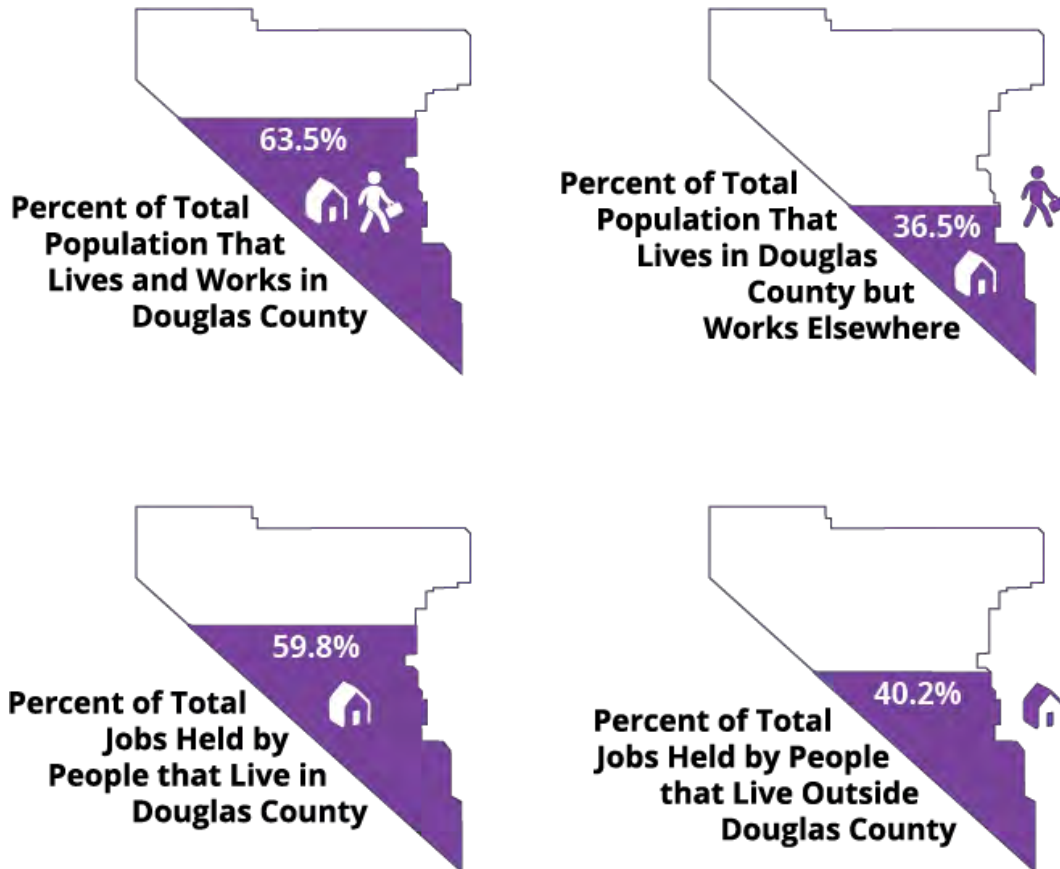
Source: U.S. Census Bureau, 2018 American Community Survey, 5-Year Estimates

In 2018, the industry Educational Services, Health Care, and Social Assistance was the single largest sector in terms of total employment in Douglas County, employing an estimated 3,764 individuals and accounting for 18 percent of the County’s total civilian employed population. The Arts, Entertainment, Recreation, Accommodation, and Food Services industry was the second largest sector, employing 3,483 individuals or 16.6 percent. Public Administration was the third largest industry sector, employing 2,044 individuals or 9.8 percent, and Retail was the fourth largest industry sector, employing 1,954 individuals or 9.3 percent.

In 2020, just 63.5 percent of the civilian workforce lived and worked in Douglas County. An estimated 36.5 percent of the county’s population, commuted for work to other communities in northwestern Nevada and east central California. In contrast, 59.8 percent of all jobs in Douglas County were held by people who lived in Douglas County. Approximately 40.2 percent of all jobs in Douglas County were held by people who lived outside of Douglas County in communities located throughout northwestern Nevada and east central California and who commuted into the county for work.

Figure ES6 compares the commuting patterns of Douglas County’s residential population (or civilian workforce) with the commuting patterns of workers who were employed in Douglas County in 2020.

Figure ES6 - Commuting Patterns for Douglas County in 2020



Source: United States Census Bureau, 2020. Residence County to Workplace County Commuting Flows for the United States and Puerto Rico Sorted by Residence Geography; 5-Year American Community Survey

An increasingly large percentage of Douglas County’s population relies on employment opportunities outside of Douglas County; these workers commute daily to other communities. An increasingly large percentage of all jobs available in Douglas County are being filled by workers who live outside the County but commute daily into the County.



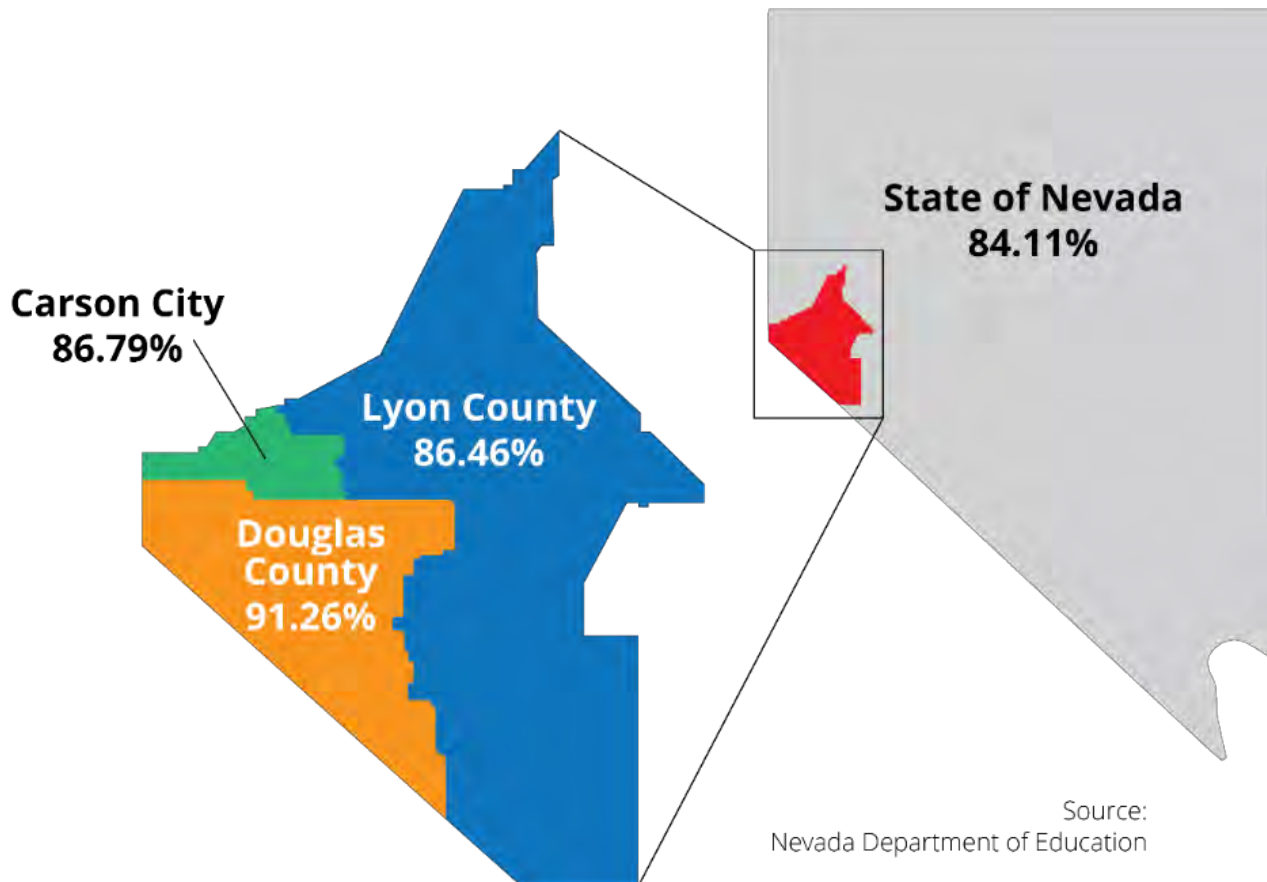
EDUCATION

The Douglas County School District operates three high schools, two middle schools, and seven elementary schools, which served a total student

population of 6,054 in Fiscal Year (FY) 2014–2015 and 5,786 in FY 2019–2020. The District also operates two alternative schools, Aspire Academy High School and Jacobsen High School (at China Spring Youth Camp). The Douglas County School District spent \$10,668 per pupil in FY 2013–2014 and \$13,674 in FY 2019–2020. By comparison, the State of Nevada spent \$8,576 per pupil in FY 2013–2014 and \$9,352 in FY 2019–2020.

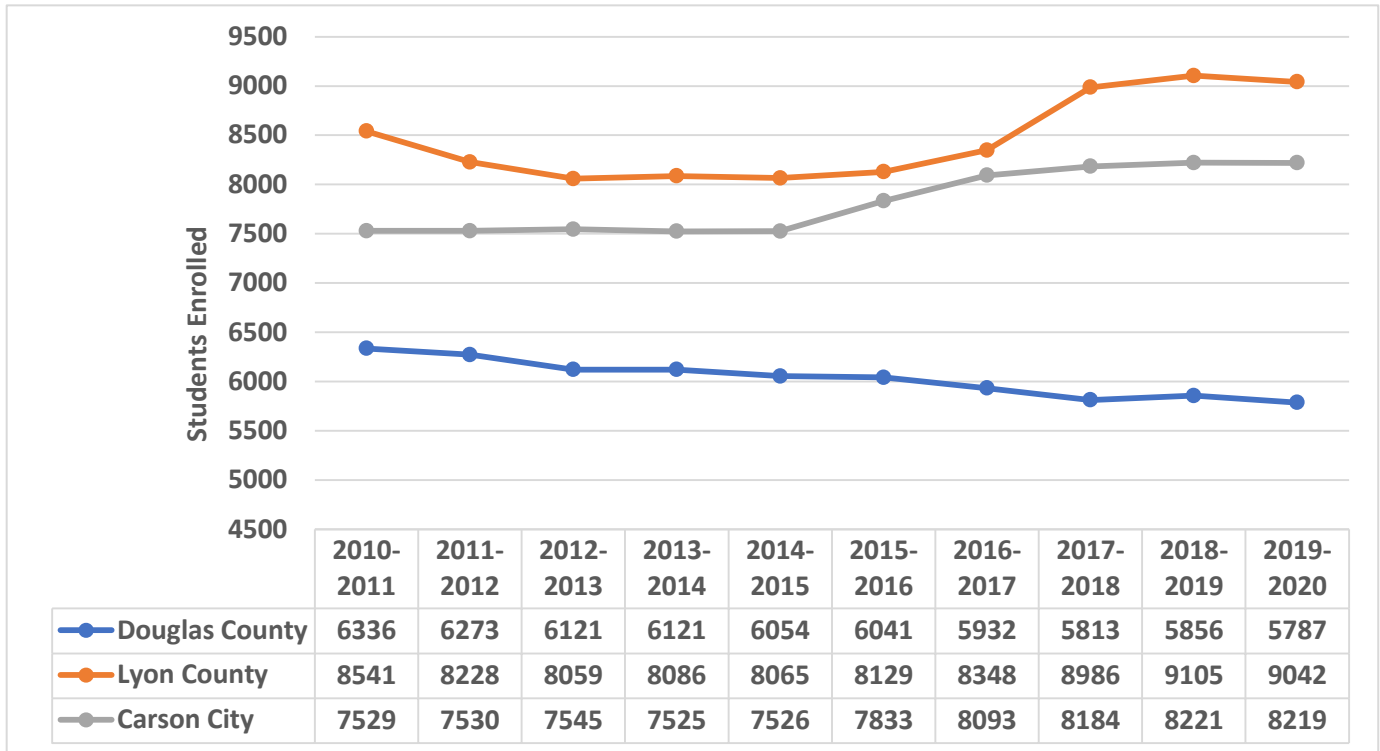
According to the U.S. News 2019 ranking of United States public high schools, George Whittell High School ranked ninth and Douglas High School ranked 22nd out of 139 public high schools in Nevada. The Douglas County School District had one of the highest graduation rates (four-year adjusted cohort) in the State for the 2019–2020 school year. Figure ES7 shows the graduation rates for Douglas County, adjacent public school districts, and the State of Nevada. The Douglas County School District had a graduation rate of 91.26 percent while the Carson City and the Lyon County School Districts had graduation rates of 86.79 percent and 86.46 percent, respectively. For this same period, the graduation rate was 93.24 percent for Douglas High School and 96.43 percent for George Whittell High School.

ES7 - Graduation Rates for 2019–2020 School Year



Total student enrollment in the Douglas County School District has been decreasing for several years, whereas student enrollment has been trending upward the past five years in Lyon County and Carson City. Figure ES8 compares student enrollment figures for all three school districts since the 2010–2011 school year.

Figure ES8 - Student Enrollment in Douglas County, Lyon County, and Carson City



Source: State of Nevada Department of Education <http://www.doe.nv.gov/DataCenter/Enrollment/>

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Scenic morning, photo by John Walker



1. LAND USE & HISTORIC PRESERVATION



PURPOSE

This Element discusses current and future land use patterns and provides guidance to property owners, residents, and elected officials regarding development proposals within Douglas County. It describes the county's regions, communities, and historic preservation programs and policies, and acts as the basis for all the remaining Elements of the Master Plan.

Land use in Douglas County is strongly tied to the desire to preserve agriculture and open spaces. Many residents support the idea that the County should remain rural and celebrate the heritage that started with the settlers of the Carson Valley in the 1800s. Programs such as the Transfer of Development Rights (TDR), as described in Element 4, Growth Management & Housing, balance the need to preserve quality of life, rural character, and open space with the need to properly plan for growth and development in locations where infrastructure and services are available and the impact of growth can be mitigated. This Element is a key component to the appropriate provision of public safety, public facilities, services, recreation, and transportation infrastructure and lays the foundation for future business development opportunities as identified in Element 3, Economic Development.

Understanding land use demands and trends is an integral part of the Master Plan. The tracking of development patterns, permit issuance, and service demands provides insight to ensure that revitalization and investment in the County protects the interest and desires of the community while achieving its strategic objectives. This section includes goals and policies to evaluate future land use requests, providing tools to make informed decisions and future modifications to the plan.

GOALS

The following goals, policies, and actions for Douglas County Land Use and Historic Preservation set forth priorities to protect and support land use in the County.



Goal 1

Retain the beauty, the natural setting/resources, and rural/agricultural character of the County while providing opportunities for managed growth and development.



Goal 2

Locate commercial and industrial development in areas that are consistent with the County's economic development strategy.



Goal 3

Preserve and promote historic, cultural, and archaeological structures, landmarks, sites, and resources as integral parts of the past and focal points to shape the County's future identity.

POLICIES



Policy L1

Promote the renovation and reuse of existing buildings.



Policy L2

Establish and maintain land use plans to provide areas for different types of future land use and intensity. Plan public services and facilities that are appropriate to the planned land uses.



Policy L3

Consider issues of community character, environmental impact, resident security and safety, aesthetics, and efficient service delivery when reviewing development proposals.



Policy L4

Include provisions in the Development Code for acquisition, construction, and maintenance of trails and trailhead facilities during project review. Such provisions may include allowing developers to utilize a density transfer for land set aside for public access or waiver of Parks and Recreation fees in lieu of dedication of such lands to the County.



Revise zoning districts and other development regulations, as appropriate, to allow development compatible with the Master Plan land use designations.



Ensure that the Master Plan's Future Land Use Map is not interpreted to affect the status of existing legal uses, densities, or intensities that are not consistent with the land use designation shown on the Land Use Map for the site. Such uses shall be considered legal non-conforming uses, and the Development Code shall set forth specific provisions to implement this policy.



Designate Urban Service Areas, where development of an urban character exists or is developing, within identified urban communities. New development in these areas may be approved by Douglas County if it is consistent with the land use designations shown on the Land Use Map, if services are available at the appropriate urban levels, if applicable policies of the Community Plan and Master Plan have been met, and if it is developed in accordance with the Development Code.



Plan urban communities to provide a balance of land uses, including sufficient commercial areas to meet the needs of community residents.



Plan locations within Urban Service Areas for multi-family residential uses along collector or arterial streets, adjacent to non-residential uses, and adjacent to other residential areas where the site configuration and project design can provide compatibility between residential uses.



Provide for the use of flexible community design techniques within Urban Service Areas to establish or revitalize neighborhoods. Mixed-Use Commercial projects, high-density traditional design, and planned developments are examples of these techniques, which should be considered when site design or neighborhood compatibility concerns can best be addressed by a project with mixed uses or densities.



Plan and provide for services to urban communities at established urban service levels, while allowing rural communities to be served in a safe manner by rural standards of service.



When adjacent to Federal lands, development that is part of a Land Division Application shall provide access to those lands, as determined by the Board of Commissioners.



Plan for a buffer or transition area separating urban land uses from existing rural residential uses.



Give first priority to development of vacant or under-utilized land in the communities ("infill" and "redevelopment") and second priority to development that expands the community. Ensure that the County's policies regarding public service provision supports these priorities.



Protect residential neighborhoods from encroachment of incompatible activities and uses that may have a negative impact on quality of life. Design and site proposed non-residential development adjacent to residential neighborhoods to protect the privacy of residences. Encourage the design of new commercial developments as integrated centers or compatible infill within developed communities rather than as small individual strip development projects.



Establish design standards and guidelines to ensure that commercial development in the historic centers of Minden, Gardnerville, and Genoa is compatible with the traditional development styles in these areas and creates or enhances their distinct identities. In Minden and Gardnerville, these standards should be compatible with the Plan for Prosperity to the greatest extent practicable.



Protect industrially designated areas from the encroachment and effects of incompatible uses in adjacent areas.



Support, whenever feasible, the preservation of the county's rich cultural heritage, including the establishment of additional historic districts to protect significant historic properties.



Cooperate with, encourage, and support the development of historical preservation efforts in the County, the Towns of Gardnerville, Minden, and Genoa, and other entities in Douglas County. Develop appropriate programs to establish guidelines for new development that is adjacent to historic structures and for the rehabilitation/reuse of historic structures to preserve their character and setting.



Use distinctive signage or other techniques to reflect the heritage of historic routes, trails, and sites, including the Emigrant Trail, the Pony Express Route, and the V&T Railway.



Create and encourage incentives for preservation of historic properties and sites. These could include property tax relief, special zoning districts, and bonus densities for additional TDRs.



Maintain Community Plans and Regions to establish the policies necessary to reflect and enhance each community's desired character.

LAND USES IN DOUGLAS COUNTY

Douglas County contains 455,275 acres of land base designated for future land use. This land base value excludes the lake areas of Lake Tahoe (approximately 15,817 acres) and Topaz Lake (approximately 1,049 acres).

In an effort to protect the public health, safety, and welfare of Douglas County's residents and property owners, a land use plan was first developed in 1996. As part of this effort, land uses were identified to provide sufficient land for residential, commercial, mixed-use, industrial, and public uses by designating future land uses in appropriate locations to preserve and protect important natural and historic resources while enabling the County to provide adequate public services.

There are 12 Future Land Use designations identified on the Douglas County Master Plan Land Use map in four specific categories: (1) Receiving, (2) Non-Residential, (3) Resource, and (4) Residential. Each Future Land Use, except for the Washoe Tribe land use, is equivalent to specific zoning districts identified in Douglas County Code Title 20.

Washoe Tribe land use designations, such as agriculture and commercial, have been incorporated into the Land Use Element Community Plan future land use maps whenever possible. Bureau of Indian Affairs (BIA) land is not identified as Washoe Tribe land; see the land ownership map in the Executive Summary.

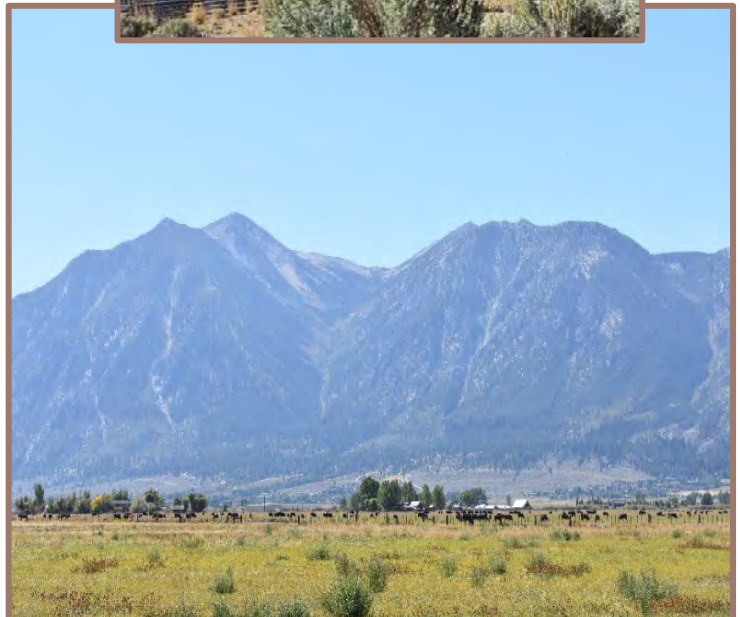
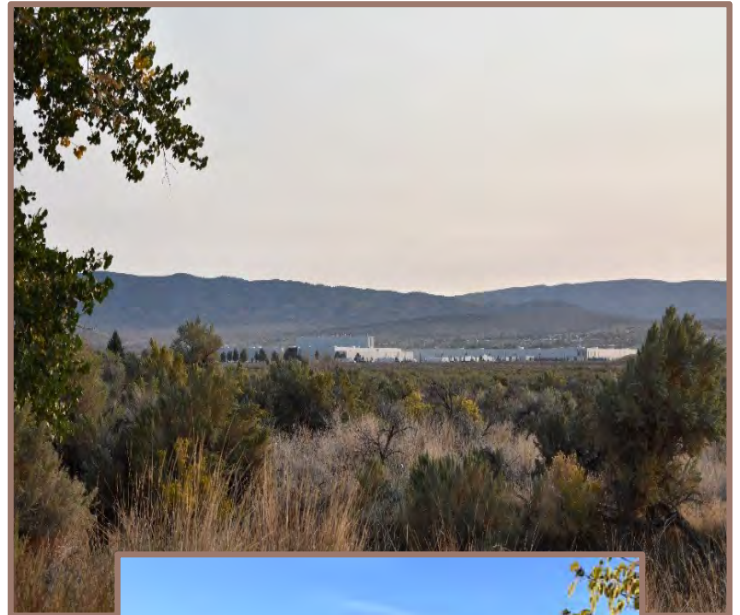


Table L1 - Future Land Use Categories (Master Plan and Douglas County Code Title 20)

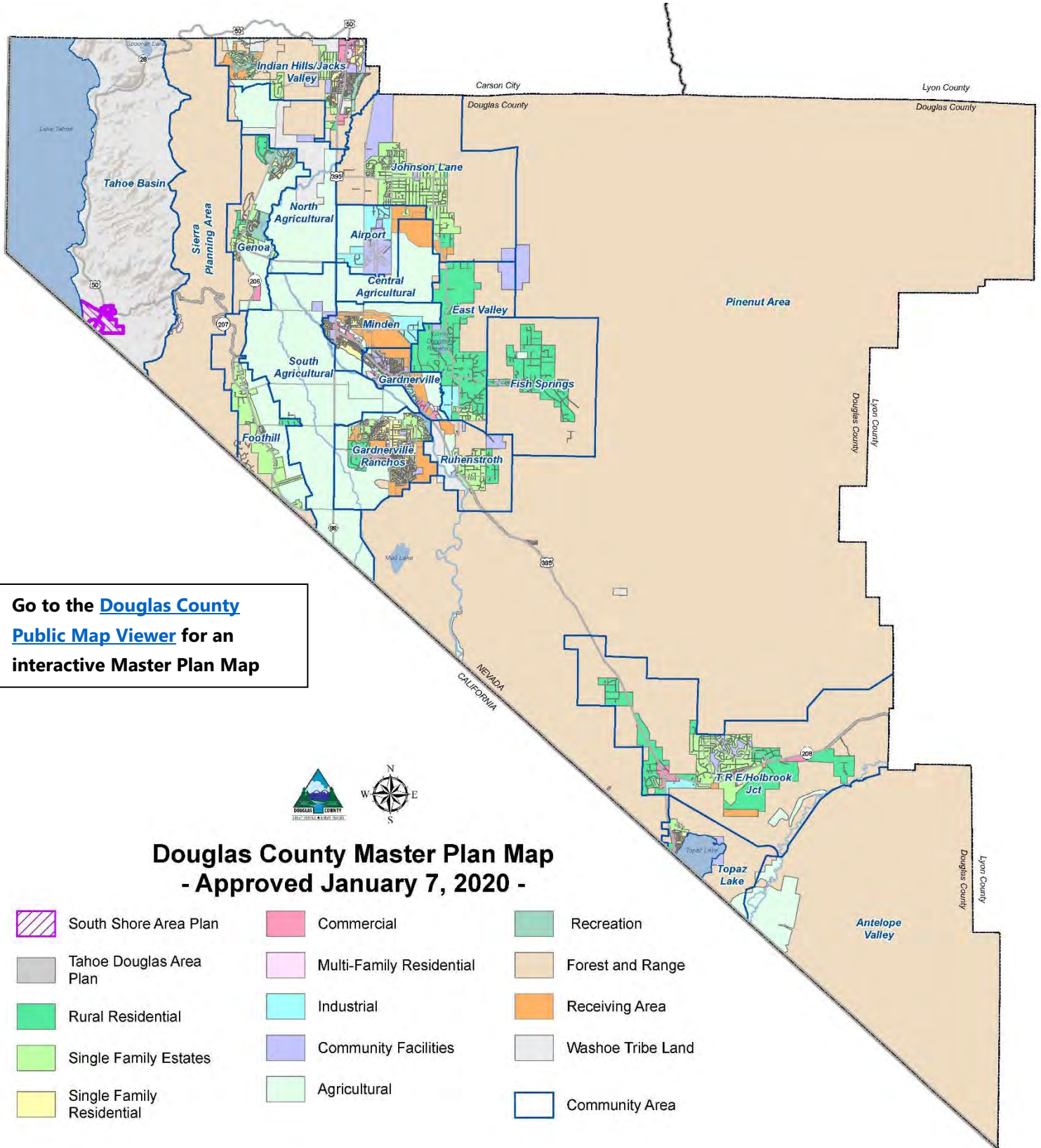
Receiving Land Use	Equivalent Base Zoning Districts	Land Use Description
Receiving Area	Allowed in all base zoning districts; requires a Specific Plan or Planned Development.	Designates parcels within Community Plans identified for future urban development that require, in most circumstances, development rights from sending areas (A-19 and FR-19 zoning districts) in Douglas County.
Non-Residential Land Uses	Equivalent Base Zoning Districts	Land Use Description
Commercial	NC - Neighborhood Commercial OC - Office Commercial GC - General Commercial MUC - Mixed-Use Commercial - Maximum residential unit density 16 dwelling units/acre MFR - Multi-Family Residential TC - Tourist Commercial	Designates parcels appropriate for neighborhood, office, regional commercial, mixed-use, multi-family, and tourist commercial development.
Industrial	GI - General Industrial LI - Light Industrial SI - Service Industrial	Designates parcels intended for various intensities of industrial development, including offices, warehouses, and manufacturing businesses.
Community Facility	AP - Airport PF - Public Facility*	Designates parcels intended specifically to airport-related industrial and public facilities lands used for public and quasi-public purposes.
Recreation	PR - Private Recreation	Designates parcels used or intended for privately owned golf courses, tennis clubs, and similar recreation.
Resource Land Uses	Equivalent Base Zoning Districts & Residential Density	Land Use Description
Forest and Range	FR-40 - Forest and Range - 40-acre minimum FR-19 - Forest and Range - 19-acre minimum	Designates public lands managed by the U.S. Forest Service, Bureau of Land Management, and Bureau of Indian Affairs as well as private lands representing the vast majority of the future land use. Most parcels are located in the Pinenut, Sierra, and Topaz regions.
Agriculture	A-19 - Agriculture - 19-acre minimum	Designates private parcels currently used for farming and ranching operations, many of which are located in floodplain areas of the Carson Valley.
Washoe Tribe	Based on the Washoe Tribe's 2008 Integrated Resource Management Plan	Designates existing parcels under control of the Washoe Tribe of Nevada and California. All Washoe parcels include land use designations, such as agricultural and commercial.

Table L1 - Future Land Use Categories (Master Plan and Douglas County Code Title 20)

Residential Land Uses	Equivalent Base Zoning Districts & Residential Density	Land Use Description
Rural Residential	RA-5 - Rural Agriculture - 5-acre minimum RA-10 Rural Agriculture - 10-acre minimum	Designates parcels intended for low-density residential development of 5 to 10 acres per dwelling. Provides for residential development outside of towns and GIDs that do not require urban services.
Single Family Estates	SFR-1 – Single Family Estates - 1-acre minimum SFR-2 – Single Family Estates - 2-acre minimum	Designates parcels of 1 to 2 acres per dwelling unit and is intended for rural medium-density residential development (urban services could be provided).
Single Family Residential	SFR ½ - Maximum density - 2 dwelling units/acre SFR 12,000 - Maximum density - 3.63 dwelling units/acre SFR 8,000 - Maximum density - 5.45 dwelling units/acre SFR-T 8,000 - Maximum density - 5.45 dwelling units/acre SFR-T 6,000 - Maximum density - 7.26 dwelling units/acre SFR-T 4,000 - Maximum density - 10.89 dwelling units/acre SFR-T 3,000 - Maximum density - 14.52 dwelling units/acre	Designates parcels at urban and suburban densities ranging from 3,000 square feet to ½ acre per dwelling unit and townhomes, manufactured home parks, and duplexes. The following urban services are required to serve these parcels: paved roads, parks and pedestrian connectivity, and water and sewer connectivity.
Multi-Family Residential	MFR - Multi-Family Residential - Maximum Density of 16 dwelling units/acre	Designates parcels within urban service areas suitable for multi- family development of up to 16 dwelling units per acre, or more with density bonuses.

**Public Facility Zoning is permitted in all land uses*

MAP L1 - DOUGLAS COUNTY FUTURE LAND USE MAP



REGIONS & COMMUNITY PLANS

Douglas County is divided into two Townships: East Fork and Tahoe (Diagram L1). Geographically, the County is comprised of five distinct regions: Carson Valley, Pinenut, Sierra, Topaz, and Tahoe Basin (Diagram L2). Community Plans within the regions express the vision that residents have for the diverse communities while preserving and promoting their unique identity.

- 1) The **Carson Valley** Region includes the unincorporated towns of Gardnerville, Genoa, and Minden. For planning purposes, there are 12 different Community Plans for the Carson Valley: Agriculture, Airport, East Valley, Fish Springs, Foothill, Gardnerville Ranchos, Genoa, Indian Hills/Jacks Valley, Johnson Lane, Gardnerville, Minden, and Ruhenstroth.
- 2) The **Pinenut** Region is the largest planning area and the least developed in the County.
- 3) The **Sierra** Region straddles the portion of Douglas County between the Carson Valley and the Tahoe Basin.
- 4) The **Tahoe Basin** Region is also under the authority of the Tahoe Regional Planning Agency (TRPA), although located partially in Douglas County. There are two community plans called "Area Plans" in the Tahoe Basin, which are under the 2012 TRPA Regional Plan: the South Shore Area Plan and the Tahoe Douglas Area Plan.
- 5) The **Topaz** Region includes the communities of Topaz Ranch Estates (TRE)/Holbrook Junction and Topaz Lake, with a community plan representing both areas. The Spring Valley area is included in the Topaz Ranch Estates/Holbrook Junction Community Plan. Although Antelope Valley and the Walker River Valley are distinct areas in southern Douglas County, there currently is no community plan for these areas.

The Community Plan areas extend beyond the boundaries of existing towns or GIDs to provide opportunities for growth. The Genoa Community Plan, for example, extends north and south of the actual Town of Genoa and reflects existing and proposed developments that are in proximity to the Town. Regions and Community Plans include information about specific community policies and diagrams from the Douglas County Future Land Use Map representing the most appropriate planned use of land for an area. This map, which is amended from time to time via the Master Plan Amendment process described in Title 20, can be found in its most current version on the [Douglas County website](#).

DIAGRAM L1 - DOUGLAS COUNTY TOWNSHIPS

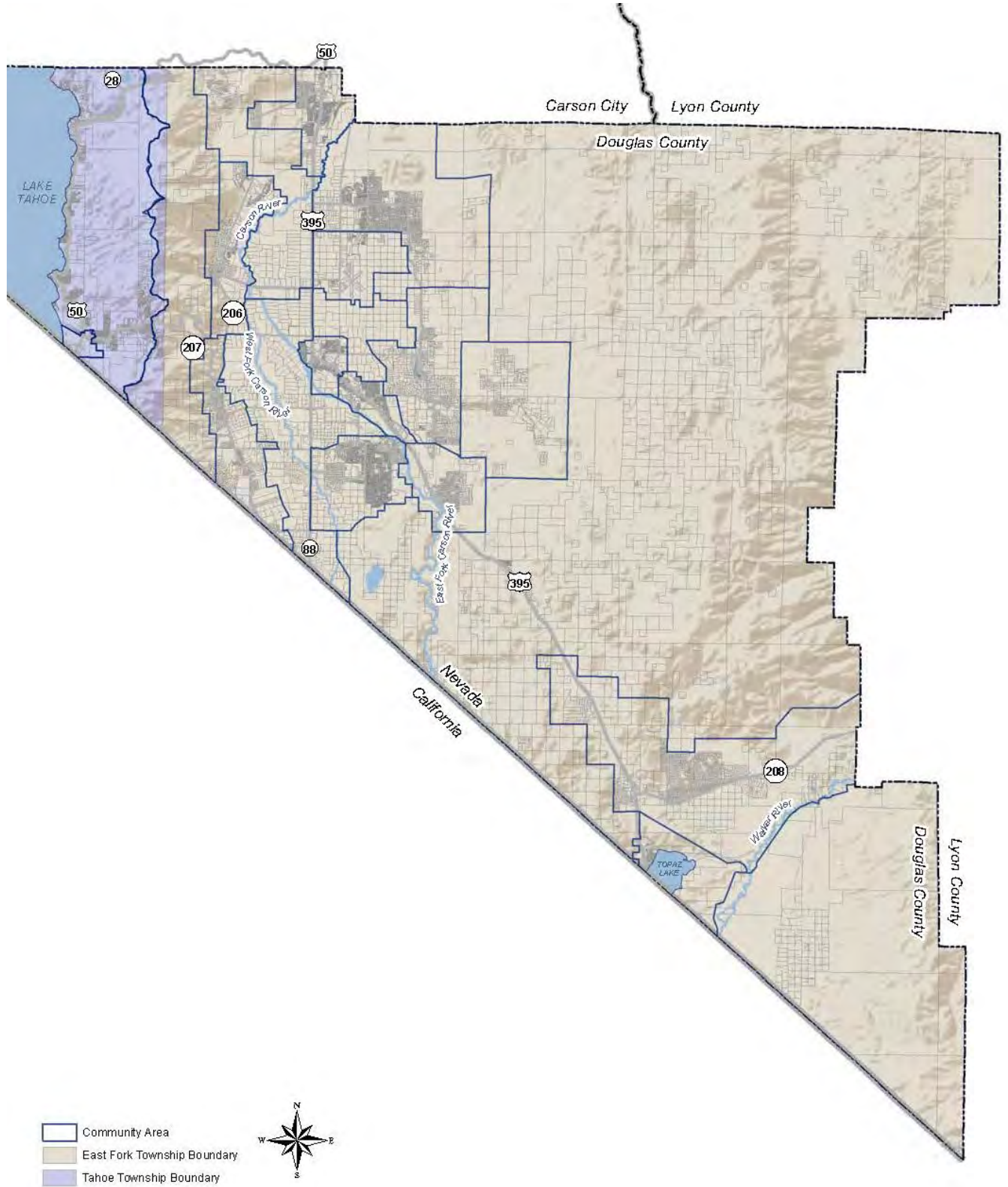
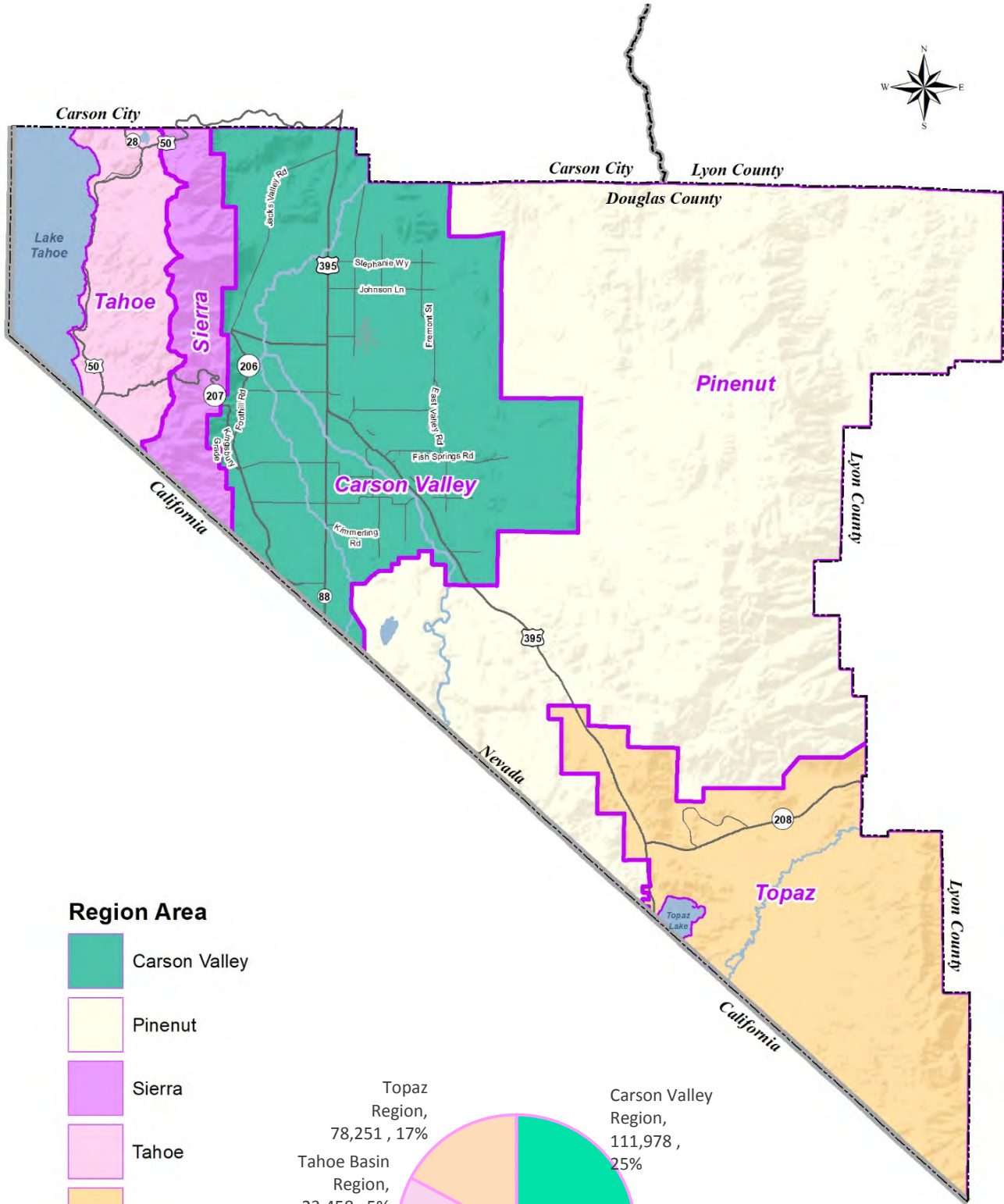
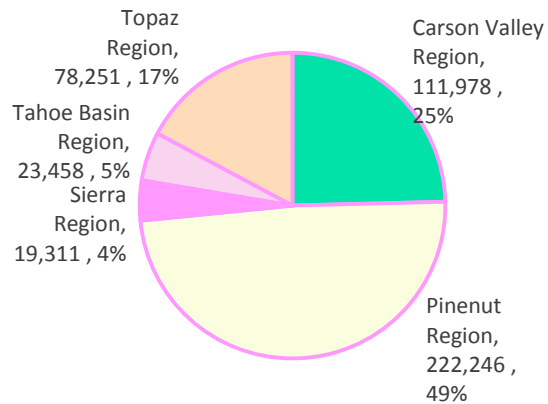


DIAGRAM L2 - DOUGLAS COUNTY REGIONS



Region Area

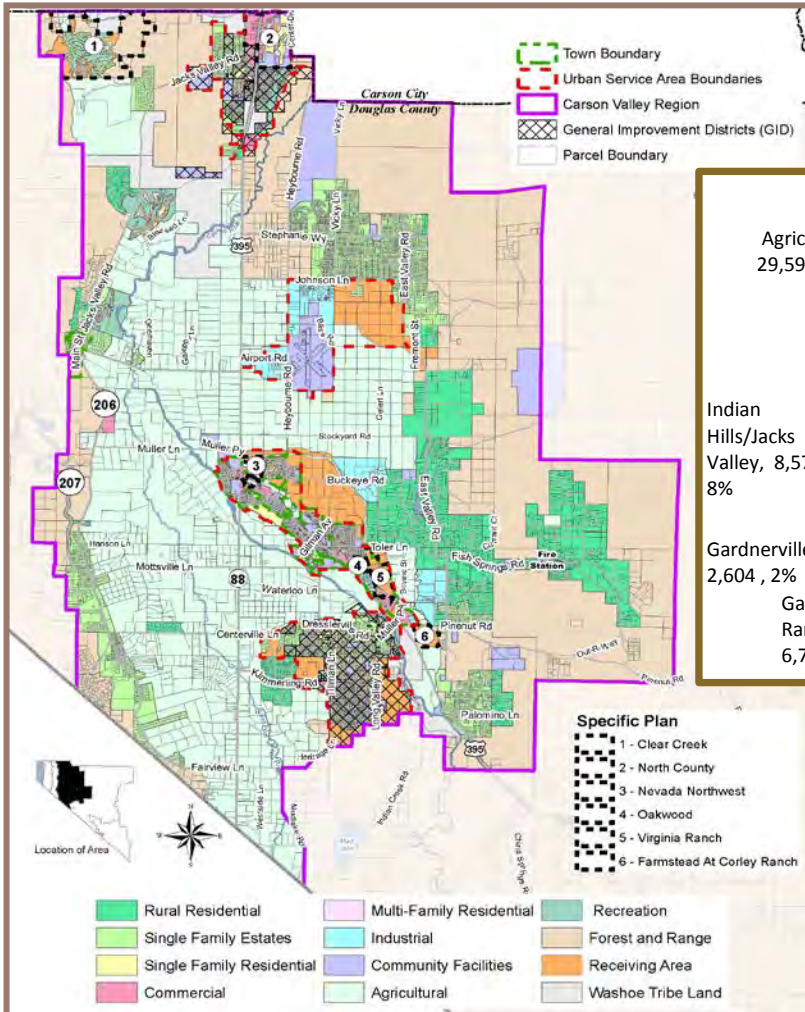




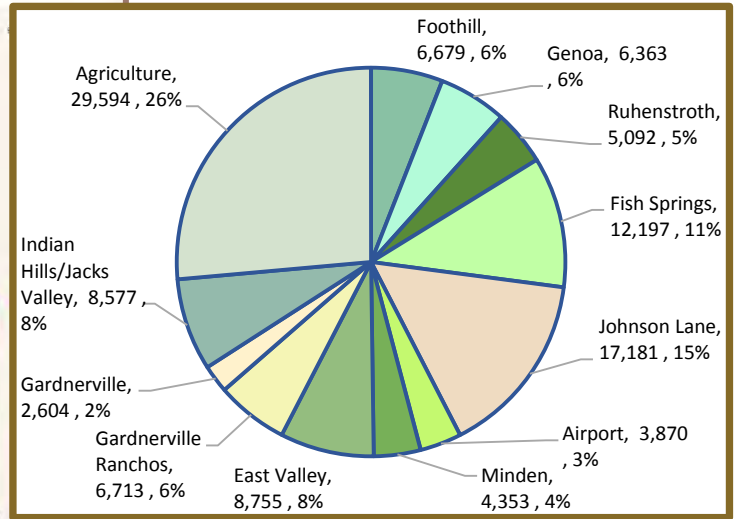
CARSON VALLEY REGION

The Carson Valley is bounded by the Sierra Nevada Mountains on the west and the Pine Nut Mountains on the east. The north boundary is the Douglas County line, and the south boundary is the California/Nevada state line. The valley averages 12 miles wide east to west and 18 miles long. Ranching and farming are the heritage of the Carson Valley. Although much of the ownership and boundaries have changed, the majority of the significant farmland is still in operation.

Diagram L3- Carson Valley Region



The Carson Valley Region totals 141,572 acres or 31.1 percent of the total acreage in the County.



The Carson Valley has a very high percentage of low- to medium-density residential development, constituting almost 98 percent of all residential land use. High-density and very high-density residential uses occupy about

two percent of all residential land in Carson Valley, and agricultural lands account for 29,594 acres. Carson Valley is also the location for most of the industrial and commercial land use in the county. Within the Carson Valley Regional Plan, there are 12 Community Plans. Each of the communities has distinctive land use identities.



An aerial photograph of the Carson Valley, showing a vast, flat landscape with scattered buildings and fields. In the background, a range of rugged mountains with patches of snow is visible under a cloudy sky. The foreground shows a dirt road and a fenced-in area with a building.

OUR VISION FOR THE CARSON VALLEY

- A diverse mix of lifestyles, from mixed-use Main Streets to quiet residential areas, ranches, and farmlands
- Preservation of our historic downtowns and sites
- The primary center of arts, culture, services, and amenities in the County

AGRICULTURE COMMUNITY PLAN

The Agriculture Community Plan is divided into three sub-areas—north, central, and southern portions of Carson Valley—that contain most of the productive irrigated farms and ranch lands in Douglas County. The total acreage in the community plan is 29,594 acres. The landscape slopes gently to the north by northwest, and the majority of



Photo by Vivian Powers

the lands are located within the flood zones from both branches (east fork and west fork) of the Carson River. The network of irrigation ditches and facilities in the valley is an intricate system conveying the waters from the Carson River to the irrigated farmland and back. There are three water masters that regulate the flow of the irrigation water in accordance with the Alpine Decree. Both forks of the Carson River merge in the center of the Carson Valley before flowing into Carson City.

VISION STATEMENT

Agriculture in Douglas County will remain a key part of our identity, and the mindful and sustainable use of agricultural resources will be protected, encouraged, and supported.

COMMUNITY-SPECIFIC POLICIES



Policy 1

Preserve and enhance the existing scenic character, beauty, and agricultural resources of the north, central, and south agricultural communities.

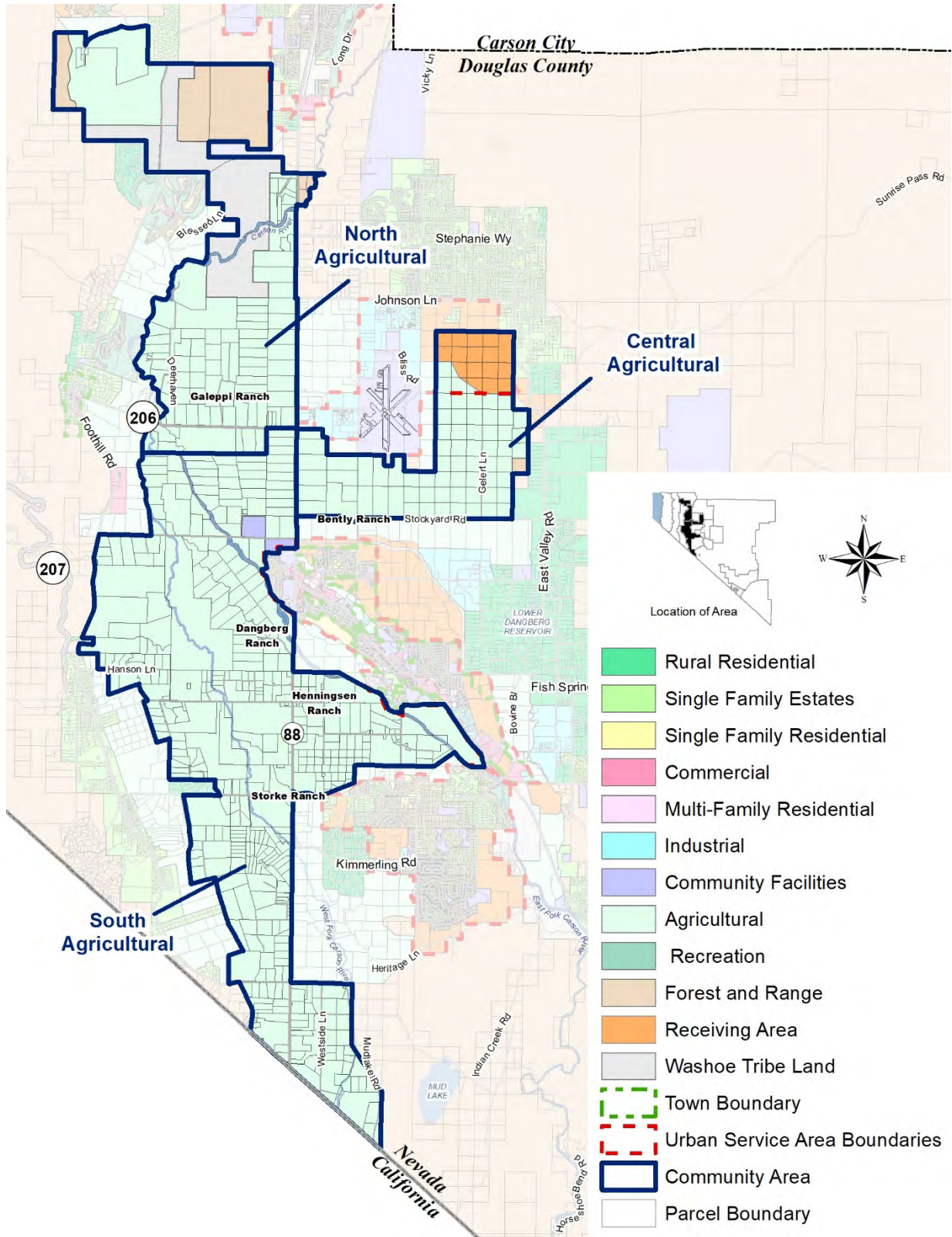


Policy 2

Use the Master Plan and development regulations to maintain and/or enhance the existing rural and scenic character of the community.

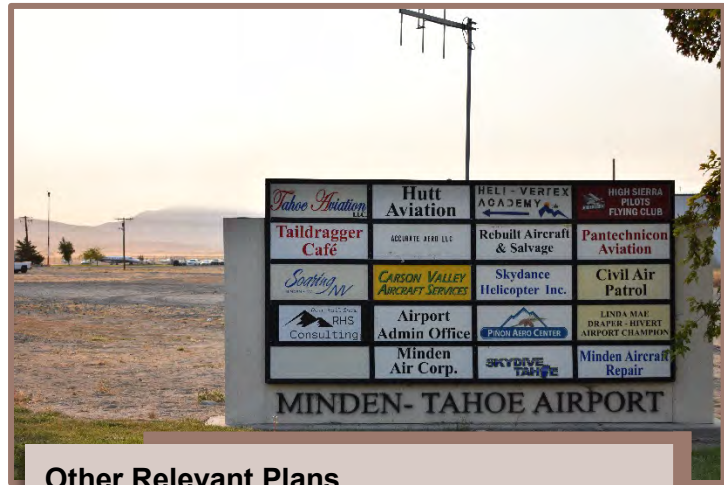
Land Use	Acres	Percentage
Agricultural	24,768	85%
Washoe Tribe Land	1,996	7%
Forest & Range	1,498	5%
Receiving Area	660	2%
Community Facilities	139	1%

DIAGRAM L4 - AGRICULTURE COMMUNITY



AIRPORT COMMUNITY PLAN

The Airport Community Plan covers approximately 3,870 acres and is centrally located in the Carson Valley. Agriculture and vacant lands comprise more than 50 percent of the community, which includes the Minden-Tahoe Airport, the Carson Valley Ranch receiving area (to the east), various business parks, and agricultural lands to the south and west. Receiving area south of Johnson Lane provides additional opportunity for the use of TDR. The County envisions industrial offices and/or single family estates to be expanded with full water and sewer connections. The wetland/floodplain in the southeast portion of the community provides an area for groundwater recharge and aviation safety. The community facilities, located on the western portion of the airport property, include aviation businesses, private aircraft hangars, and the County’s Public Works Department. Industrial offices are encouraged along Johnson Lane to buffer the residential uses to the north.



Other Relevant Plans

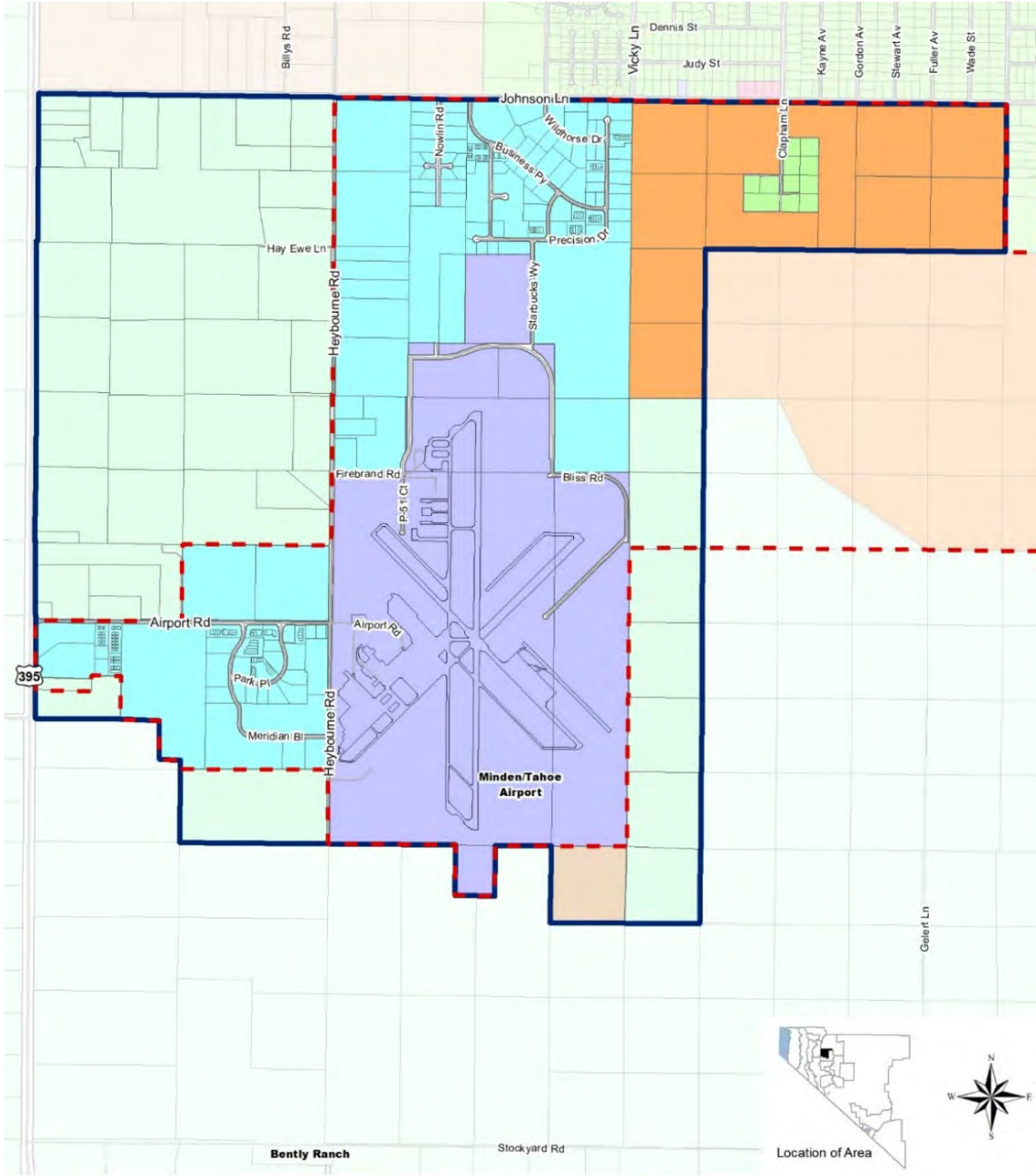
Airport Master Plan

VISION STATEMENT

The Airport Community Plan will focus on creating a state-of-the art transportation hub while continuing to be recognized as a premier soaring destination. The Airport Community will become a logistics center for commerce, offering a convenient location for industrial and agricultural uses.

Land Use	Acres	Percentage
Agricultural	1,413	37%
Community Facilities	967	25%
Industrial	892	24%
Receiving Area	445	12%
Forest & Range	41	1%
Single Family Estates	29	1%

DIAGRAM L5 - AIRPORT COMMUNITY



- | | | |
|---|--|--|
|  Single Family Estates |  Community Facilities |  Urban Service Area Boundaries |
|  Single Family Residential |  Agricultural |  Community Area |
|  Commercial |  Forest and Range |  Parcel Boundary |
|  Industrial |  Receiving Area | |

COMMUNITY-SPECIFIC POLICIES



Policy 1

Use zoning, the Airport Master Plan, the project review process, and design guidelines to promote development that will enhance property values and the aesthetics of the Airport Community while maintaining a buffer around the airport perimeter for safety and noise abatement.



Policy 2

Encourage industrial and commercial uses to be developed along the south side of Johnson Lane and design them to be compatible with planned residential development in the vicinity, minimizing aesthetic and maintaining the views from existing properties located north of Johnson Lane.



Policy 3

Regulate direct access on Airport Road, Heybourne Road, Johnson Lane, and East Valley Road to maintain the function and safety of these collector roads. Extend Vicki Lane to the south of Johnson Lane and promote the connection of East Valley Road.



Policy 4

Have property owners prepare a specific plan for the receiving areas of the Airport Community area for review by Douglas County. New single family estates or other land uses that are proposed need to address a variety of issues that include on- and offsite flooding and drainage controls and conveyances, downstream routing of the storm water, infrastructure connections to community sewer and water systems, traffic and roadways, land use compatibility, and overall community design.



Policy 5

Require the paving of all public roads in the Airport Community. Driveways, parking areas, loading areas, and other high activity areas in non-residential developments shall be paved and shall not require the installation of streetlights, curbs, gutters, or sidewalks.



Policy 6

Preclude land uses in the flight path that pose unacceptable hazards to airport operations or development near the airport, per the Airport Master Plan.



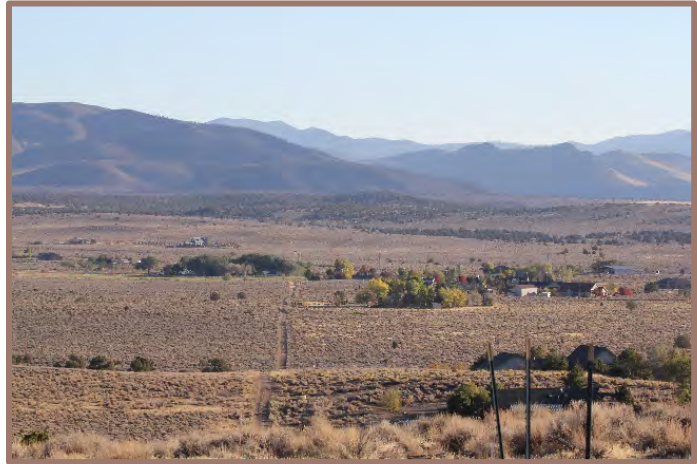
Policy 7

Pursue funding for a Federal Aviation Administration (FAA) Part 150 Noise Study and Part 77 Hazard Study in order to prepare an Airport Overlay Zoning District for the Minden-Tahoe Airport.



EAST VALLEY COMMUNITY PLAN

The East Valley Community Plan area includes approximately 8,577 acres and is located on the east side of the Carson Valley, south of the Johnson Lane Community, east of central Agricultural, Minden, and Gardnerville Communities, and north of Ruhensroth. The community enjoys views across the Carson Valley agricultural lands, with open spaces across the scenic vistas of the Sierra Nevada Mountains to the west and Pine Nut Mountain range to the east. This area is primarily comprised of single family estates and rural residential parcels, public lands, and the employment center of Williams Ridge Technology Park (at the southwestern border of Pinenut Road). Williams Ridge Industrial Park is envisioned to have improved access on Pinenut Road as more industry is located there. Grant Drive could be extended to East Valley Road, where Sawmill could connect to improve industrial access to Highway 395.



VISION STATEMENT

East Valley will be a very low-density rural residential community providing access to the Pine Nut mountain range for outdoor recreation, nature, and wildlife experiences. It will be serviced by employment and retail centers located in adjacent industrial and business parks.

Land Use	Acres	Percentage
Rural Residential	4,894	58%
Forest & Range	2,541	30%
Community Facilities	400	5%
Industrial	382	4%
Single Family Estates	230	3%

COMMUNITY-SPECIFIC POLICIES



Policy 1 Designate East Valley as a community with rural and potential urban service areas.



Policy 2 Plan for a buffer or transition area separating urban land uses from existing rural residential use.



Policy 3 Prohibit new commercial/industrial land use designations in the East Valley Community Plan and encourage development of infill in the existing business parks.



Policy 4 Limit expansion of public facility uses within the East Valley Community Plan unless the use is found to be compatible with the existing rural character of the community plan area.



Policy 5 Work with the BLM to identify areas to be included as permanent publicly accessible open space along the eastern side of the East Valley Community.



Policy 6 Maintain all single family estate designations within the East Valley Community at a two-acre minimum parcel size.



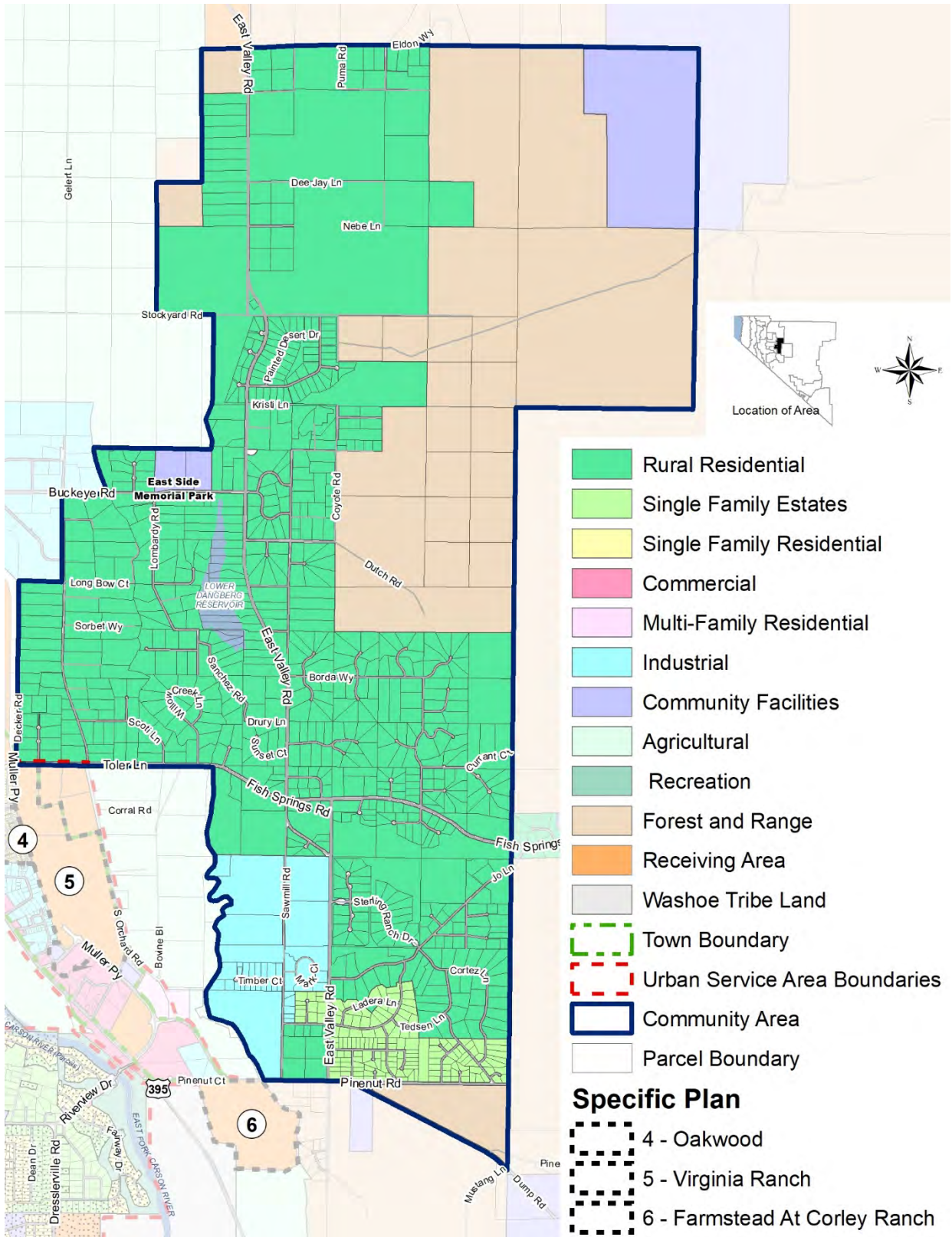
Policy 7 Allow the use of individual sewage disposal systems and domestic wells for service in this rural community, unless water quality studies identify the need for community systems.



Coordinate with and strongly encourage the BLM to plan, design, and maintain trails and public access points to the federal lands within the East Valley Community. Hiking, bicycling, and equestrian trails should be planned with appropriately designed trailheads.

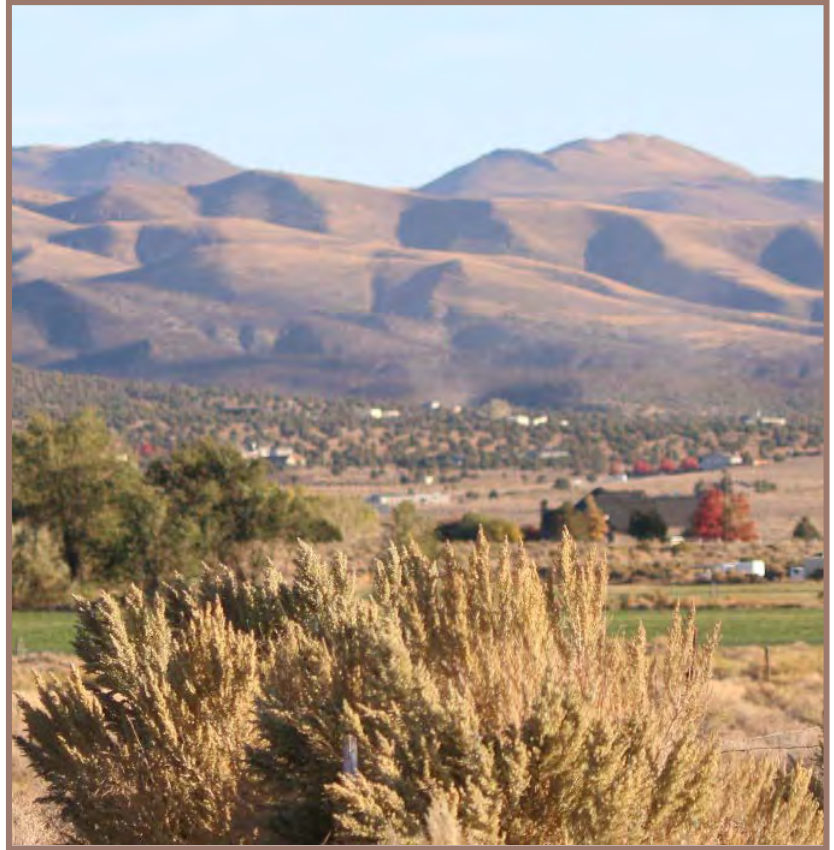


DIAGRAM L6 - EAST VALLEY COMMUNITY



FISH SPRINGS COMMUNITY PLAN

The Fish Springs Community includes approximately 12,197 acres, primarily Forest and Range land use with rural residential, agricultural, and public facilities land. The area received its name from Fritz Elges, who constructed a covered dug-out reservoir in which carp (oily freshwater fish) were grown. Thus, an early effort of aquaculture gave the area its name. The Fish Springs Community is separated from the Carson Valley by the easterly hills of the Pine Nut Range. The community consists of single family residences characterized by lots between one and 10 acres in size generally scattered throughout the area. Based on historic patterns and topography, it is assumed this pattern of development will continue.



The only public facilities in the community are the Fish Springs Volunteer Fire Department and two parcels of land owned by Douglas County on either side of Fish Springs Road at the entrance to the canyon.

VISION STATEMENT

Fish Springs will be a very low-density rural community providing access to majestic scenery and improved access to outdoor recreation, nature, and wildlife experiences.

Land Use	Acres	Percentage
Forest & Range	9,473	78%
Rural Residential	2,471	20%
Agriculture	59	1%
Community Facilities	48	1%

COMMUNITY-SPECIFIC POLICIES



Do not expand the Rural Residential areas in Fish Springs until areas presently planned for this use are 85 percent developed, unless the governing body determines otherwise.



Work with the BLM to establish a buffer of permanent, publicly accessible open space around the community.



Plan and provide public facilities and services to the community at established rural levels of service, including minimizing installation of streetlights, curbs, gutters, and sidewalks.

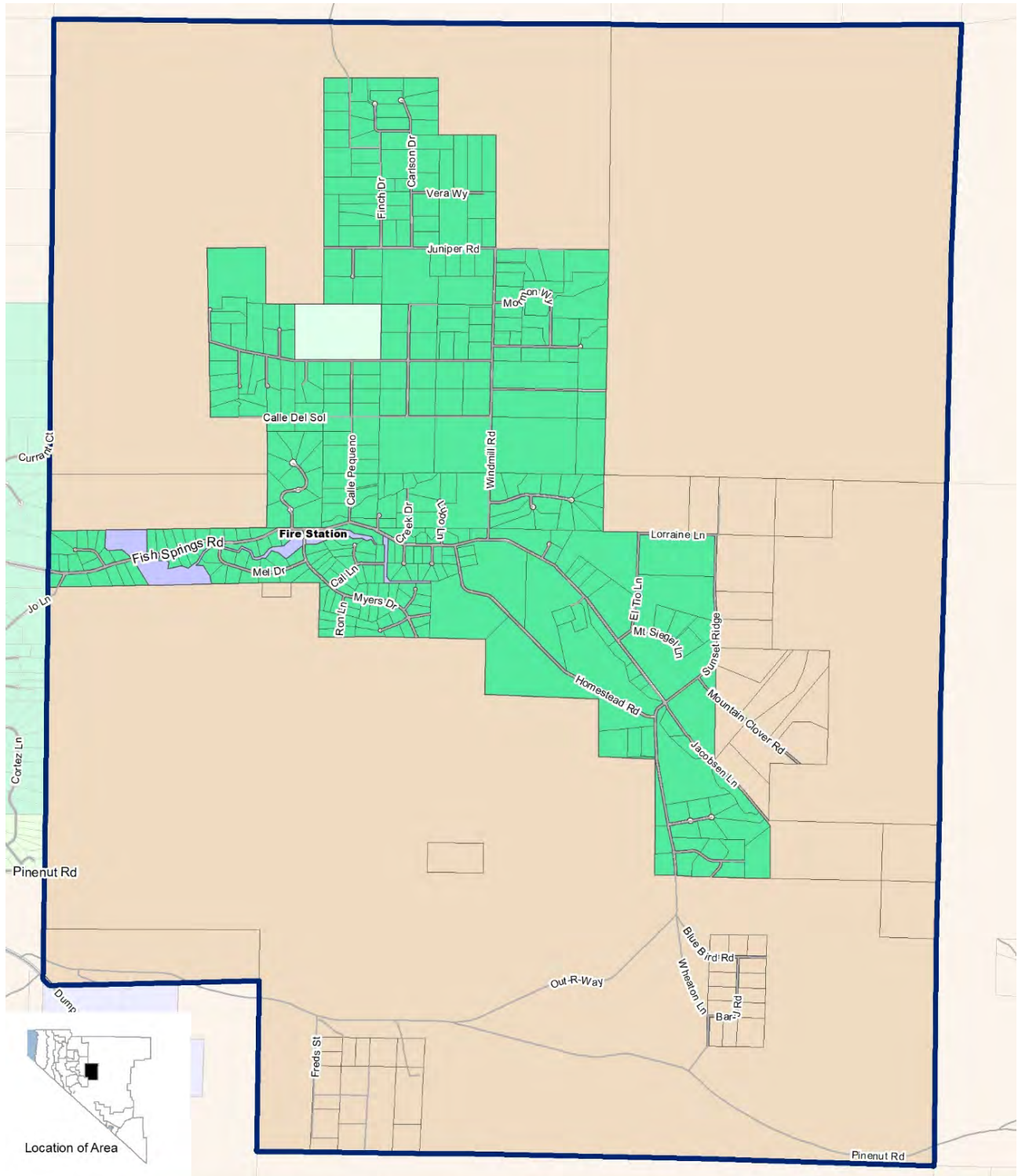








Determine the appropriate route and plan for a secondary emergency access for the community.



Cooperate with private organizations such as the Carson Valley Trails Association (CTVA) and others to plan, design, and maintain trails and improve public access points to federal lands. Plan hiking, bicycling, and equestrian trails with appropriately designed trailheads in cooperation with the BLM. Establish public access points through the planning and permitting process.

DIAGRAM L7 - FISH SPRINGS COMMUNITY



	Rural Residential		Agricultural		Community Area
	Single Family Estates		Forest and Range		Parcel Boundary
	Community Facilities				





FOOTHILL COMMUNITY PLAN

The Foothill Community area includes approximately 6,679 acres of Forest and Range, Single Family Estate, and Rural Residential areas with parcel sizes between one and ten acres adjacent to agricultural lands. In the mid-1800s, the Mottsville and Sheridan settlements were established in the Foothill Community, and both of these names are used today to identify these settlement areas. The Foothill Community is a picturesque setting overlooking agricultural fields nestled at the foot of the pine-covered Carson Range of the Eastern Sierra Nevada Mountains. The community enjoys a rural environment with a low population. Agricultural fields surround the community to the north, east, and south, and a cluster of homes along Foothill Road serves as a central access spine for the community. There are some residential developments on smaller lots (Sheridan Acres) with lot sizes of approximately one-half acre. This community is currently an area of exclusive custom-built homes, and it is assumed this pattern of development will continue. Foothill has no commercial or industrial land uses. The Sheridan Volunteer Fire Department and the Mottsville Cemetery are the only public facilities located in the Community.



VISION STATEMENT

The Foothill Community will be a quiet collection of clustered residences providing picturesque views of the Carson Valley and the opportunity to experience the rich local history and culture.

Land Use	Acres	Percentage
Forest & Range	2,192	34%
Agricultural	2,097	33%
Single Family Estate	1,940	31%
Rural Residential	117	2%
Community Facilities	6	0%

COMMUNITY SPECIFIC POLICIES



Policy 1

Continue to develop the Foothill Community as a residential community area with rural levels of service.



Policy 2

Do not support the installation of streetlights, curbs, gutters, or sidewalks within the Foothill Community except on collector roads.



Policy 3

Require development in designated high fire hazard areas to provide appropriate emergency access.



Policy 4

Require development of lands within areas of identified active fault zones to conform to seismic development policies.

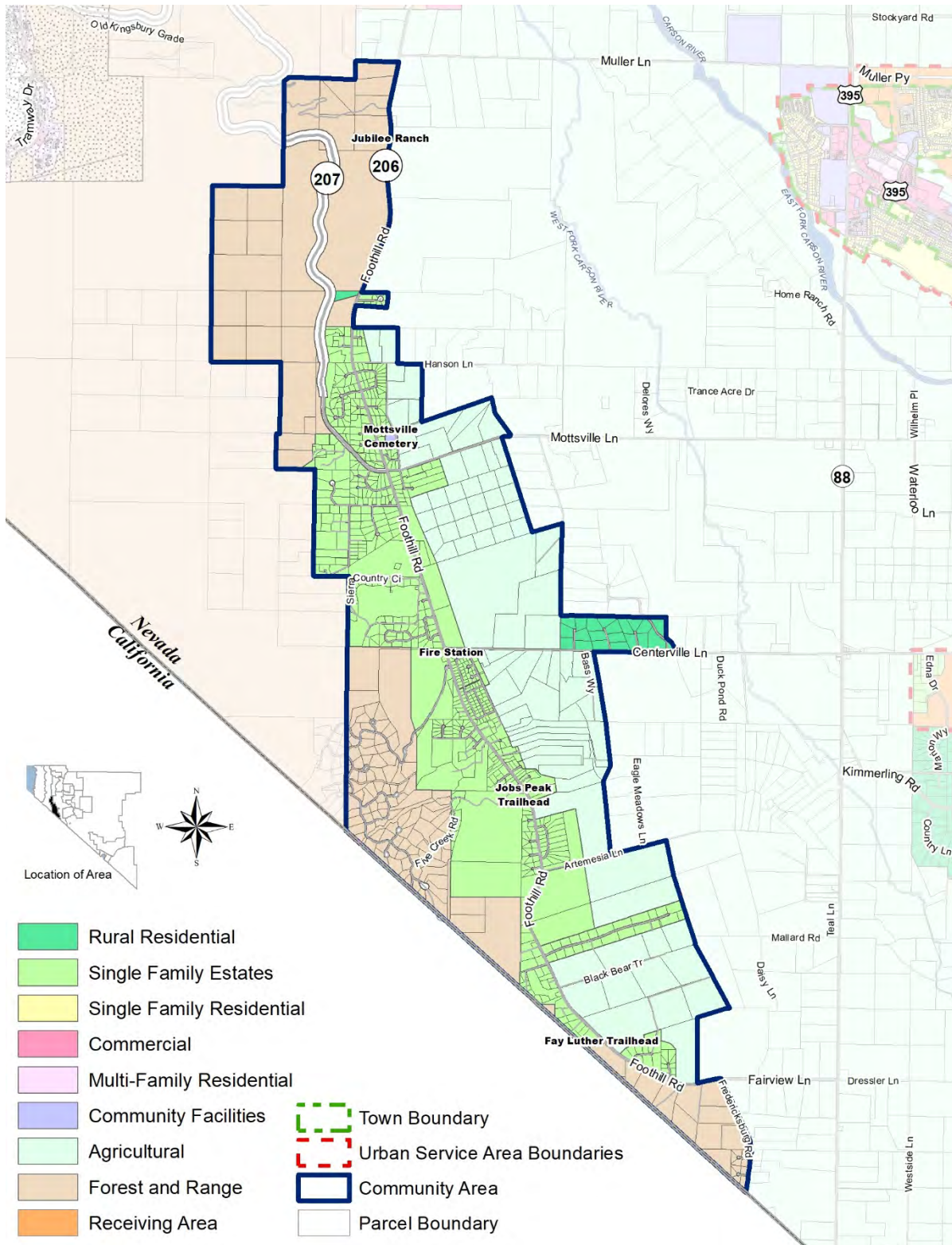


Policy 5

Work with the USFS to establish areas of permanent publicly accessible open space along the western boundary of the Foothill Community and a network of hiking, bicycling, and equestrian trails with accessible trailheads.



DIAGRAM L8 - FOOTHILL COMMUNITY





GARDNERVILLE RANCHOS COMMUNITY PLAN

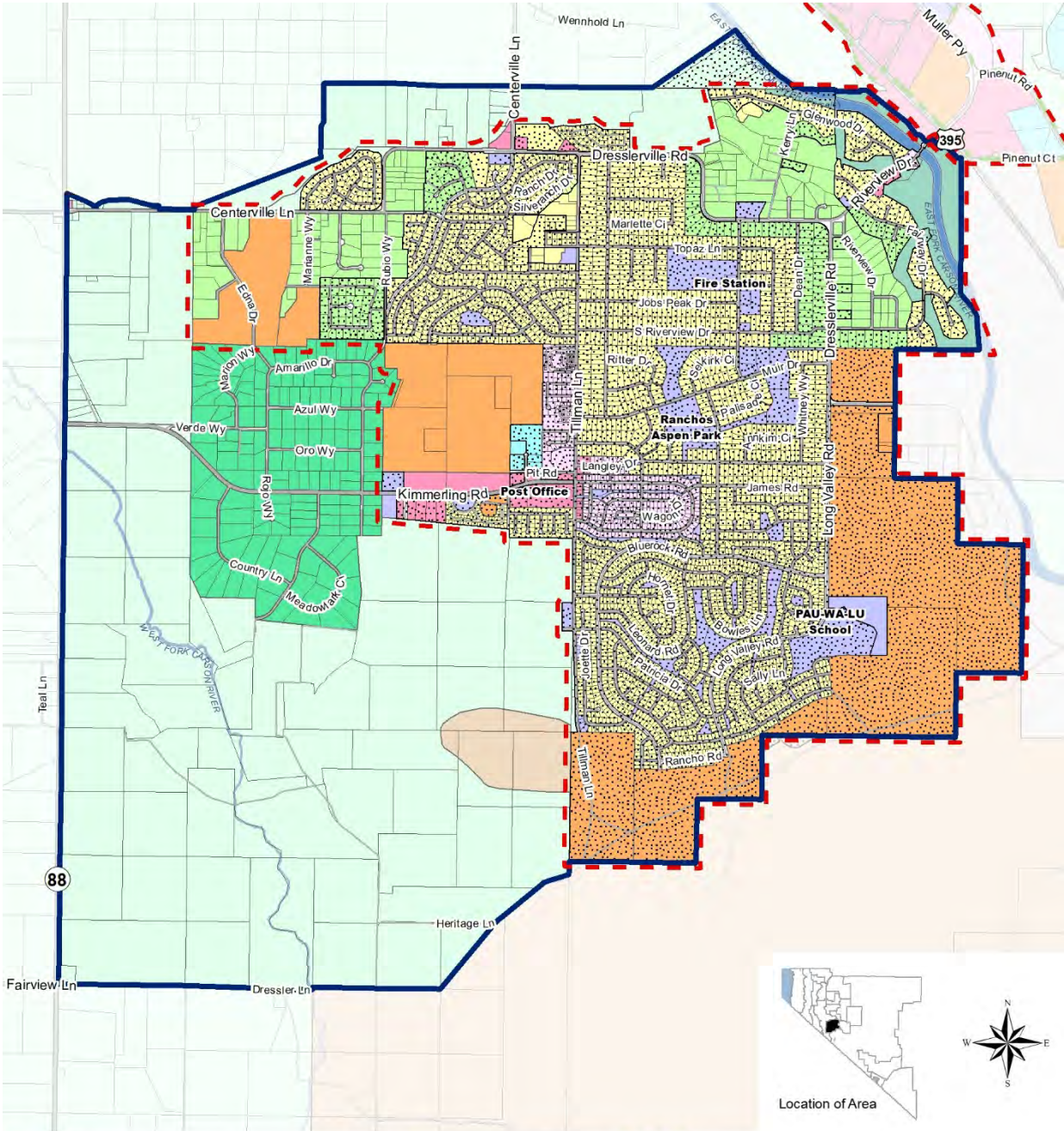
The Gardnerville Ranchos area includes approximately 6,713 acres and is home to the largest population base in Douglas County. In the mid-1960s, C.E. (Red) Swift owned a large tract of land on which he wanted to build homes. Douglas County required the proposed subdivision to have a municipal water system and paved roads. Swift tried to get the land annexed to the towns of Minden and Gardnerville but was turned down because of the proximity of the land to the towns. The Gardnerville Ranchos General Improvement 318 District was then created by Douglas County Ordinance 147 on April 9, 1965. The District is one of the oldest GIDs in the County. The Gardnerville Ranchos Community Plan lies in the south-central portion of the Carson Valley. The community, which was historically used as ranching land, now maintains both urban and rural residential areas.


















VISION STATEMENT

The future vision for the Gardnerville Ranchos Community Plan area is to retain the community's rural character and aesthetics. The Gardnerville Ranchos residents share a strong sense of community. Passive and recreational open spaces are identified as fundamental features in all new development projects to serve both new and existing residents. Bicycle, pedestrian, and equestrian nature corridors can connect the Ranchos to the Douglas County Community Center and adjacent communities. Particular attention is given to prevent overdevelopment of the designated receiving area in the plan area while providing housing opportunities that meet the needs of the Gardnerville Ranchos Community. Roadway designs should improve traffic circulation patterns, and proactive roadway maintenance programs will assure safe and smooth conditions. Low-impact development practices are employed to protect and ensure the District's low-cost, superior quality and quantity of ground water today and into the future.

Land Use	Acres	Percentage
Agricultural	2,622	42%
Single Family Residential	1,248	20%
Receiving Area	902	14%
Single Family Estate	457	7%
Rural Residential	450	7%
Community Facilities	214	3%
Forest & Range	85	2%
Multi-family Residential	95	2%
Recreation	101	2%
Commercial	64	1%
Industrial	14	0%
Washoe Tribe Land	1	0%

DIAGRAM L9 - GARDNERVILLE RANCHOS COMMUNITY



- | | | | | | |
|---|---------------------------|---|----------------------|---|-------------------------------------|
|  | Rural Residential |  | Community Facilities |  | Town Boundary |
|  | Single Family Estates |  | Agricultural |  | Urban Service Area Boundaries |
|  | Single Family Residential |  | Recreation |  | Community Area |
|  | Commercial |  | Forest and Range |  | General Improvement Districts (GID) |
|  | Multi-Family Residential |  | Receiving Area |  | Parcel Boundary |
|  | Industrial |  | Washoe Tribe Land | | |

COMMUNITY-SPECIFIC POLICIES



Designate Gardnerville Ranchos as a community with defined urban and rural areas. These areas shall be distinct, and different standards shall be applied to each area.



Encourage development of neighborhood commercial uses to adequately serve the community.



Ensure adequate provision of park sites to meet the needs of the growing community.



Plan, construct, and operate parks in the Gardnerville Ranchos Community that are consistent with the County's park standards in the Parks and Recreation section of the Public Facilities, Services, and Recreation Element.



Work closely with the Douglas County School District in the development, maintenance, and joint operation of school park sites in the community.



Work with the Gardnerville Ranchos GID to improve gateways into Gardnerville Ranchos to further delineate and enhance the image of the community.



Encourage water system connections for emergency services to be made between the Gardner Ranchos GID and Gardnerville Water.



GENOA COMMUNITY PLAN

Nestled at the foot of the Carson Range of the east slope of the Sierra Nevada Mountains, the Genoa Community Plan area includes approximately 6,363 acres along the western edge of Carson Valley. Much of the Town boundary is formed by U.S. Forest Service property. Genoa, which was settled in 1851, is the oldest town in Nevada and holds an important place in the history of Nevada and the West. Explorers and trappers often made their way through this



area when heading west to California. In June of 1851, John Reese and his party built a trading post, and the area began to attract settlers, becoming a permanent settlement known as Mormon Station; it was renamed as Genoa in 1855. Many of the structures in the Town are included on the National Register of Historic Places. The commercial properties along Main Street are within the Genoa Historic District, which includes restrictions on development and strict architectural standards.

VISION STATEMENT

Genoa will remain a symbol of the early settlement of Douglas County and the State of Nevada, maximizing the opportunities arising from the intersection of historic preservation, heritage tourism, and its potential as a gateway to the Tahoe Basin.

Land Use	Acres	%
Forest & Range	2,232	37%
Agricultural	2,018	33%
Recreation	627	10%
Single Family Estate	449	7%
Rural Residential	395	6%
Commercial	150	3%
Single Family Residential	233	4%
Community Facilities	14	0%

COMMUNITY SPECIFIC POLICIES



Policy 1 Use the Master Plan and development regulations to maintain or enhance the existing rural, agricultural, and historic character of the community.



Policy 2 Support the expansion of commercial development in the Town of Genoa in a manner that is compatible with the Town's existing historic character. Work with the Town to establish appropriate parking requirements for the commercial corridor.



Policy 3 Ensure that development regulations support growth in the bed and breakfast industry in Genoa to preserve existing historic homes and to promote tourism of Genoa's historic resources.



Policy 4 Continue to use design review to ensure that new commercial development is compatible with the historic character of the Town of Genoa. Ensure that this process addresses the amount, scale, design, location, and intensity of development.



Policy 5 Periodically review the advisability of expanding the historic district of the Town of Genoa.



Policy 6 Encourage the displacement of overhead power and communication transmission lines to underground facilities in the Town of Genoa.



Policy 7 Encourage a quiet residential neighborhood and do not approve any development or projects that will unreasonably disrupt the livelihood or peace of the residents.



Policy 8 Ensure that all streets in the Town are designed for slow speeds and safe vehicular and pedestrian routes.

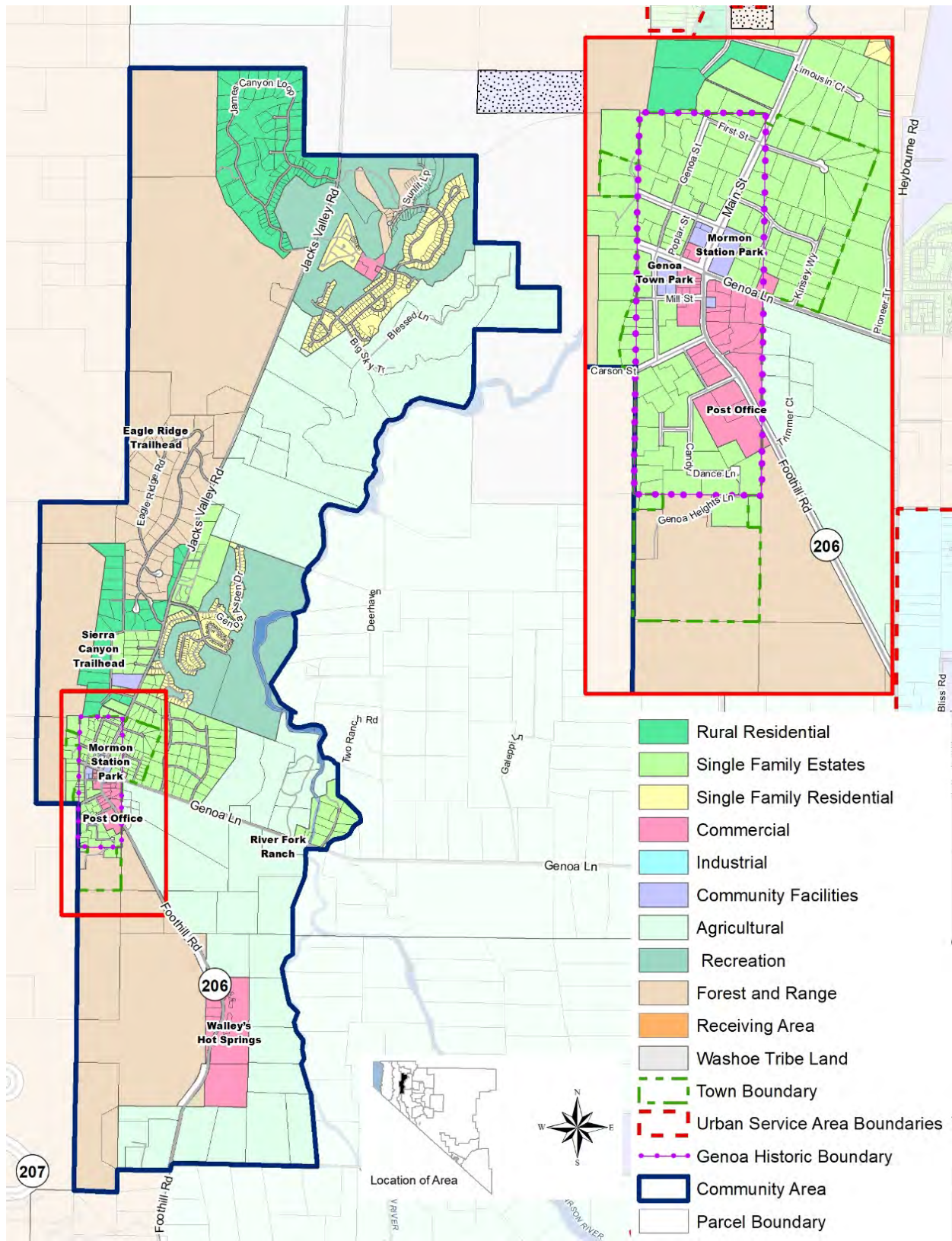


Policy 9 Ensure that local roads in the Town continue to reflect the rural character while controlling dust.



Policy 10 Coordinate with the Nevada Department of Transportation to ensure that modifications to State Route 206, Genoa Lane, and Jacks Valley Road are compatible with the existing character of Genoa and increase the safety or desirability of pedestrian traffic.

DIAGRAM L10 - GENOA COMMUNITY





GENOA TOWN HALL

SPA & BOUTIQUE

ATLAS
ESTABLISHED

INDIAN HILLS/JACKS VALLEY COMMUNITY PLAN

The Indian Hills/Jacks Valley Community, located at the north end of the Carson Valley, is the northern gateway of Douglas County. Spanning approximately 8,577 acres, the community consists of the commercial center adjacent to the Carson City and Douglas County lines of the North Valley area. The community is bisected by the Jacks Valley Wildlife Management area on USFS and BIA land, including the Clear Creek Tahoe development. The mountains of the Toiyabe National Forest to the west augment the natural open spaces and contribute to the picturesque scenery that is such an important part of this community's character.

This area lies between the steep slopes of the Sierras to the northwest and the broad floodplain of the Carson River to the southeast. The community is primarily residential, with some commercial and industrial land at the Highway 395, Mica Drive, Jack Valley Road, and Topsy intersections. Though Indian Hills/Jacks Valley is one community plan, it is composed of four distinct neighborhoods: (1) Indian Hills General Improvement District, (2) North Valley Area, (3) Silverado, and (4) Alpine View Estates.



Other Relevant Plans

North Douglas County Specific Plan
Clear Creek Tahoe Specific Plan

VISION STATEMENT

Indian Hills/Jacks Valley will continue to provide a variety of lifestyle choices ranging from rural estates to small single family residential lots, with more urbanized development centered around the Topsy Lane and Jacks Valley Road corridor along Highway 395.

Land Use	Acres	%
Forest & Range	3,899	48%
Single Family Estate	969	12%
Community Facilities	613	8%
Single Family Residential	600	7%
Washoe Tribe Land	571	7%
Recreation	370	5%
Agricultural	343	4%
Commercial	323	4%
Receiving Area	307	4%
Multi-family Residential	78	1%
Rural Residential	28	0%

COMMUNITY SPECIFIC POLICIES



Policy 1

Limit commercial development outside of the existing business corridors along U.S. 395 to neighborhood commercial uses that serve the needs of the community's residents.



Policy 2

Ensure that the commercial designation located at the intersection of Jacks Valley Road and Highway 395 provides for mixed residential and commercial uses.



Policy 3

Ensure that commercial designations associated with the resort/casino area in the south portion of the plan area are oriented toward tourism.



Policy 4

Ensure that commercial designations at the gateway to Douglas County/Carson City provide for regional commercial activities. The commercial designation on U.S. Forest Service lands anticipates land trades to private ownership but should only be permitted in exchange for open space lands in Douglas County.



Use zoning, the project review process, and design guidelines to ensure that multi-family and non-residential developments are compatible with nearby development.



Minimize the number of points of access to U.S. Highway 395, Sunridge Road, Topsy Lane, Vista Grande Blvd., and Jacks Valley Road. Limit direct access from private property.



Require connection to a centralized water system and a sewage treatment and disposal system for all new development in areas designated for urban development.



Require the paving of local streets in new urban and rural developments. Pave streets in urban areas to urban standards; pave streets in rural areas to rural standards.



Ensure that future development in the Clear Creek Specific Plan Development, which is characterized by golf estate lots surrounded by alpine meadows and forest lands, is consistent with the specific plan and remains hidden from offsite views. Maintain buffer areas with the Alpine View Estates and Freedom Ranch subdivisions to the southeast.



Ensure that future development in the North Douglas County Specific Plan Development, which is characterized by a mix of regional commercial, multi-family, and high-density single family developments, is consistent with the specific plan and is evaluated on its impact on regional infrastructure.

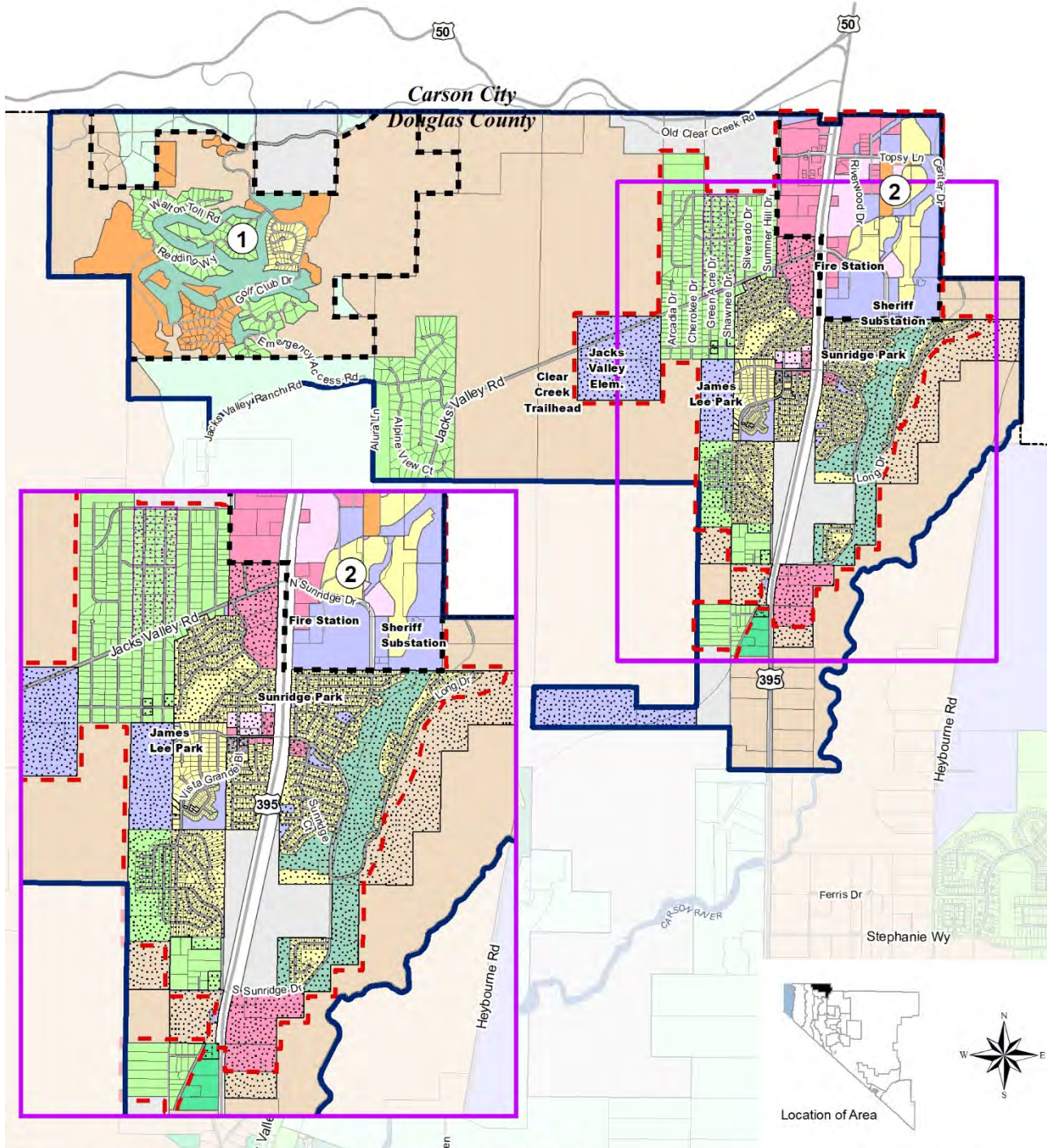
Indian Hills General Improvement District area consists of a mixture of detached single family homes, manufactured housing, and apartments in a suburban residential development setting. A neighborhood commercial center is located on Mica Drive (one of the gateways into the community), and a large regional commercial shopping center is located on the north end of the community along Highway 395 at Jacks Valley Road.

Silverado area consists primarily of detached single family homes on an average lot size of one acre. The area includes the Sierra Estates General Improvement District, serving around 64 single family custom-built homes of various styles and sizes. Jacks Valley's community character is rural, with medium to large lots in a suburban residential setting with unpaved streets.

Alpine View Estates is situated along the foothills of Jacks Valley with spectacular views of the eastern slope of the Sierra Nevada mountain range. Residents enjoy the conservation area and preserved agricultural fields, where cattle graze year-round. Alpine View Estates has detached single family, custom-built homes, which are generally large and upscale, on an average lot size of two acres. Alpine View Estates' community character is rural residential parcels of two acres with paved streets. Vacant land and public open space dominate the undeveloped parts of this community.



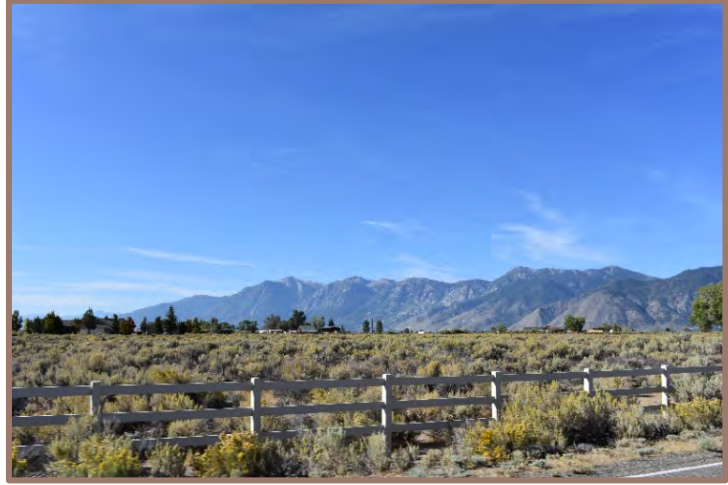
DIAGRAM L11 - INDIAN HILLS/JACKS VALLEY COMMUNITY



- | | | | |
|---------------------------|----------------------|-------------------------------|----------------------|
| Rural Residential | Community Facilities | Town Boundary | Specific Plan |
| Single Family Estates | Agricultural | Urban Service Area Boundaries | |
| Single Family Residential | Recreation | Community Area | 1 - Clear Creek |
| Commercial | Forest and Range | Indian Hills GID | 2 - North County |
| Multi-Family Residential | Receiving Area | Sierra Estates GID | |
| Industrial | Washoe Tribe Land | Parcel Boundary | |

JOHNSON LANE COMMUNITY PLAN

The Johnson Lane Community Plan is located in the northeast corner of the Carson Valley and consists of approximately 17,181 acres. The area has characteristics of a rural residential community. Residents of this area overlook the Carson Valley and enjoy access to open public lands, the Pine Nut Mountains to the east, and the scenic vistas of the tree-covered Sierra Nevada mountain range to the west. This



community is primarily developed with single family estates and rural residential areas containing individual custom-built homes, with forest and range land surrounding the community, and it is assumed this pattern of development will continue to expand. There is a concern regarding the nitrates in the groundwater, and future development should connect to a municipal water system. Sewer connectivity is also encouraged. The only commercial development in the Johnson Lane Community today is a small neighborhood commercial use on the northwest corner of Johnson Lane and Clapham Lane. The Douglas County North Valley Wastewater Treatment Plant is located within the community area. The Incline Village General Improvement District (IVGID) wetlands are also located in this area. Several areas along the north side of Johnson Lane and adjacent to U.S. Highway 395 are considered prime farmland.

VISION STATEMENT

Johnson Lane will be a primarily residential community characterized by improved infrastructure, protection from natural hazards, resources best management practices, and easy access to the Pine Nut range.

Land Use	Acres	%
Forest & Range	11,836	71%
Single Family Estate	3,173	19%
Community Facilities	1,293	8%
Rural Residential	192	1%
Receiving Area	178	1%
Agricultural	20	0%
Commercial	5	0%
Industrial	0.08	0%

COMMUNITY-SPECIFIC POLICIES



Limit commercial development outside of the existing business corridors to neighborhood commercial uses that serve the needs of the Johnson Lane Community.



Ensure that the scale and design of commercial development blends with the community's predominantly residential character.

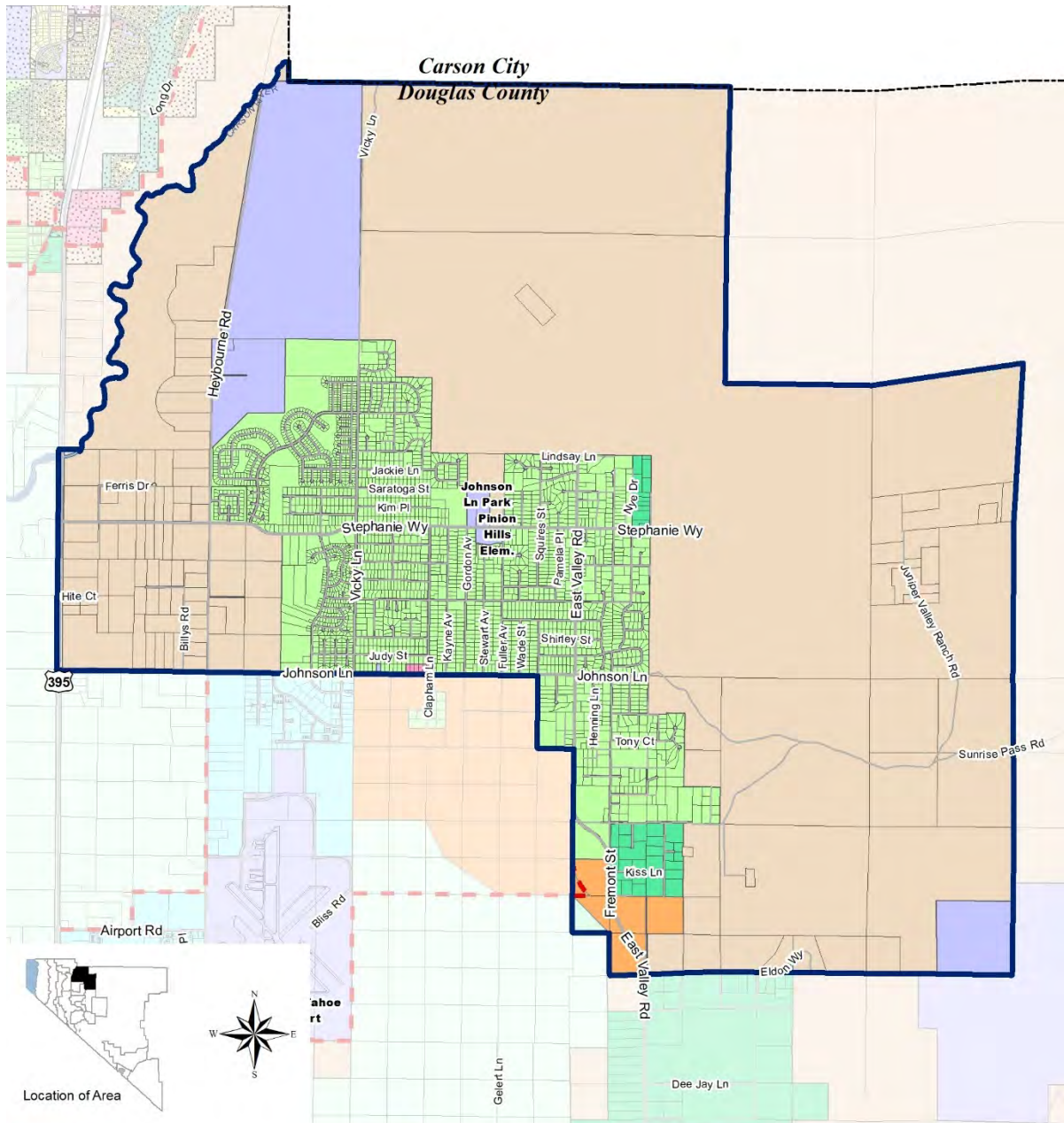


Work with BLM to identify BLM properties that are essential to creating a permanent open space buffer to the north and east of the Johnson Lane Community. Retain properties as permanent publicly accessible open space while providing for detention basins to protect residences within drainage ways.



Require connection to a centralized water system and sewage treatment and disposal system for all new development in areas designated for urban development.

DIAGRAM L12 - JOHNSON LANE COMMUNITY



- | | | |
|---|--|--|
|  Rural Residential |  Community Facilities |  Urban Service Area Boundaries |
|  Single Family Estates |  Agricultural |  Community Area |
|  Single Family Residential |  Recreation |  Parcel Boundary |
|  Commercial |  Forest and Range | |
|  Multi-Family Residential |  Receiving Area | |
|  Industrial |  Washoe Tribe Land | |

GARDNERVILLE AND MINDEN COMMUNITY PLANS

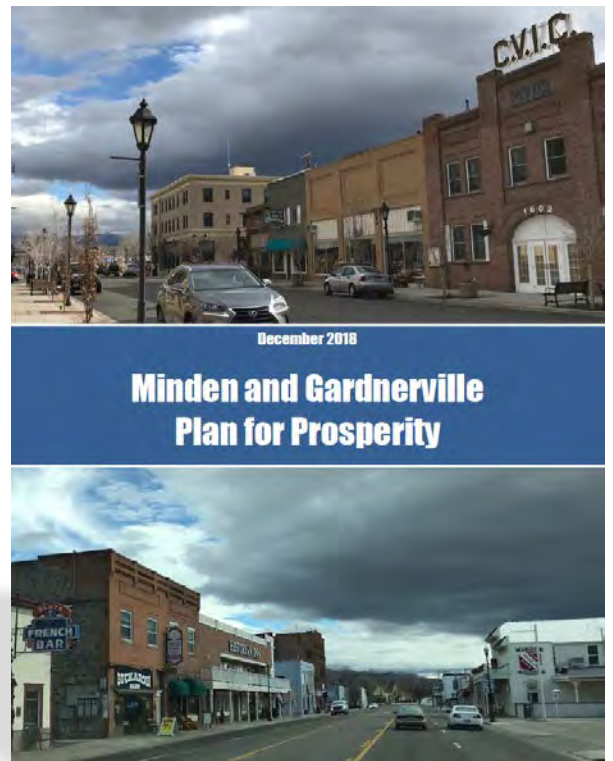
VISION STATEMENT

“Minden and Gardnerville envision vibrant downtowns that are regional destinations and the hearts of their communities. Their town centers will be mixed-use, feature cultural facilities, have a full annual events calendar, and have integrated arts programming. Their successful Main Street Districts are enabled by a completed Muller Parkway allowing through traffic to bypass Main Street. The Parkway supports redesign of the main street and historic Railroad Avenue portions of Highway 395 as pedestrian-oriented experiences. Trails will connect the town centers with new parks along Martin Slough and Muller Parkway, which double as detention facilities that reduce flooding. Neighborhoods will have definable centers including parks, schools, libraries, and their own namesake streets. New neighborhoods will include housing supporting the needs of existing and future residents. The Towns envision new types of housing including mixed-use development in the downtowns and agri-neighborhoods on the Towns’ edges.”

– Minden and Gardnerville Plan for Prosperity, December 2018

Goals and Policies for the Gardnerville Community Plan are contained in the 2018 Minden/Gardnerville Plan For Prosperity.

The Plan for Prosperity was created by the Towns of Gardnerville and Minden in their capacity as advisory bodies to Douglas County. Douglas County will utilize the goals and policies contained in the Plan for Prosperity to the greatest extent possible. Click [here](#) to view the Minden and Gardnerville Plan for Prosperity.



GARDNERVILLE COMMUNITY PLAN

The Gardnerville Community area includes approximately 2,604 acres of Agriculture, Commercial, Community Facilities, and is home to one of the service industrial areas in the County. Residents of the mixed-use area of residential densities are a short walk away from one of two commercial corridors of Highway 395. The Gardnerville Community Plan includes the Town of Gardnerville as well as areas adjacent to the Town that are suited for future urban development or conservation. The Town of Gardnerville was established in 1879 when Lawrence Gilman moved the Kent House from Genoa to a seven-acre tract in the Carson Valley that was owned by Lawrence Gardner. The Kent House then became the Gardnerville Hotel. The Gardnerville Community Plan contains a large variety of different future land uses.

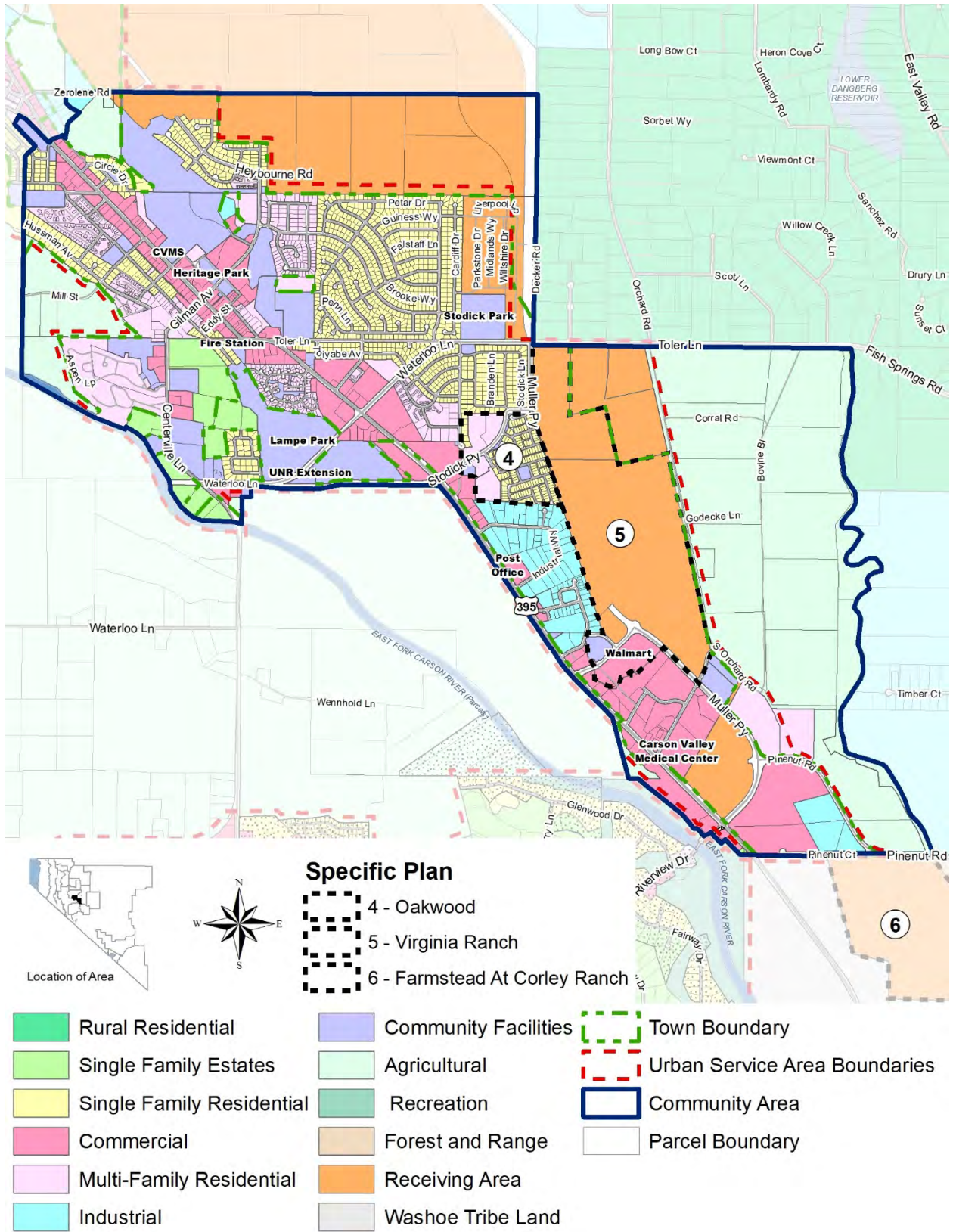


Other Relevant Plans

2018 Minden and Gardnerville Plan for Prosperity
 Virginia Ranch Specific Plan
 Sierra Nevada SW Enterprises

Land Use	Acres	%
Agricultural	608	26%
Receiving Area	582	25%
Commercial	283	12%
Single Family Residential	275	12%
Community Facilities	240	10%
Multi-family Residential	209	9%
Industrial	86	3%
Single Family Estate	58	2%
Rural Residential	1	1%

DIAGRAM L13 - GARDNERVILLE COMMUNITY



MINDEN COMMUNITY PLAN

The Minden Community Plan is approximately 4,353 acres and includes the Town and adjacent areas that are suitable for future urban development or otherwise preserved for open space. Minden was founded in 1905 and contains many structures and sites of historic value, including 10 properties that are listed on the National Register of Historic Places. On average, this community provides a residential density of five units per acre.



Other Relevant Plans

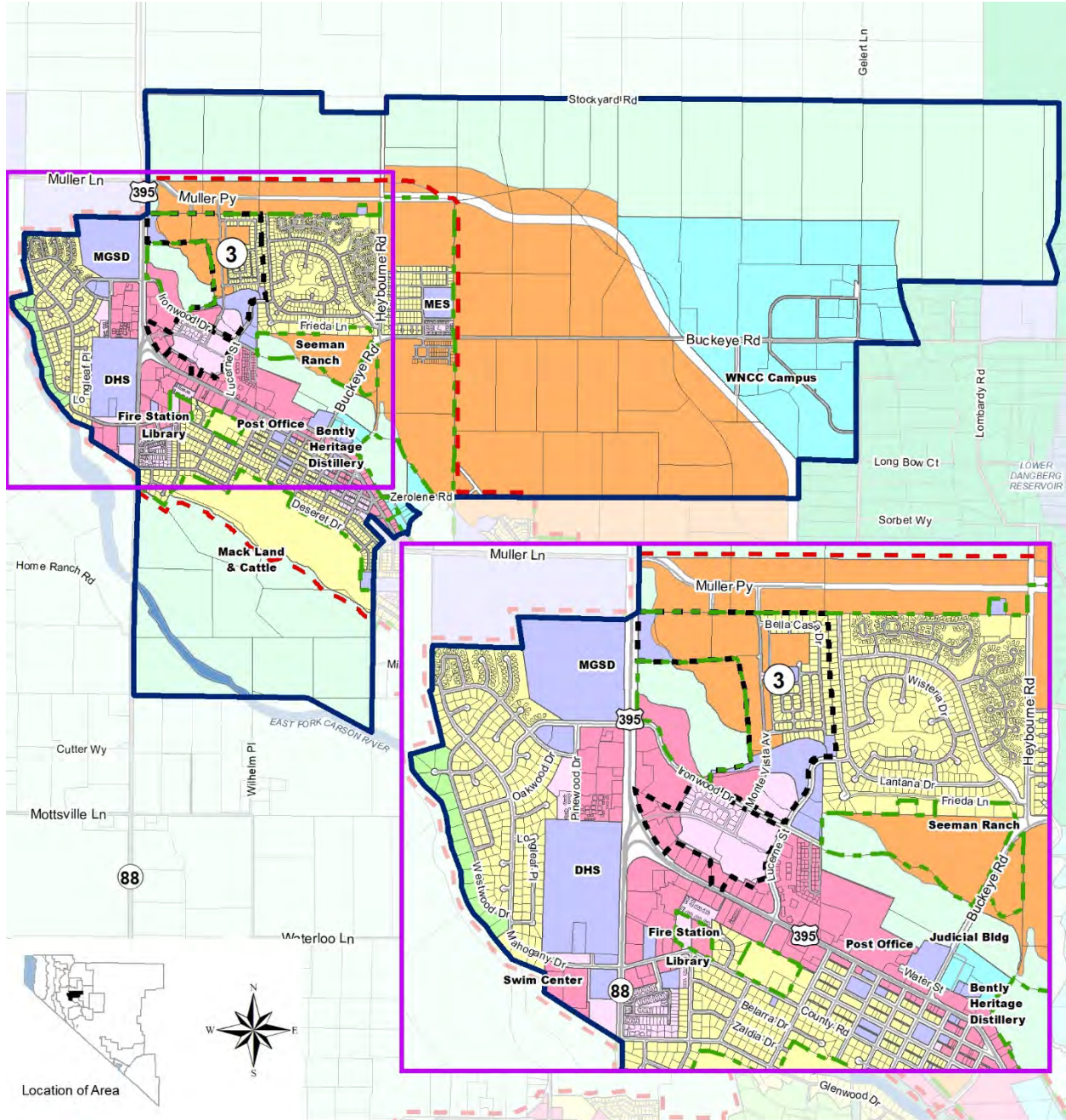
2018 Minden and Gardnerville Plan for Prosperity
Nevada Northwest Specific Plan

Several areas are designated as Receiving Areas in the Minden Community Plan and are located generally north and southwest of Minden. The development of these properties will be dependent upon the preparation and adoption of comprehensive specific plans for the areas that specify densities and land uses, and this mitigates planning and environmental issues. The areas should be developed as distinct neighborhoods compatible and complementary to surrounding neighborhoods.

A variety of residential densities should be utilized with the predominant land use being single family. Multi-family uses, except Mixed-use Commercial Districts, where appropriate, should be limited to small enclaves spread throughout the community rather than concentrated. Housing for seniors and affordable housing should be included in the overall housing mix. Community support facilities should be provided, such as parks and church sites. Natural drainage features should be incorporated into the neighborhood designs to enhance open space elements that create linear parks and pathways to connect elements of the existing towns. Buffering of agricultural lands should be included in future development.

Land Use	Acres	Percentage
Agricultural	1,612	40%
Receiving Area	1,111	27%
Industrial	488	12%
Single Family Residential	455	11%
Commercial	158	4%
Community Facilities	133	3%
Multi-family Residential	62	2%
Single Family Estate	16	1%
Rural Residential	2	0%

DIAGRAM L14 - MINDEN COMMUNITY



- | | | |
|--|---|---|
| Rural Residential | Community Facilities | Town Boundary |
| Single Family Estates | Agricultural | Urban Service Area Boundaries |
| Single Family Residential | Recreation | Parcel Boundary |
| Commercial | Receiving Area | Specific Plan |
| Multi-Family Residential | Washoe Tribe Land | 3 - Nevada Northwest |
| Industrial | | |

RUHENSTROTH COMMUNITY PLAN

Ruhenstroth is located in the southeastern part of the Carson Valley Region and consists of approximately 5,092 acres. Its residents enjoy the scenic vistas of the Carson Range of the Sierra Nevada Mountains and the rugged terrain of the Pine Nut Mountains. The Fairgrounds are located in this community and are the largest public facility in the County for special events. The Washoe Tribe’s Dresslerville Community is also located in this area. Given the County’s need to diversify the stock of available housing, there is some potential to provide for expanded future land uses in this community as reflected in the 130-acre transition area adjacent to Pinenut Road. This area requires the adoption of a Specific Plan, with strict limits on allowed development that will encourage a mix of housing types to serve the area’s existing and expected population. This area was created to provide for an active adult and over 55-year-old community with a maximum of 250 dwelling units, necessary neighborhood services, and a mix of housing types, including small-lot development that allows for maximum retention of agricultural land and open space.



Other Relevant Plans
 Corley Ranch Specific Plan
 Dry Creek Estates
 Settelmeyer Ranches

VISION STATEMENT

Ruhenstroth will keep flourishing as a rural community nestled in the hills surrounding the East Fork Carson River, with a local economy centered on the Washoe Tribe's Dresslerville Community and the Lahontan National Fish Hatchery Complex.

Land Use	Acres	Percentage
Forest & Range	2,307	47%
Single Family Estate	787	16%
Washoe Tribe Land	727	15%
Agricultural	358	7%
Rural Residential	278	6%
Community Facilities	269	6%
Receiving Area	131	3%

COMMUNITY SPECIFIC POLICIES



Restrict commercial development to the transition area and comply with applicable intensity standards and design guidelines. Commercial development shall not be considered as consistent with the desired character of the original Ruhenstroth developed area, exclusive of the transition area.



Complete any rehabilitation or reuse of any gravel pit according to site plans approved by Douglas County that result in development compatible with the surrounding Ruhenstroth community and that use regrading, revegetation, and other techniques to minimize the visual and environmental impacts of the site.



Seek to create a permanent buffer of open space around the originally developed part of the Ruhenstroth community, exclusive of the transition area.



Require paving of roads within the Ruhenstroth community and do not support the installation of streetlights, curbs, gutters, or sidewalks.

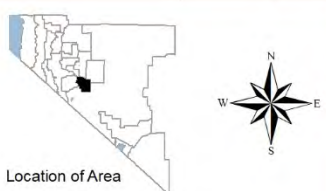
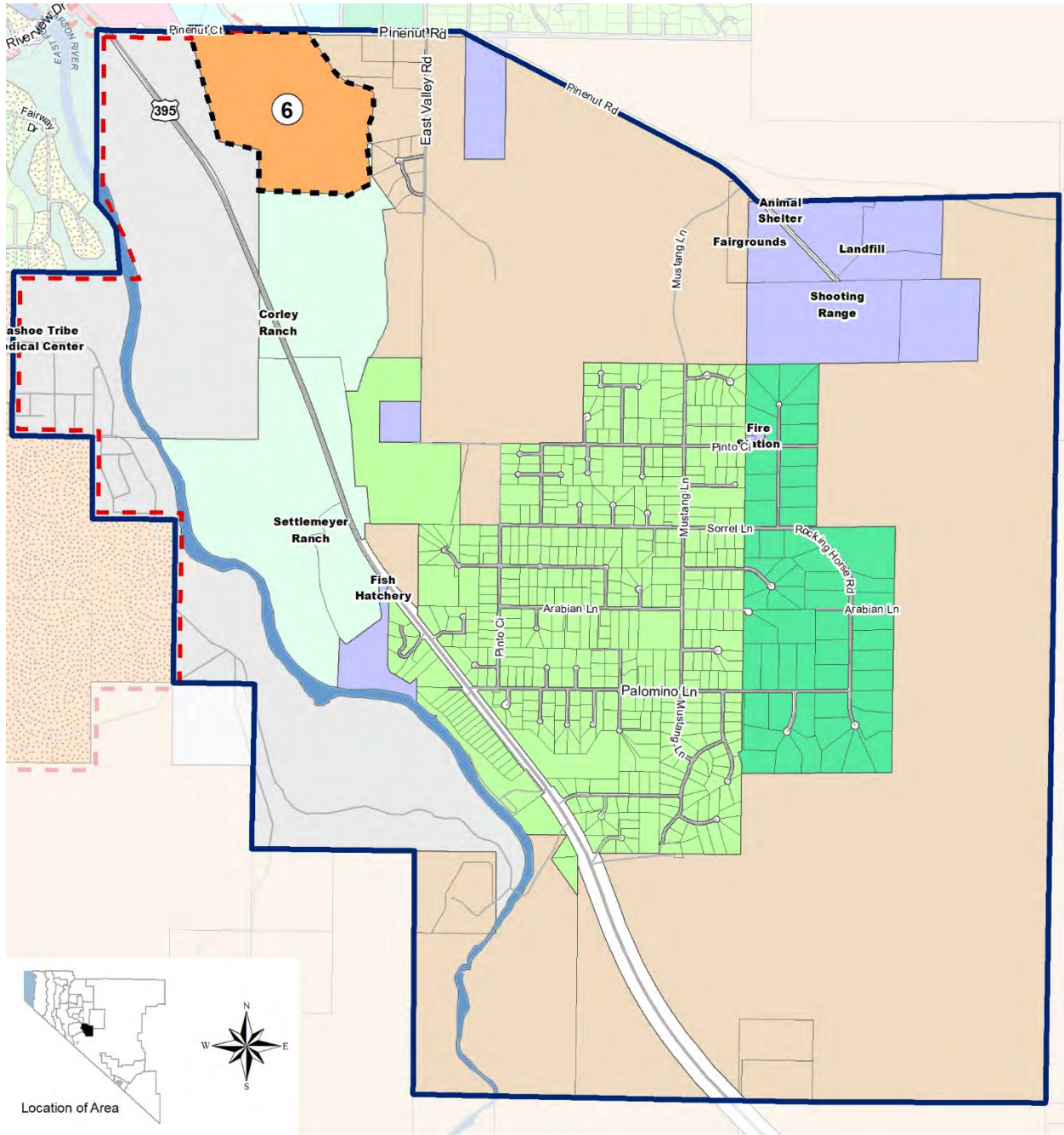



















Allow the use of individual sewage disposal systems and domestic wells for service in the community unless continuing water quality studies identify the need for community systems. Continue making long-range plans to provide community water and sewer services to the area.



Construct a road to connect the Ruhenstroth community to Pinenut Road to provide a second access out of the community during an emergency.

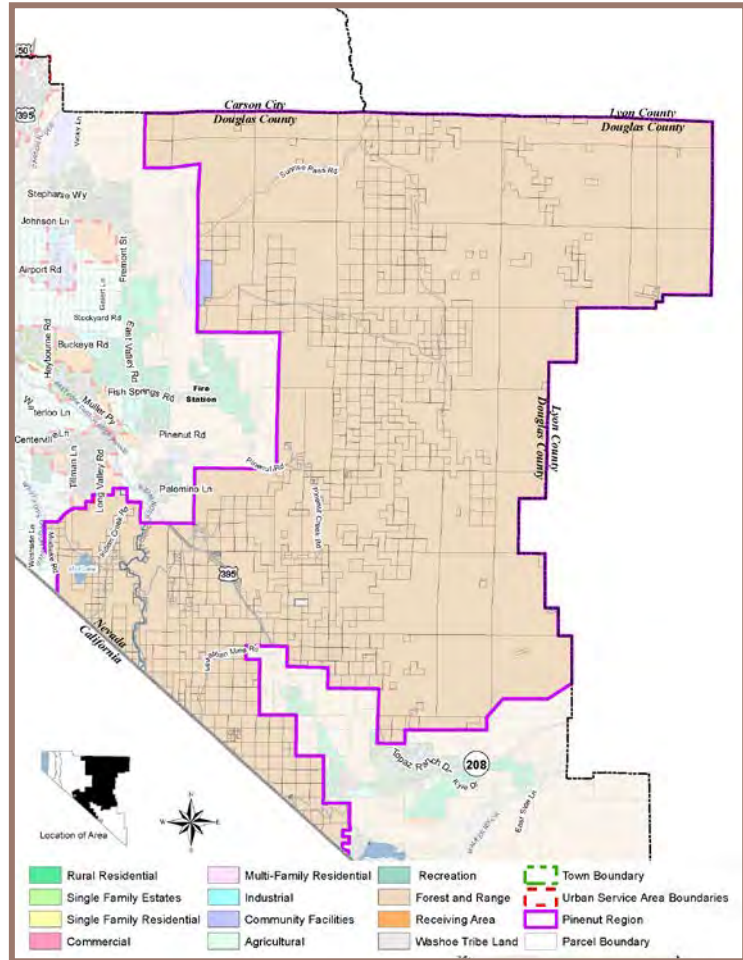
DIAGRAM L15 - RUHENSTROTH COMMUNITY



- | | | |
|---|--|---|
|  Rural Residential |  Community Facilities |  Urban Service Area Boundaries |
|  Single Family Estates |  Agricultural |  Community Area |
|  Single Family Residential |  Recreation |  General Improvement Districts (GID) |
|  Commercial |  Forest and Range |  Parcel Boundary |
|  Multi-Family Residential |  Receiving Area | Specific Plan |
|  Industrial |  Washoe Tribe Land |  6 - Farmstead At Corley Ranch |

PINENUT REGION

The Pinenut area is located in the eastern part of Douglas County and includes portions of the Pine Nut Range, including the lower lying foothills to the Carson Valley. Several year-round creeks flow from natural springs in the Pine Nut Range to the valley below. The areas of potential wetlands are in the Mud Lake area in the far west edge of the plan area. Due to the topography and rural setting, the area is unlikely to develop any significant employment base. The scenic quality of the Pinenut area is the picturesque forested lands overlooking the Carson Valley and the lower open range lands. The elements include piñon- and juniper-covered mountains and lower-elevation sagebrush



terraces. The Pinenut Region is the largest of the five regional plan areas, comprising 222,246 acres or about 49 percent of the county, and is one of the least developed areas in the County. This area has the largest acreage of publicly owned land, comprising of 194,810 acres. The Pinenut Allotments comprise 23 percent of the land in the Pinenut Region. Allotment lands south of the Ruhestroth community along U.S. Highway 395 South have seen increased residential development in the form of manufactured homes with little or no infrastructure. Of the urbanized land, residential and industrial/transportation categories make up the greatest share. Residential development is solely comprised of Rural Residential use designations totaling 650 acres.

Other Relevant Plans
 BLM Resource Management Plan (2016)
 BIA Pinenut Allotments
 Washoe Tribe IRM Plan
 Douglas County Master Plan Conservation Element



REGION-SPECIFIC POLICIES



Policy 1

Preserve and enhance the scenic resources and encourage preservation of public and private forested lands.



Policy 2

Encourage access to public lands for recreational use.



Policy 3

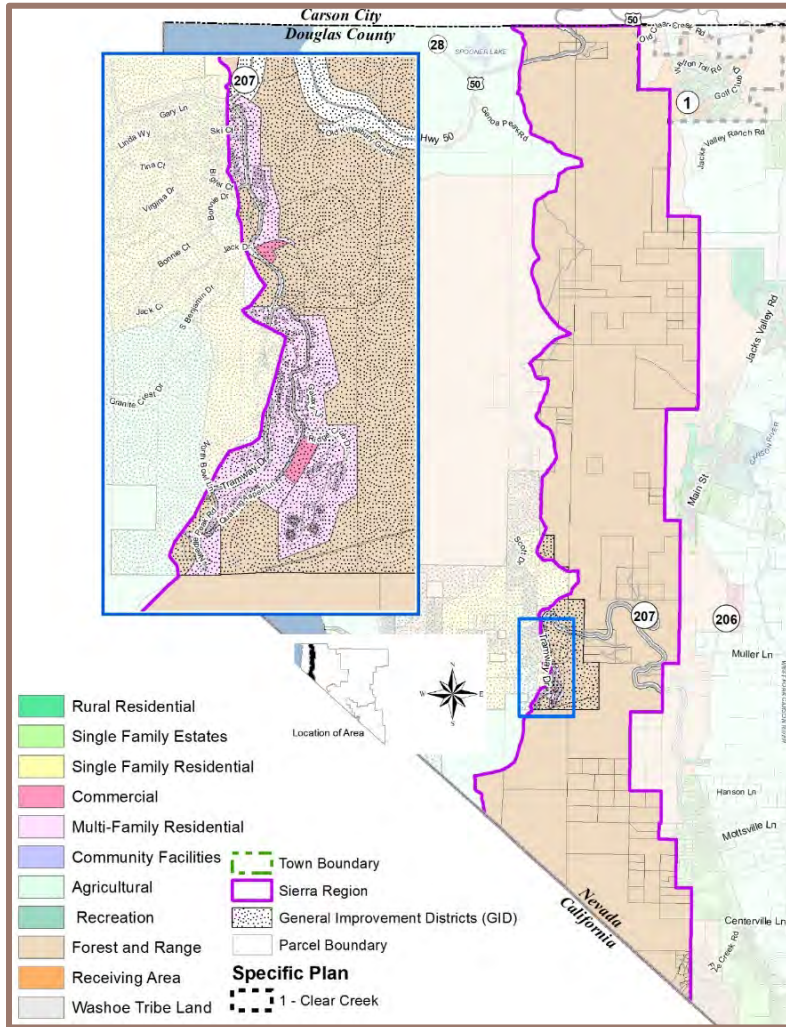
Protect the Scenic Corridor along U.S. Highway 395.



Policy 4

Establish rural standards and appropriate design guidelines for residential development to ensure the integrity of the area's natural beauty.

SIERRA REGION



The Sierra Region, approximately 19,311 acres, lies between the Carson Valley and the Tahoe Basin and is very sparsely populated. About 75 percent of the lands in the area are in public ownership. Due to the topography, little development will occur. The only major arterial road in the area is Kingsbury Grade, which traverses the Regional Plan. The Sierra Regional Plan is known for its natural beauty and recreational amenities, including Heavenly Ski Resort. The Heavenly ski area encompasses a large area, including private and U.S. Forest Service lands in both Nevada and California. The Sierra Regional Plan is comprised of steep, forested slopes. About 84 percent of the County's privately owned

forest land lies in the community. This area will continue to act as a buffer between the Tahoe and Carson Valley Regional Plans; there is very little development with the exception of the Tahoe Village and the Summit Village neighborhoods. These two neighborhoods contain approximately 850 dwelling units outside of the Tahoe Basin and are primarily comprised of timeshare condominiums. Therefore, the community contains a limited permanent residential population; the estimated population in 2010 was approximately 169. The Tahoe Village and Summit Village neighborhoods are serviced by the Kingsbury General Improvement District (KGID), which is located within the Tahoe Basin; their populations are included in the Tahoe Basin population numbers.



REGION-SPECIFIC POLICIES



Policy 1

Preserve and enhance scenic resources and encourage preservation of public and private forested lands.



Policy 2

Encourage private land/public land exchange to increase public land holdings within the Sierra area consistent with the Master Plan.



Policy 3

Encourage access to public lands for recreational use through approved access points.



Policy 4

Require development in areas of moderate to steep slopes (greater than 10 percent) to conform to the hillside development policies.



Policy 5

Support efforts to implement the Heavenly Ski Resort Master Plan.

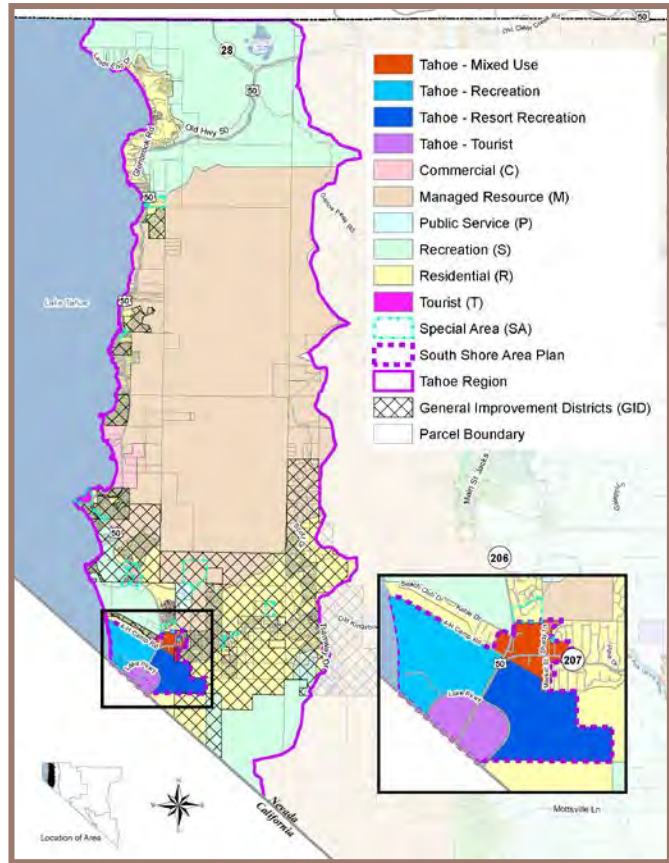


Policy 6

Encourage new development to be infill within the KGID service area.

TAHOE REGION

The Tahoe Region is located on the western edge of Douglas County. The area totals 23,458 acres or about 5 percent of the County. Approximately 84 percent of the land is in public ownership, with the remaining 16 percent in private ownership. The area borders Lake Tahoe, the 10th deepest lake in the world, which is known for the clarity of its waters and its scenic beauty. The Lake Tahoe Region is under the jurisdiction of the TRPA, which was established in 1969 under the Bi-State Tahoe Regional Planning Compact to control growth and development and protect Lake Tahoe’s clarity and environment. In the 1980s, the Bi-State Tahoe Regional Planning Compact was amended to further control growth by using the Environmental Threshold Carrying Capacities, or “thresholds,” which are environmental standards that address matters such as air quality, water quality, and noise. The 1987 Regional Plan was adopted, which put in place residential growth caps called “allocations” and established caps on all other forms of development. The TRPA developed Community Plans and Plan Area Statements to implement the 1987 Regional Plan. Douglas County adopted three Community Plans for Stateline, Kingsbury, and Round Hill and 30 Plan Area Statements. The Community Plans and Plan Area Statements address the policies, regulations, and programs for specific areas in order to attain and maintain the environmental thresholds and implement the goals and policies of the 1987 Regional Plan.



**VACATION
RENTAL
HOT SPOT
>200**



**13
GENERAL
IMPROVEMENT
DISTRICTS**



**>\$590,000
TYPICAL HOME
VALUE IN 2020**

REGION-SPECIFIC POLICIES



Policy 1

Encourage preservation of natural resources and lands.



Policy 2

Support the unique recreation business opportunities without compromising the enjoyment of activities for local residents.

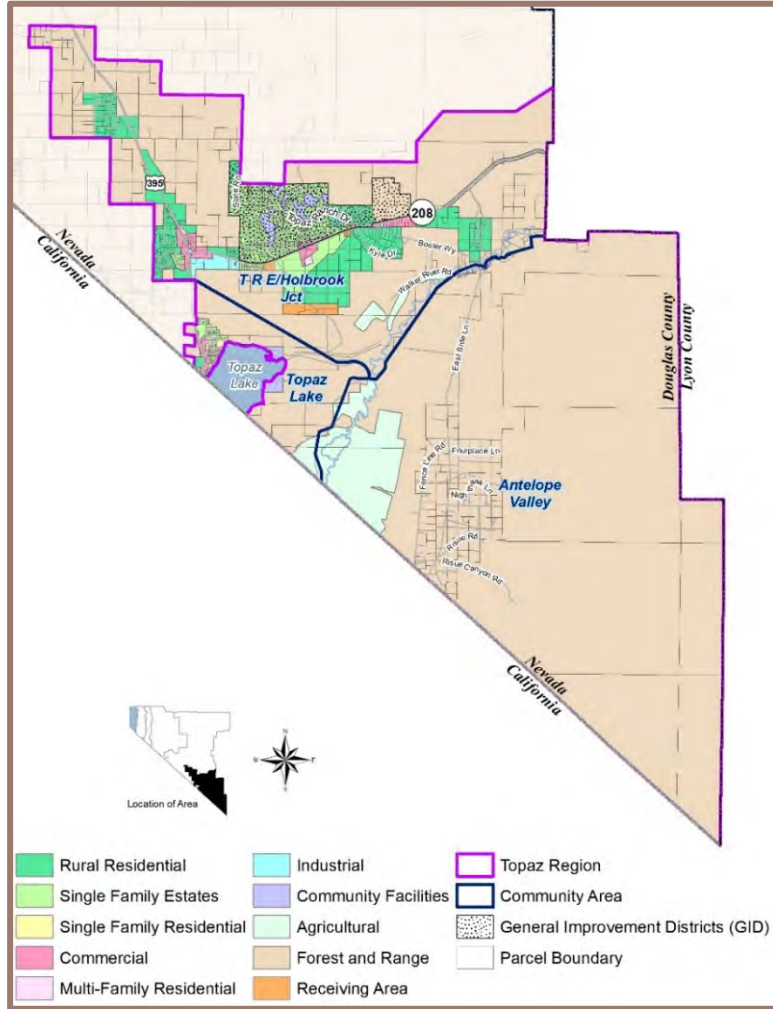


Policy 3

Promote an integrated regional approach to planning between Tahoe and the Carson Valley.

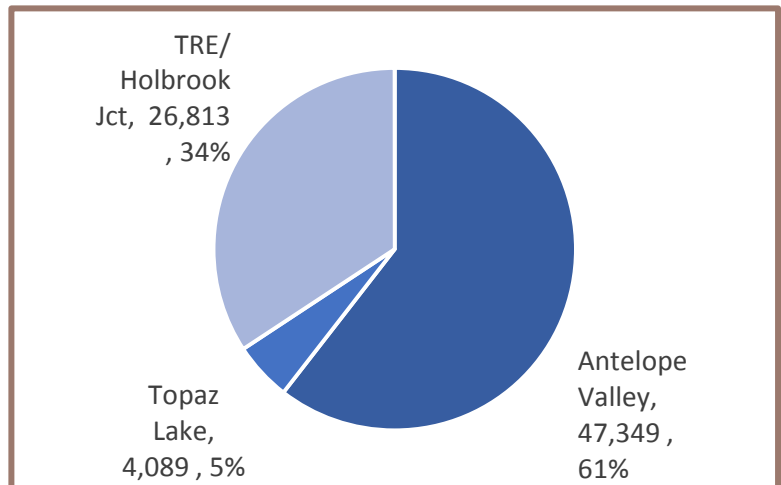


TOPAZ REGION



The Topaz Region is located in the southern portion of Douglas County along U.S. Highway 395 and consists of approximately 78,251 acres. Around 2,065 acres are devoted to urban uses, with 80 percent of the urban land allocated to residential uses. There are three distinct areas in the Regional Plan: Topaz Ranch Estates/Holbrook Junction, Topaz Lake, and Antelope Valley. Community plans for Topaz Lake, Topaz Ranch Estates/Holbrook Junction have been adopted and are referenced in their Community Plan section. There are agricultural lands and riparian vegetation along the Walker River, which separates Antelope Valley from the rest of the Topaz area. The topography is

characterized by steep slopes, sparsely wooded piñon pines, hillsides, and a scattering of agricultural lands. One of the challenges of future development in this region is the lack of municipal water service and sewage infrastructure. This makes Topaz an area for which future growth will have to be curtailed in order to maintain good soil and water quality, and that will most likely resemble an “off-grid” type of rural living.



REGION-SPECIFIC POLICIES



Policy 1

Provide community services and facilities to meet the needs of Topaz area residents.



Policy 2

Coordinate and cooperate with other providers, where applicable, to plan and provide public facilities and services to the rural development areas of the Topaz communities at established rural levels of service. Work to upgrade facilities in existing rural areas over time and with available resources.



Policy 3

Ensure that the Douglas County School District continues to monitor the need for development and location of potential school sites in the Topaz area.



Policy 4

Allow the use of individual sewage disposal systems and domestic wells for service in rural residential areas of Topaz unless continuing water quality studies identify the need for community systems.

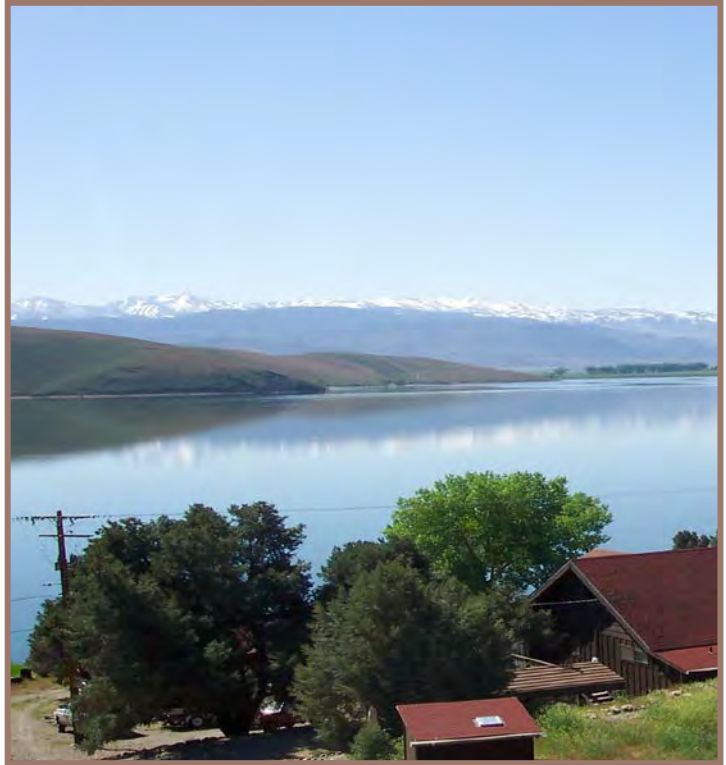


Policy 5

Coordinate and cooperate with the BLM to plan public access and use of BLM lands in the Topaz area, particularly where they are adjacent to Topaz Park or other County recreational facilities.

TOPAZ LAKE COMMUNITY PLAN

The Topaz Lake Community includes approximately 4,089 acres in the southern portion of Douglas County bounded by Topaz Lake, U.S. Highway 395, and the California state line on the west. The existing Topaz Lodge Casino and commercial land use designations flank U.S. Highway 395, which forms the western boundary of the residential area. The Topaz Marina area has limited seasonal commercial use.



The Topaz Lake Community consists of commercial land uses along U.S. Highway 395 and relatively high-density residential uses. To the east along the north shore of Lake Topaz, the land use designation is farm, forestry, and open reserve. Lot sizes in the original subdivision vary from 5,000 square feet to just under one-half acre. Lot sizes that have developed on the hillside to the north vary from one to five acres. There are no industrial or multi-family land uses currently within the Community Plan. Most of the commercially zoned parcels in the Topaz Lake Community Plan are undeveloped.

VISION STATEMENT

Topaz Lake will provide a year-round epicenter of recreational activities, strengthening its businesses and providing increased amenities and services for its residents.

Land Use	Acres	Percentage
Forest & Range	3277	83%
Single Family Estate	226	6%
Agricultural	252	6%
Rural Residential	30	1%
Community Facilities	166	4%

COMMUNITY-SPECIFIC POLICIES



Policy 1

Designate Topaz Lake as a rural community and maintain the existing rural character of the residential areas.



Policy 2

Designate areas for compact commercial development where commercial centers are established and can be expanded.



Policy 3

Require that all street types in new urban and rural development areas are paved and minimize the installation of streetlights, curbs, gutters, and sidewalks.



Policy 4

Evaluate the special recreational needs of senior citizens in the Topaz communities and include these in recreational facility planning.



Policy 5

Continue to provide county-wide park services and facilities at Topaz Lake Park as long as the leasehold is maintained.



Policy 6

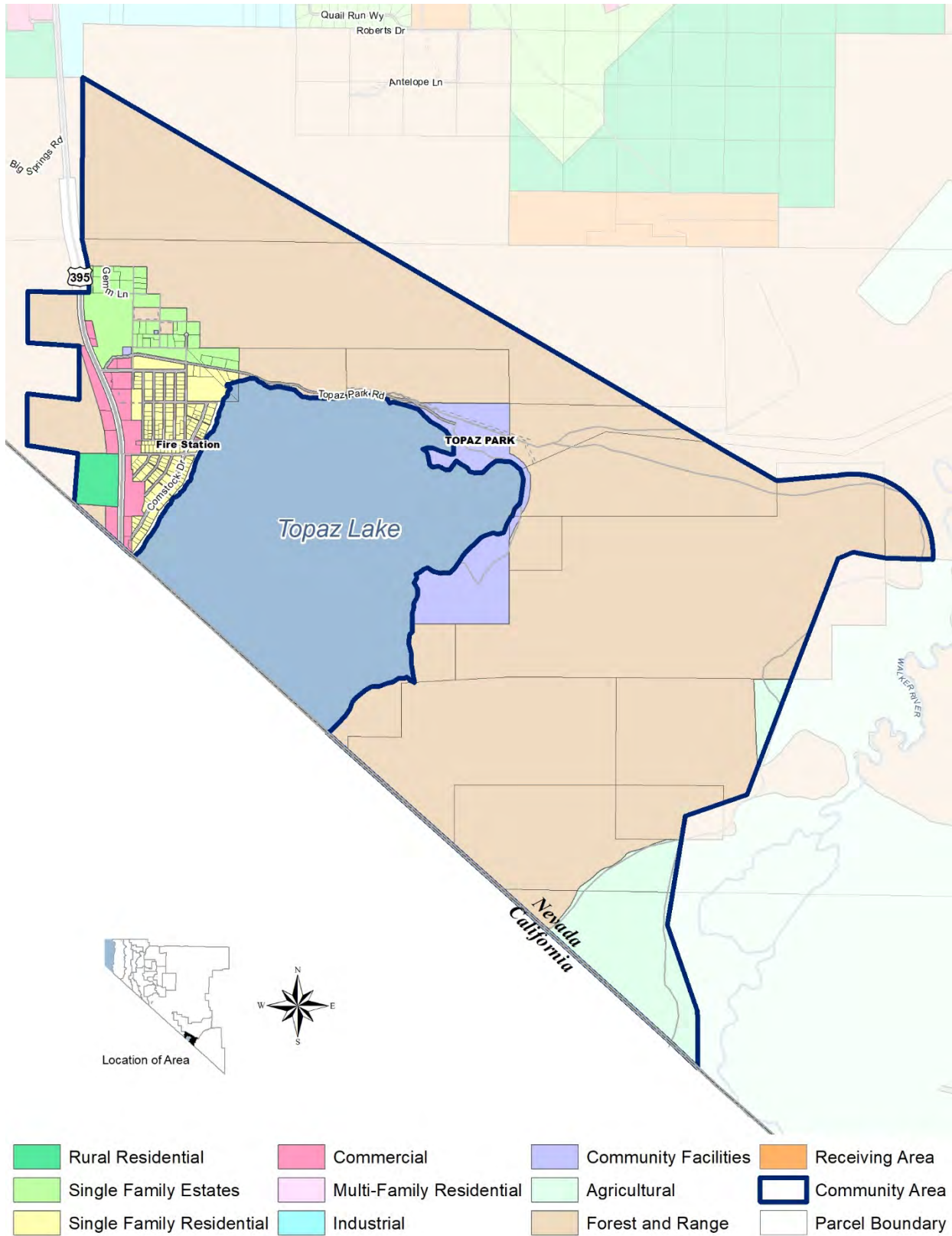
Encourage expansion and consolidation of water service systems.



Policy 7

Require that all new individual sewage disposal systems are located on a parcel or parcels with a minimum of one acre, per NAC 444.

DIAGRAM L16 - TOPAZ LAKE COMMUNITY



TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN

The TRE/Holbrook Community Plan consists of approximately 26,813 acres and is located in the southern portion of Douglas County along U.S. Highway 395 to the north of Topaz Lake. The area includes Spring Valley, which is located approximately five miles north of Holbrook Junction. Topaz Ranch/Holbrook is located to the north and west of State Route 208 and is separated from Topaz Lake by Wild Oat Mountain.

Topaz communities have natural features, including the location of a major range-front fault, that impact development in the area. The Topaz floodplain map depicts areas that are within the 100-year floodplain. Areas outside of the 100-year floodplain that have locally significant flood potential are not shown on this map. However, one such area exists in TRE due to the drainage of Minnehaha Canyon. These features raise concerns about slope stability, seismic hazard, fire, and flood hazards and will affect the type, location, and design of future development.

VISION STATEMENT

Topaz Ranch Estates/Holbrook Junction will remain a low-density rural community that is focused on providing improved access and transportation to services and the strengthening of neighborhood-scale local businesses.

Land Use	Acres	Percentage
Forest & Range	18,581	71%
Rural Residential	3,821	15%
Single Family Estate	2,259	9%
Commercial	376	1%
Agricultural	326	1%
Community Facilities	309	1%
Receiving Area	242	1%
Industrial	205	1%
Multi-family Residential	28	0%

COMMUNITY-SPECIFIC POLICIES



Policy 1

Designate the TRE/Holbrook area as a rural community and maintain the existing rural character of the residential areas of the community.



Policy 2

Encourage Single Family Residential – Two-acre Minimum as a standard for areas designated as single family estates.



Policy 3

Encourage the TRE GID to use the same roadway paving standards established for County roads, and encourage the GID to pave existing collector roadways.



Policy 4

Encourage expansion of the TRE municipal water system.



Policy 5

Continue to cooperate with the TRE GID in assessing flash flooding hazards in this community and evaluating potential facility needs and funding sources for related drainage improvements.



Policy 6

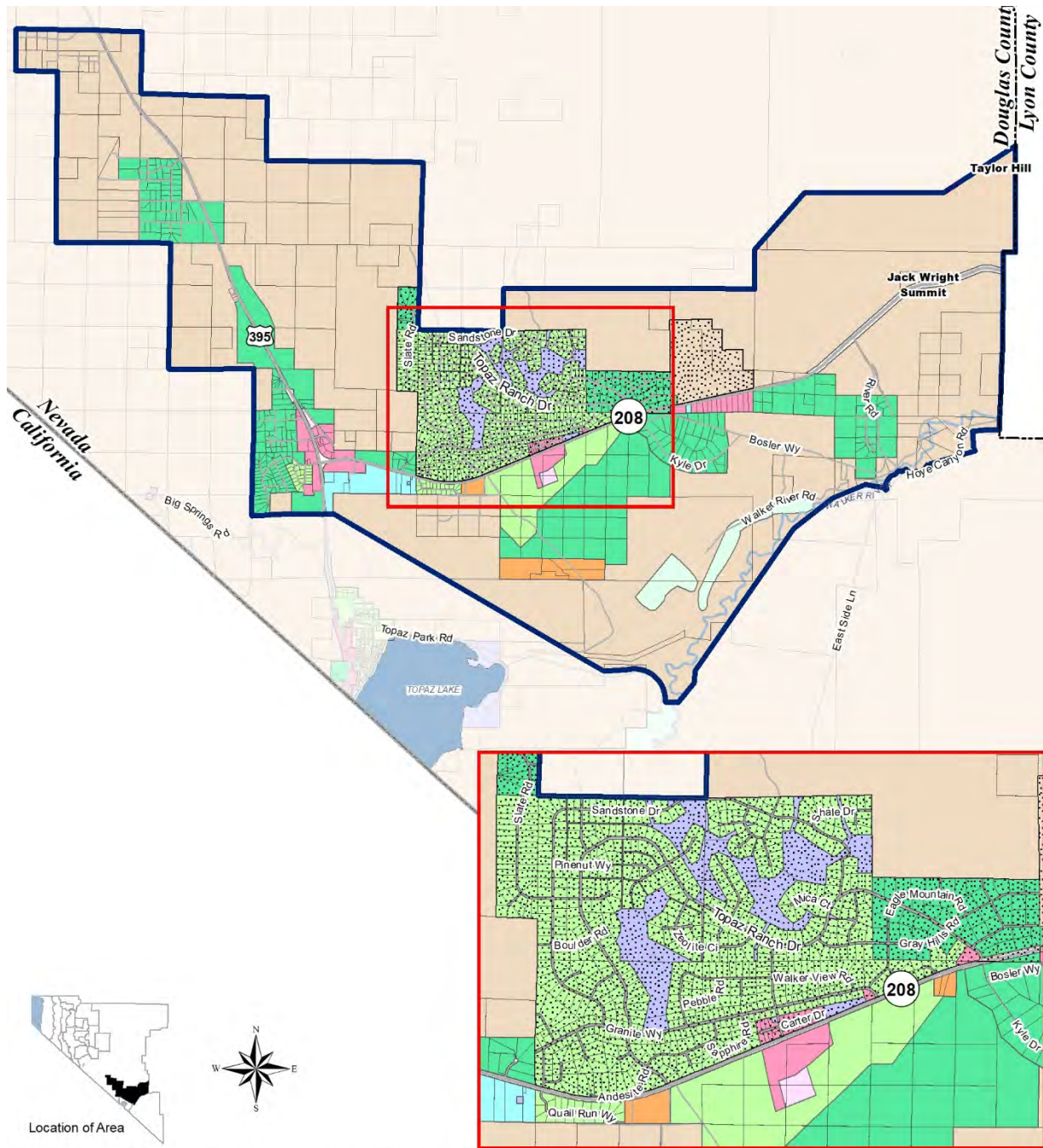
Evaluate the special recreational needs of senior citizens in the TRE/Holbrook communities and include these in recreational facility planning.

Land uses in the TRE/Holbrook community include limited irrigated agriculture, range lands, forested lands, rural residential, and a limited amount of commercial. The existing rural residential areas are on lots ranging in size from one to 10 acres, with the majority of the existing homes on lots in the two to two-and-one-half-acre range. The irrigated agricultural lands lie in the southeast portion of this community, and range lands are located on the western side. A small industrial area is located just southeast of the intersection of U.S. Highway 395 and Highway 208 to serve the region's industrial needs.

Future Development and Receiving Area

An area south of TRE is designated as a Receiving Area. A plan that specifies densities and uses and mitigates planning and environmental issues must be prepared and adopted prior to establishing this area for actual development, and rights must be acquired to support the densities. Overall, the new development area is anticipated to be designed for compatible uses with the existing community. The concept of developing a small, reasonably self-contained neighborhood is proposed; this neighborhood would contain several housing types, including limited multi-family housing and densities, and would be supported with community and commercial facilities. A community of 1,000 to 2,000 units is anticipated, which would require water and sewer systems.

DIAGRAM L17 - TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN



- | | | |
|---------------------------|----------------------|-------------------------------------|
| Rural Residential | Industrial | Community Area |
| Single Family Estates | Community Facilities | General Improvement Districts (GID) |
| Single Family Residential | Agricultural | Parcel Boundary |
| Commercial | Forest and Range | |
| Multi-Family Residential | Receiving Area | |

ANTELOPE VALLEY COMMUNITY PLAN

The Antelope Valley Community Plan is the lower triangular-shaped region in southern Douglas County bounded by Walker River to the north, the Nevada/California State line to the west, and the Wellington Hills to the east. The two land use designations in this plan are Agricultural and Forest and Range. With limited access to power and communications, Antelope Valley is the most sparsely populated community in the county.

Antelope Valley comprises approximately 47,349 acres; 33,356 are public lands of the Toiyabe National Forest controlled by the United States Forest Service. Except for access from Eastside Lane, there are only dirt trails to access the area. The community is a popular area for public off-highway vehicle (OHV) use and camping; there are a number of creeks in the area, such as Desert Creek that drains easterly through the most southerly tip of Douglas County into Smith Valley.

Land Use	Acres	Percentage
Forest & Range	44,865	95%
Agricultural	2,484	5%

VISION STATEMENT

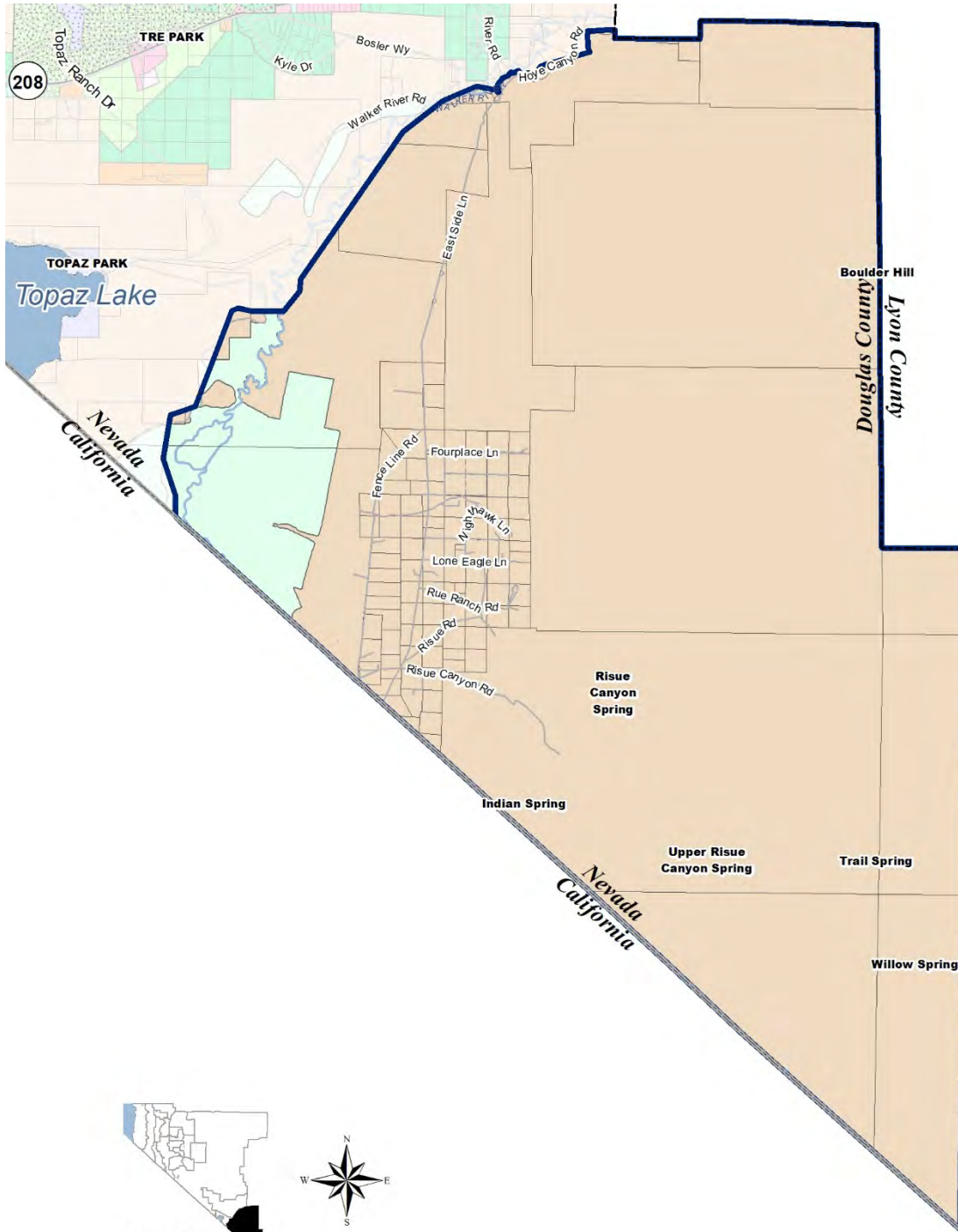
Antelope Valley will remain a very low-density rural community focused on providing access to public lands, the Walker River, and other recreational use areas.



2017 Flood

Source: Walker River Irrigation District website <https://youtu.be/ISdFbHu3Tb0>

DIAGRAM L18 - ANTELOPE VALLEY COMMUNITY PLAN



- Rural Residential
- Multi-Family Residential
- Agricultural
- Community Area
- Single Family Estates
- Industrial
- Forest and Range
- Parcel Boundary
- Commercial
- Community Facilities
- Receiving Area



Ranch House

The Ranch House was built in 1882 by the prominent local family, the [Name]. It is a fine example of late 19th-century architecture, featuring a wide porch and a large chimney. The house was used as a residence and a place of business for many years.

Entrance

The entrance to the Ranch House is a grand affair, with a wide porch supported by tall columns. The porch is a central feature of the house, providing a shaded area for guests and a place for social gatherings.

HISTORIC PRESERVATION IN DOUGLAS COUNTY

Historic Preservation in Douglas County involves federal, state, and local governments' civic organizations, such as the Douglas County Historical Society, Lake Tahoe Historical Society, and the Genoa Historic District Commission. Private individuals and businesses are also involved in preserving historic and culturally significant resources in Douglas County. Historic preservation efforts help honor the people, buildings, and places associated with the development of Douglas County while providing educational opportunities for residents and visitors as well as opportunities for sustainable development through the reuse of existing structures for new purposes.



Typically, places and structures are considered historic when they are at least 50 years old. According to NRS 381.195, "historic" is defined as the "middle of the 18th century until 50 years before the current year"; anything before the middle of the 18th century is defined as "prehistoric." Given that the Washoe People inhabited Douglas County for thousands of years prior to the 1800s when settlement of the European-Americans began, Douglas County contains both historic and prehistoric sites and buildings.

The Genoa Historic Overlay District is the only local historic district in Douglas County and only applies to non-residential zoned parcels in the Town of Genoa within the boundary of the district. The district was created in 1974 as a zoning overlay district and is authorized under Douglas County Code Chapter 20.680. The Genoa Historic District Commission (Douglas County Code Chapter 2.28) is responsible for reviewing any architectural changes to non-residential buildings that are visible from the main street public right-of-way.

National and State Register of Historic Places Historic Markers

The National Register of Historic Places is under the National Park Service (U.S. Department of the Interior). Table L2 shows the buildings, sites, districts, and structures in the National Register and the location of the properties. Table L3 shows the state register.

Table L2 - Douglas County Properties on the National Register of Historic Places

Date of Listing	Name	Location
1975	Genoa Historic District*	Genoa
1978	Minden Flour Milling Company* - 6 th St. and U.S. 395	Minden
1979	Carson Valley Hospital* - 1466 U.S. 395	Gardnerville
1979	Lake Shore House* - Glenbrook Rd.	Glenbrook
1980	Home Ranch - west of Minden on Hwy. 88	Minden
1983	Carson Valley Improvement Club Hall - 1606 Esmeralda Ave.	Minden
1986	Douglas County Courthouse - 1616 Eighth St.	Minden
1986	Farmers Bank of Carson Valley -1597 Esmeralda Ave.	Minden
1986	Minden Butter Manufacturing Company - 1617 Water St.	Minden
1986	Minden Inn - 1594 Esmeralda Ave.	Minden
1986	Minden Wool Warehouse - 1615 Railroad Ave.	Minden
1986	Friday's Station – U.S. 50 near SR 207	Stateline
1989	Arendt Jensen House* - 1243A and 1243B Eddie St.	Gardnerville
1992	Douglas County High School - 1477 U.S. 395	Gardnerville
1994	Arendt Jensen, Jr. House - 1431 Ezell St.	Gardnerville
2000	Farmers Bank of Carson Valley* - 1596 Esmeralda Ave.	Minden
2001	Lena N. Gale cabin*- 726 Cedar St.	Zephyr Cove
2001	Jobs Peak Ranch - 144 Summit Ridge	Genoa
2003	Gardnerville Branch Jail* - 1440 Courthouse St.	Gardnerville
2004	Reese-Johnson-Virgin House (Pink House)* - 193 Genoa Lane	Genoa
2004	TAHOE (Shipwreck)	Lake Tahoe
2008	Gardnerville Elementary School - 1290 Toler Ave.	Gardnerville
2008	Minden Elementary School - 1638 Mono Ave.	Minden
2016	Dance Hill (It-goom-mum the weh-weh-ush-shah-ish TCP)	Washoe Tribe

Source: Nevada State Historic Preservation Office (SHPO)

*Properties that are also listed on the State Register of Historic Places

Table L3 - Douglas County Properties Listed Only in the State Register of Historic Places

Date of Listing	Name	Location
1988	George Brown House - 1452 Main Street	Gardnerville
1981	Walley's Hot Springs - Foothill Rd.	Genoa
1988	Bliss Boat House - 1851 Glenbrook Rd	Glenbrook
1987	Dangberg House - 1600 6 th St.	Minden

Source: Nevada SHPO, Douglas County GIS

Historic Markers

The State of Nevada established its roadside Historical Marker Program in 1967. There are 271 historic markers in Nevada, with 17 markers located in Douglas County (see Table L4). These markers describe the history of Douglas County.

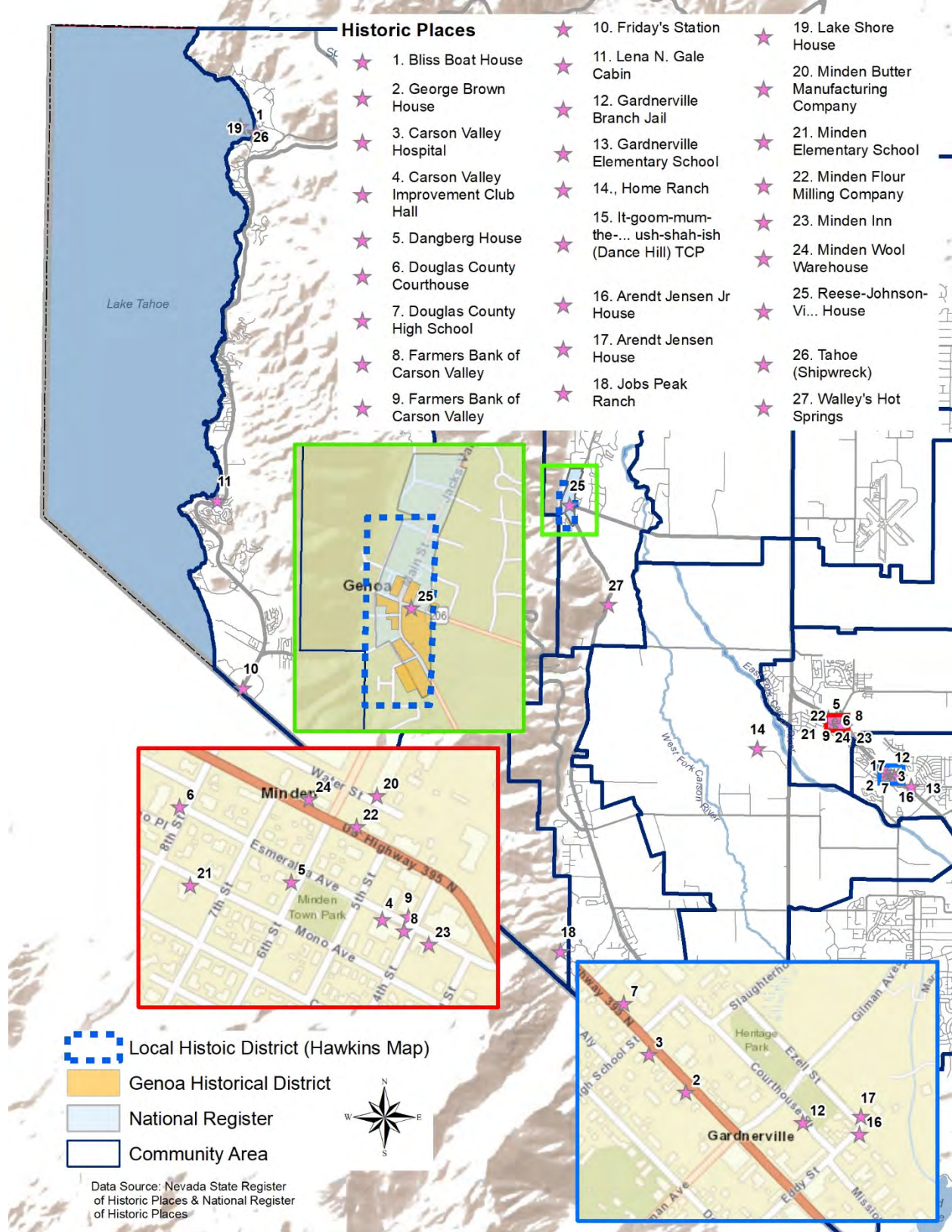


Marker Number	Name
12	Nevada's Birthplace
117	Kingsbury Grade
118	Luther Canyon
120	Walley's Hot Springs
121	Mottsville
122	Sheridan
123	Cradlebaugh Bridge
124	Boyd Toll Road
125	Twelve Mile House
126	Double Springs
129	Gardnerville
130	Minden
131	Dresslerville
207	Carson Valley
219	Glenbrook
225	Spooner Area
226	De'ek Wadapush (Cave Rock)
261	Spooner Summit

Source: Nevada SHPO

<https://shpo.nv.gov/nevadas-historical-markers/historical-markers>

DIAGRAM L19 - NATIONAL & STATE REGISTER OF HISTORIC PLACES

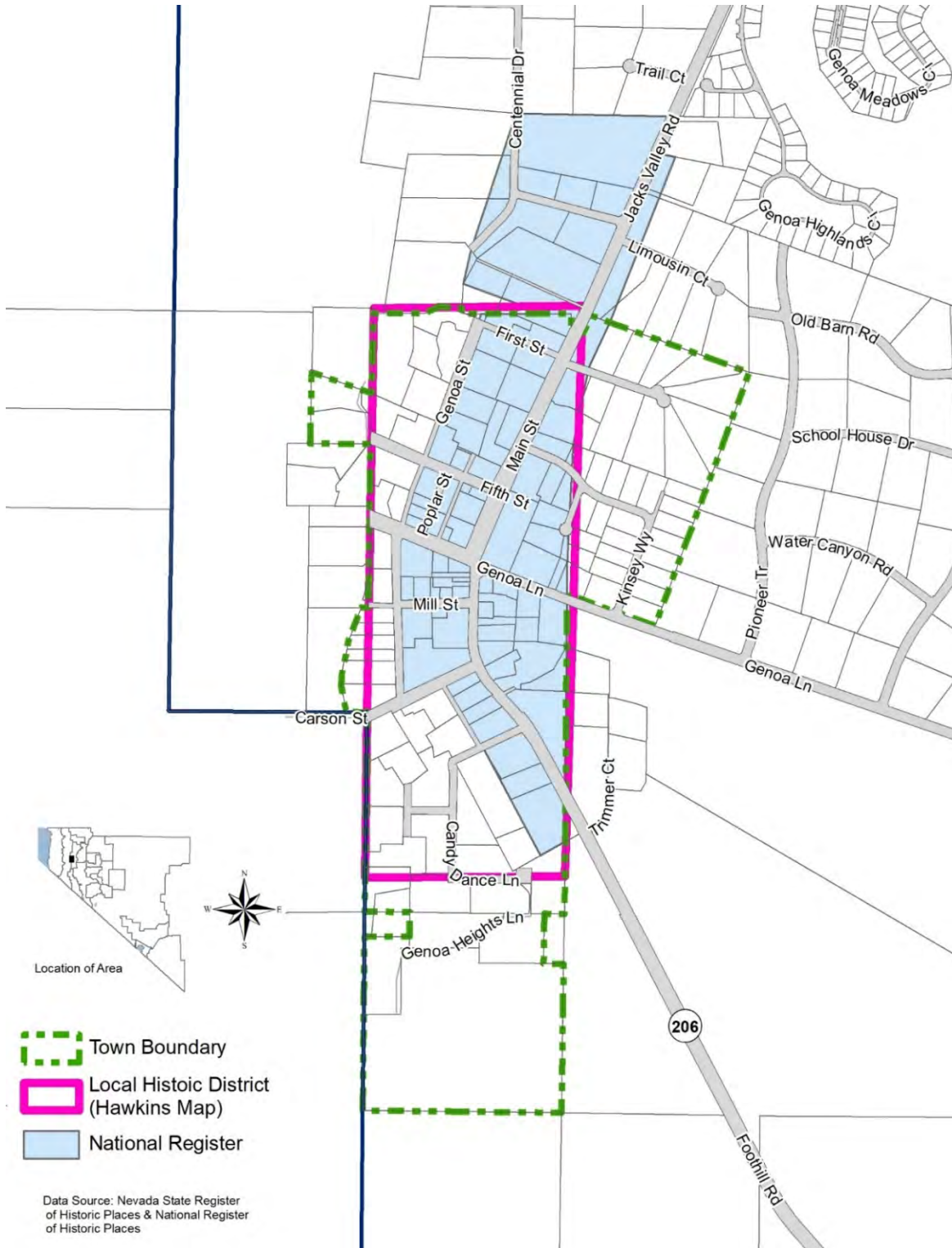


SHPO Multiple Property Document Form

In 2018, the Nevada State Historic Preservation Office (SHPO) adopted a study called Multiple Property Documentation Form (MPDF), which provides a context for the agricultural development of Carson and Eagle Valleys in Nevada. The report mentions the Wilhelm Lampe Ranch/Jacobs Berry Farm. Also significant to the valley's ranching history is the Dangberg Home Ranch, which was listed on the National Register in 1980. In addition to being a useful research tool, the MPDF allows for a streamlined process to nominate important agricultural properties in Carson Valley to the National Register of Historic Places. Staff at the Nevada SHPO can assist interested property owners who wish to pursue National Register listing. Recognizing farms, ranches, and other agricultural resources in Carson Valley on the National Register provides official acknowledgement of the importance of agriculture to Douglas County's development, enhances the heritage tourism and marketing opportunities for valley business owners, and allows property owners to leverage historic preservation incentives to preserve historic farms and ranches.



DIAGRAM L20 - GENOA HISTORIC DISTRICT, NATIONAL REGISTER, AND TOWN BOUNDARY



LOOKING TO THE FUTURE

Preservation of Historic Resources

Douglas County does not consider historic resources in the development review process. Property owners are not required to submit information on historic resources that may be impacted by a Master Plan Amendment or Zoning Map Amendment. There are a number of opportunities to recognize historic resources and further support additional preservation efforts throughout Douglas County:

- **Further education efforts by providing information about historic resources, such as the National Register listings and the Historic Markers, on the Douglas County web site.** The State of Nevada established the Centennial Ranch program several years ago to honor farming families who have owned farms and ranches for at least 100 years. The Douglas County Historical Society established an historic award program in 2014; the first recognition award was given that year to J.T. Basque Bar and Dining Room.
- **Apply to be a certified local government (CLG) through the SHPO, making Douglas County eligible for CLG funds.** There are currently four CLGs in the State of Nevada: City of Las Vegas, City of Reno, Carson City, and Storey County. CLGs are eligible to apply for Historic Preservation funds from the SHPO. Every year, Nevada SHPO is required to give a minimum of 10 percent of its National Park Service Federal Historic Preservation Funds to CLGs in Nevada. The State receives approximately \$80,000 per year from the National Park Service, and the City of Las Vegas does not usually apply for CLG funds.
- **Protect Historic Resources.** Dance Hill is now listed on the National Register of Historic Places but is not currently protected from vandalism, OHV use, and target practice. Although efforts have been made to create an agreement between the Washoe Tribe and government entities, including Douglas County, there has been little progress on this issue.
- **Work with the Genoa Historic Commission to update the current design manual with review by the Planning Commission and Board of Commissioners.** The manual has not been updated in several years and was never adopted by the Board of Commissioners. Ultimately, the manual should be adopted and incorporated into the County's Design Criteria and Improvement Standards manual.

All proposals for new development or structure modifications that are visible from the right-of-way must be reviewed by the Genoa Historic Commission, the members of which are appointed by the Board of County Commissioners. Although an appointed body, the Commission has no staff support from Douglas County, and agendas and meetings are not currently posted on the County web site.

Unlike local historic districts in Carson City and Reno, the Genoa local historic district only covers non-residential properties. The district does not regulate alterations, additions, or new construction for any other buildings or properties within the boundary of the local district.

The current design manual used by the Genoa Historic Commission has not been updated in several years and was never adopted by the Board of Commissioners.

Douglas County should work with the Genoa Historic Commission to update the manual with review by the Planning Commission and Board of Commissioners. Ultimately, the manual should be adopted and incorporated into the County's Design Criteria and Improvement Standards manual.

Multi-Family Residential Zoning in Douglas County

As of 2020, property owners must have a multi-family residential land use designation in order to propose multi-family residential zoning. To encourage more multi-family residential development, Douglas County could permit multi-family residential zoning in the Commercial Land Use Designation. The mixed-use commercial zoning district, which allows up to 16 dwelling units per acre, is already a permitted zoning district within the Commercial land use designation. Douglas County should consider allowing applicants to request zoning map amendments for multi-family residential zoning in the commercial land use category to facilitate additional housing, including affordable housing, within the County. To encourage more residential density, it may also be appropriate to require a minimum density of 10 to 12 units per acre for proposed multi-family residential development.

Need for Parcel-Based GIS Land Uses and Zoning

It is estimated that more than 100 parcels in the County contain more than one land use designation or zoning district. This creates problems when development proposals are brought forward to the County. A related issue is the lack of parcel-based land uses and zoning in the County. Douglas County GIS uses shape files for its land use and zoning layers, which can cause errors in map displays and parcel analysis. Douglas County should consider working with affected property owners to create uniform land uses and zoning on these parcels and should update GIS shape files based on updated information.

Receiving Areas Designation and Future Land Use Map Updates

Many receiving areas that were subject to a development application are now built out, but processes in the zoning ordinance set up a mechanism to reflect this change in the Land Use Map, with the result that most of them are still shown as a legacy receiving areas. Once the area is developed, the county should establish an efficient process to reflect the land use change in a way that the official map shows a category consistent with the development on the ground. In 2019, as part of the Master Plan update process, Community Development removed Receiving Area from these built-out subdivisions; this should be continued in the future.







2. AGRICULTURE & CONSERVATION

A



PURPOSE

The purpose of the Agriculture and Conservation Element is to provide an overview of the agriculture industry and to report on the conservation and preservation efforts of Douglas County. This Element discusses conservation tools used to preserve agriculture farmlands as open space, the County's Transfer Development Rights (TDR) program, and the Southern Nevada Public Lands Management Act (SNPLMA). In addition to land conservation, this section provides a discussion on renewable energy, water supplies (both surface and underground water sources), and water quality.

GOALS

The following goals, policies, and actions for the Douglas County Agriculture & Conservation Element set forth future priorities for the County.

Goal 1



Enhance our air and water quality.

Goal 2



Protect and expand open space and natural areas while allowing development that acknowledges and enhances agricultural areas.

Goal 3



Encourage the efficient use of energy resources.

Goal 4



Protect sensitive wildlife, vegetation, and habitat.



Goal 5

Protect and encourage ranching, farming, agricultural activities, and supportive industries.

POLICIES



Policy A1

Cooperate with private and public agencies to protect water quality throughout the region.



Policy A2

Encourage the agricultural community to retain its water rights and protect water quality.



Policy A3

Design development to minimize the amount of newly created impervious surfaces. Encourage open spaces and landscaped areas.



Policy A4

Utilize historic drainage patterns and maintain operations for the benefit of the downstream users of the irrigation network. Maintain pre-development conditions except as part of a regional drainage plan. Maintain runoff rates and volumes.



Policy A5

Ensure that industrial uses implement best management practices and ongoing monitoring programs aimed at reducing the potential for impacts to groundwater quality.



Policy A6

Obtain existing non-supplemental groundwater rights for quasi-municipal use when such rights become available.



Policy A7

Buffer water bodies, wetlands, and riparian areas from development.



Policy A8

Protect prime farmland by discouraging development patterns that harm this important resource.



Policy A9

Coordinate programs for public acquisition and development of open space areas with efforts to protect land for agricultural use.



Policy A10

Avoid locating noise-sensitive land uses such as hospitals, schools, and homes in existing and anticipated noise impact areas. Work with the Minden-Tahoe Airport as part of the development review process to determine where aviation easements are necessary.



Policy A11

Effectively sustain ranchlands and farmlands in prime agricultural areas through a combination of land use planning tools that meet agricultural land conservation goals.



Policy A12

Leverage a variety of funding sources to finance publicly accessible open space.



Policy A13

Encourage incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects, both public and private.



Policy A14

Protect environmentally sensitive and habitat areas that serve valuable ecological functions by limiting their development or by requiring mitigation of adverse impacts resulting from development.



Policy A15

Work with the USFS, BLM, and Nevada Department of Wildlife to retain and enhance the viability of wildlife habitats and migration corridors.



Policy A16

Protect against and mitigate invasive and non-native species.



Policy A17

Ensure the continuation of agriculture as a distinct and significant land use in the county.



Policy A18

Define agricultural uses as economic development. Promote and encourage agriculture as an important industry and a desirable land use that defines the desired character of the county.



Policy A19

Support and encourage developments that include a commitment to farmland and open space preservation, production of agricultural products, preservation of our agricultural history, and economic, social, and environmental value to the community.



Policy A20

Collaborate with stakeholders and other affected interests to sustain, promote, revitalize, and grow the agricultural community.



Policy A21

Recognize the importance of wild horses in Nevada history and encourage their protection while ensuring the safety of citizens and their property.

CURRENT TRENDS

AGRICULTURE IN DOUGLAS COUNTY

Agriculture is a primary sector of the economy that makes valuable use of natural resources through farming, ranching, aquaculture, and similar industries. Douglas County has a long and evolving agricultural history. The County contains some of the finest agricultural lands in Nevada, which provide numerous benefits such as floodplain storage,



stormwater conveyances, wildlife habitat, and wildlife migration corridors. For many people, the most obvious advantage of agriculture land use is the open space associated with thousands of acres of pasture and crop production, which contributes to the quality of life for residents and defines the rural character of the County.

The agriculture industry {North American Industry Classification System (NAICS)} Sector 11) includes growing crops, raising animals, harvesting timber, and growing and harvesting fish and other animals. Agriculture establishments include farms, ranches, dairies, greenhouses, nurseries, orchards, and hatcheries. The two basic activities associated with this land use are agricultural production and agricultural support activities.

PRIME FARMLAND SOILS

Douglas County contains over 50,000 acres of different categories of prime farmland, according to the Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture. Prime farmland soils offer the best physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Diagram A1 displays the location of farmland in the County; Diagram A2 displays the location of farmland in the Carson Valley. Both diagrams group farmland into the following categories: farmland of statewide importance, prime farmland if irrigated, prime farmland if irrigated and drained, and prime farmland if irrigated and reclaimed of excess salts and sodium. Farmland of statewide importance and prime farmland if irrigated are located south of U.S. Highway 208, in Antelope Valley, throughout the Carson Valley adjacent to the east and west forks of the Carson River, and east of U.S. Highway 395.



DIAGRAM A1 - PRIME FARMLAND IN DOUGLAS COUNTY

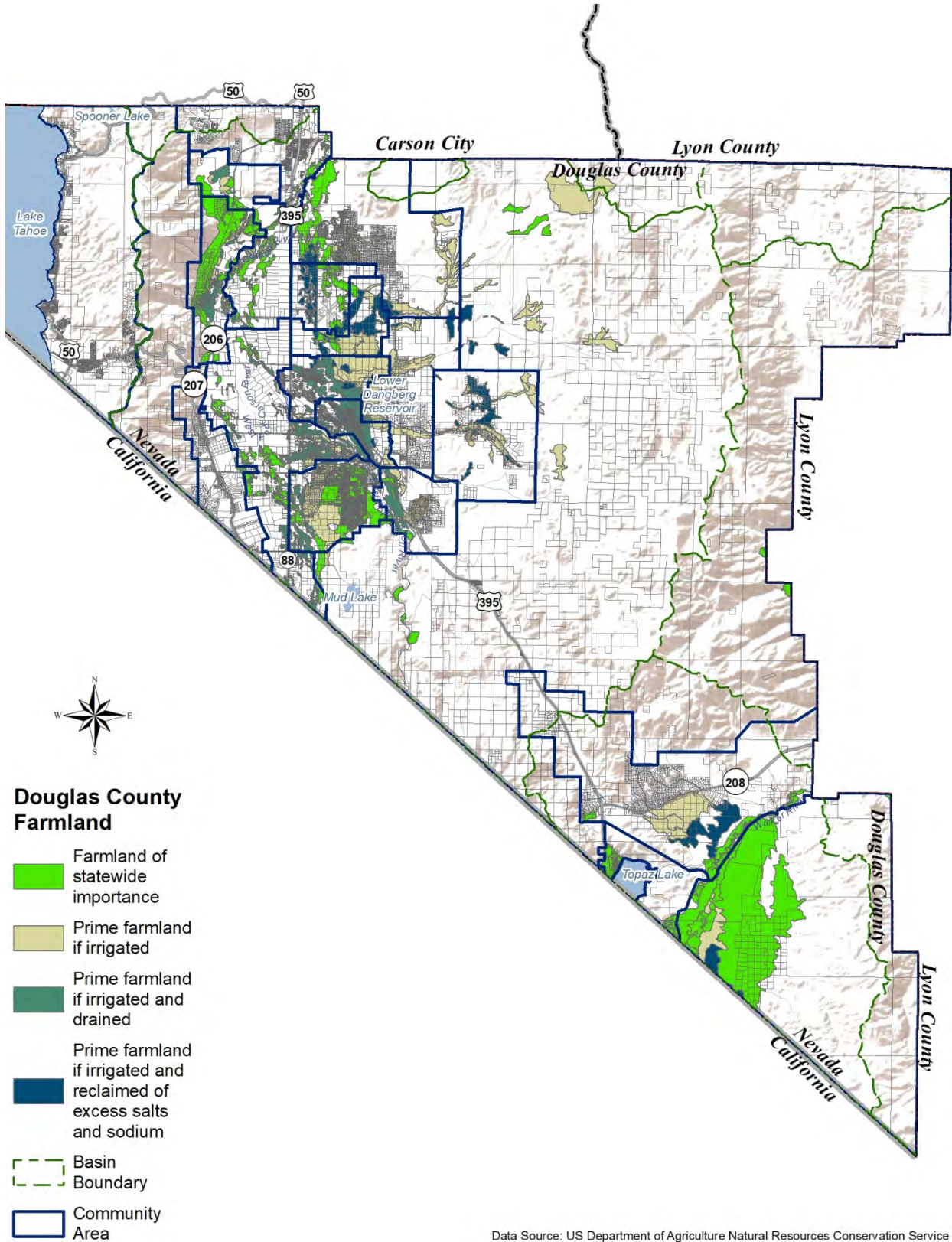
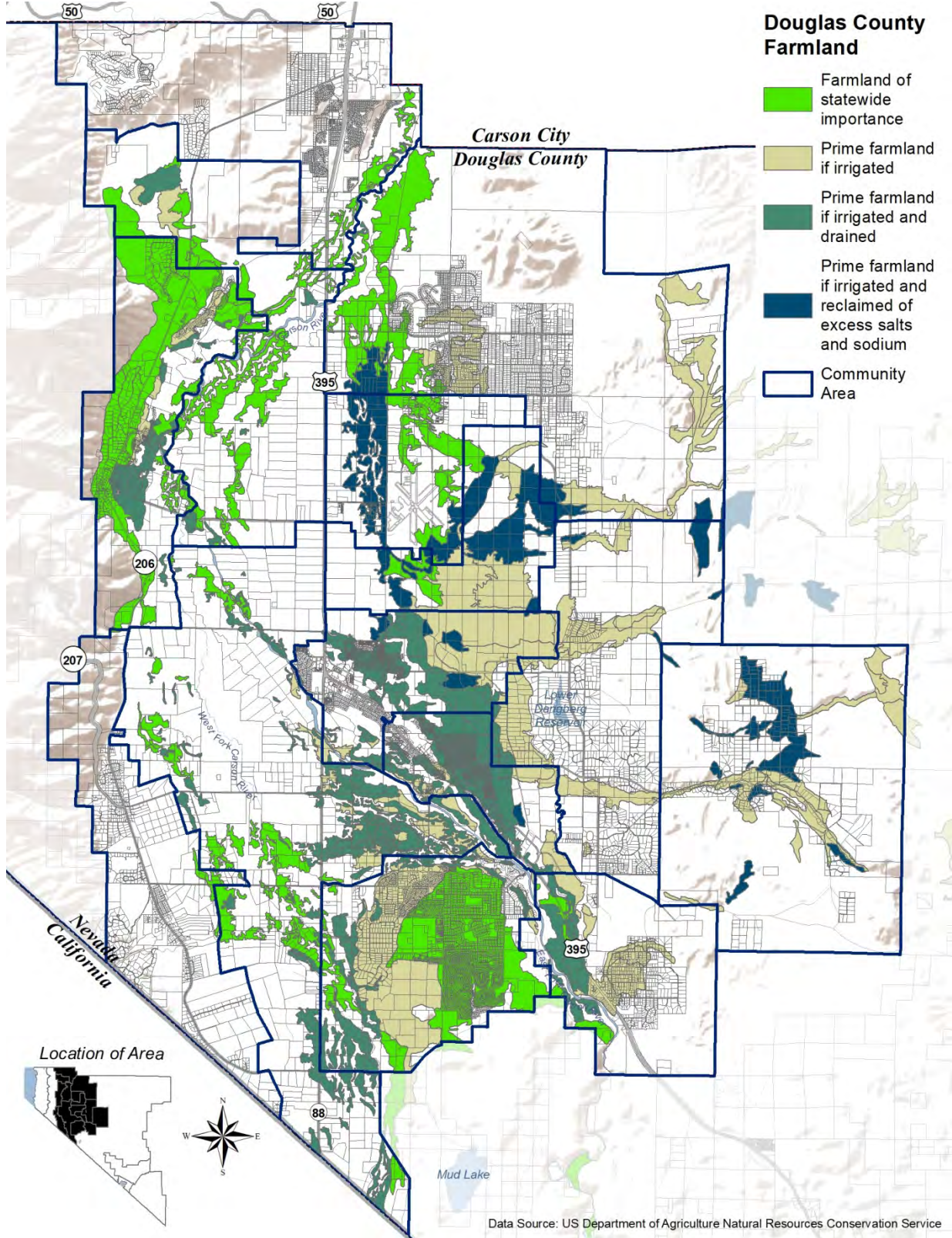


DIAGRAM A2 - PRIME FARMLAND IN CARSON VALLEY



FARMS IN DOUGLAS COUNTY

There are different estimates of the number of farms in Douglas County. The 2012 Census of Agriculture (by the U.S. Department of Agriculture) reports a total of 255 farms in the County; the 2017 census shows that number dropped to 239 farms. Table A1 includes information on the number of farms and farm acreage in Douglas County and other counties in Northern Nevada. Churchill County has the highest number of farms at 504, although Washoe County contains the most farmland with 501,310 acres. Table A2 contains historical numbers of farms in Douglas County.

Table A1 - Farms in Selected Northern Nevada Counties (2017)

County	Number of Farms	Land in Farms (acres)	Average Farm Size (acres)
Carson City	17	966	57
Churchill	504	249,832	496
Douglas	239	118,320	495
Lyon	312	181,354	581
Washoe	353	501,310	1,420

Source: U.S. Department of Agriculture, Census of Agriculture

The largest single agricultural commodity in Nevada is cattle and calf production. According to the 2017 Census of Agriculture, the number of head in Douglas County () was 17,023 and accounted for 3.6 percent of the state inventory. Lyon County had 53,063 head or 11.1 percent of the total; Churchill County had 60,209 head or 12.6 percent of the total.

As of January 1, 2016, farmers in Nevada are required to obtain a Producers Certificate to sell their farm products directly to the public. At present, there are only seven certified producers in Douglas County as compared to 205 certified producers statewide.

Table A2 - Census of Agriculture for Douglas County (1945–2017)

Year	Total Farms	Land in Farms (acres)	Average Size of Farm (acres)	Total County Land Area (acres)	Farmland as Percentage of Total Land Area
1945	131	216,678	1,654	450,683	48.1%
1950	139	226,902	1,632	450,683	50.3%
1959	108	235,016	2,176	450,683	52.1%
1964	98	228,233	2,329	450,683	50.6%
1969	99	160,861	1,625	450,683	35.7%
1974	107	162,037	1,514	450,683	36.0%
1978	131	107,307	819	450,683	23.8%
1982	159	112,769	709	450,683	25.0%
1987	202	114,574	567	450,683	25.4%
1992	172	79,635	463	450,683	17.7%
1997	156	90,372	579	450,683	20.1%
2002	178	210,952	1,185	450,683	46.8%
2007	179	91,046	509	450,683	20.2%
2012	255	100,944	396	450,683	22.4%
2017	239	118,320	495	450,683	26.3%

Source: U.S. Department of Agriculture, Census of Agriculture

The 2002 Census of Agriculture reported total land in farms at 210,952 acres in Douglas County. It is unclear why the number spiked in 2002 as it does not follow the trend, which ranged between approximately 80,000 and 118,000 acres from 1992 to 2017. The Douglas County Assessor’s Office reports the total acreage that qualifies for NRS 361 agricultural use value taxation’ and reported around 77,000 acres as of October 2020.

DEVELOPMENT REGULATIONS

The Douglas County Consolidated Development Code (Title 20) contains the zoning and subdivision regulations for agricultural land uses. Title 20 spells out the County’s Right to Farm Policy, which says, in part, “it is the declared policy of Douglas County to conserve, protect, enhance, and encourage agricultural operations within the County.” This is intended to promote a good neighbor policy and to protect agricultural operations from nuisance complaints from adjacent owners of non-agricultural properties, provided that the agricultural operations are conducted in conformance with County regulations.

Agricultural uses are permitted in the Agriculture 19-acre minimum (A-19) zoning district. Many land uses are allowed by right in the A-19 zoning district, such as “agricultural products processing” and “animal keeping.” Other uses, such as



“agricultural products retail outlet,” are allowed by special use permit only (requiring approval by the Planning Commission).

LOCATION OF AGRICULTURE IN DOUGLAS COUNTY

Table A3 provides information on the amount of acreage in each community plan that qualifies for NRS 361A. The property owners who are agricultural producers qualify for an agricultural use assessment based on NRS 361A. This statute, passed in 1975 by the Nevada Legislature, allows agricultural and open space real property to be considered separate classes for taxation purposes. Agricultural use assessments are lower than full cash value assessments. If properties are converted to a higher use, however, the property owner must pay the taxes deferred on the property for up to seven years. To qualify for this lower property value, the land must be devoted to agricultural use for at least three consecutive years prior and must produce a minimum gross income of \$5,000 per year from agricultural activities.

Table A3 - NRS 361A Agricultural Acreage, by Community Plan

Community Plan	NRS 361A Acreage	Number of Agricultural Parcels	Total Parcel Acreage in Community Plan	Percentage of NRS 361A Acreage
Agricultural, Central	4,042	87	4,047	99.9%
Agricultural, North	5,494	80	9,393	58.5%
Agricultural, South	14,651	381	16,155	90.7%
Airport	1,878	54	3,870	48.5%
Antelope Valley	7,894	7	47,349	16.7%
East Valley	996	38	8,755	11.4%
Fish Springs	98	4	12,197	0.8%
Foothill	2,742	108	6,679	41.1%
Gardnerville	699	28	2,604	26.8%
Gardnerville Ranchos	2,626	79	6,713	39.1%
Genoa	2,661	45	6,363	41.8%
Indian Hills/Jacks Valley	869	16	8,577	10.1%
Johnson Lane	1,439	36	17,181	8.4%
Minden	2,885	59	4,353	66.3%
Pinenut Region	18,578	175	222,246	8.4%
Ruhenstroth	606	7	5,092	11.9%
Sierra Region	266	5	19,311	1.4%
Tahoe Basin	0	0	23,458	0.0%
Topaz Lake	985	2	4,089	24.1%
Topaz Ranch Estates/Holbrook Jct.	6,677	65	26,813	24.9%
Total Acreage	76,086	1,276	455,245	16.7%

Source: Douglas County GIS and Douglas County Assessor, October 2020

DIAGRAM A3 - NRS 361 AGRICULTURAL PARCELS IN DOUGLAS COUNTY

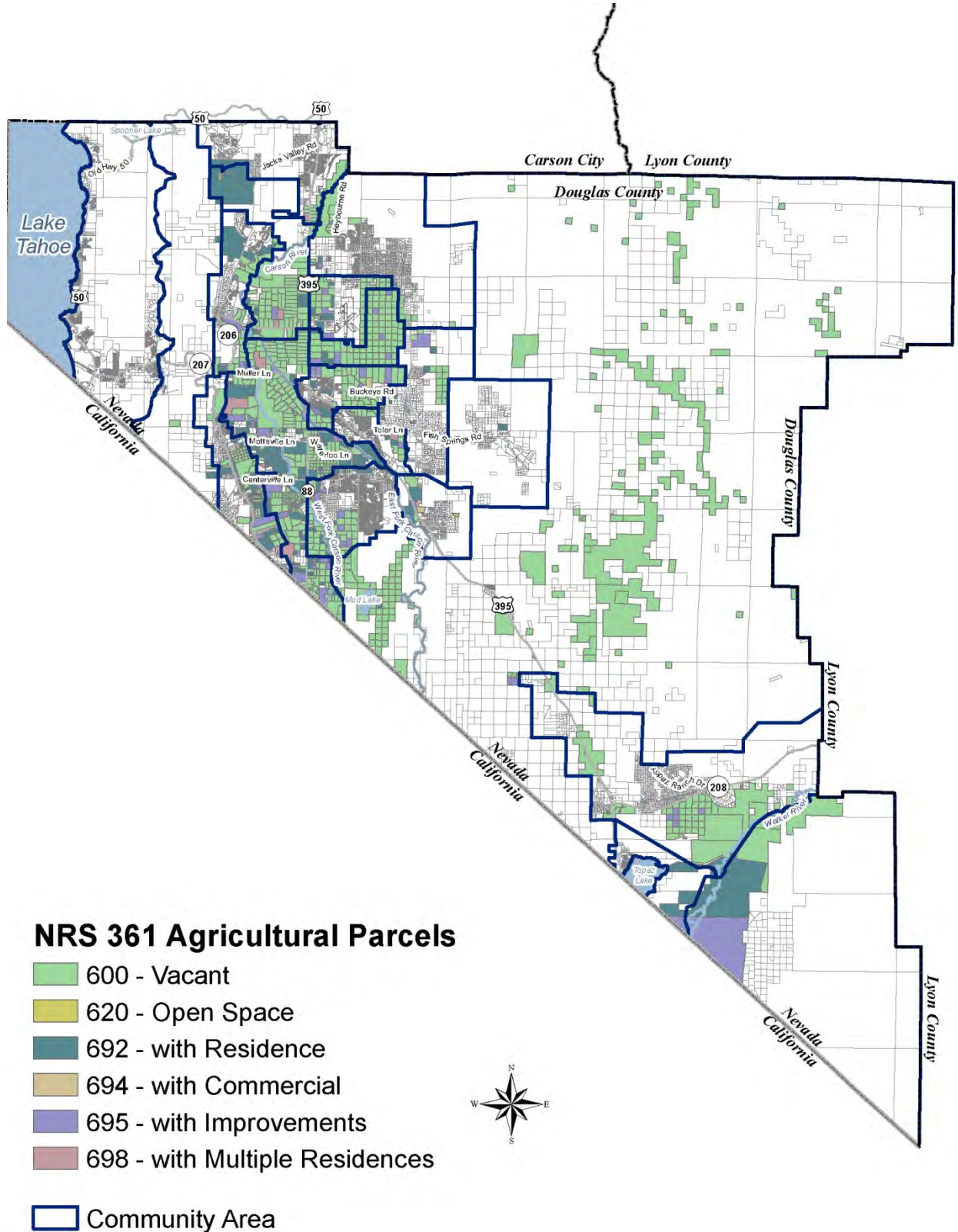


DIAGRAM A4 - NRS 361 AGRICULTURAL PARCELS IN CARSON VALLEY

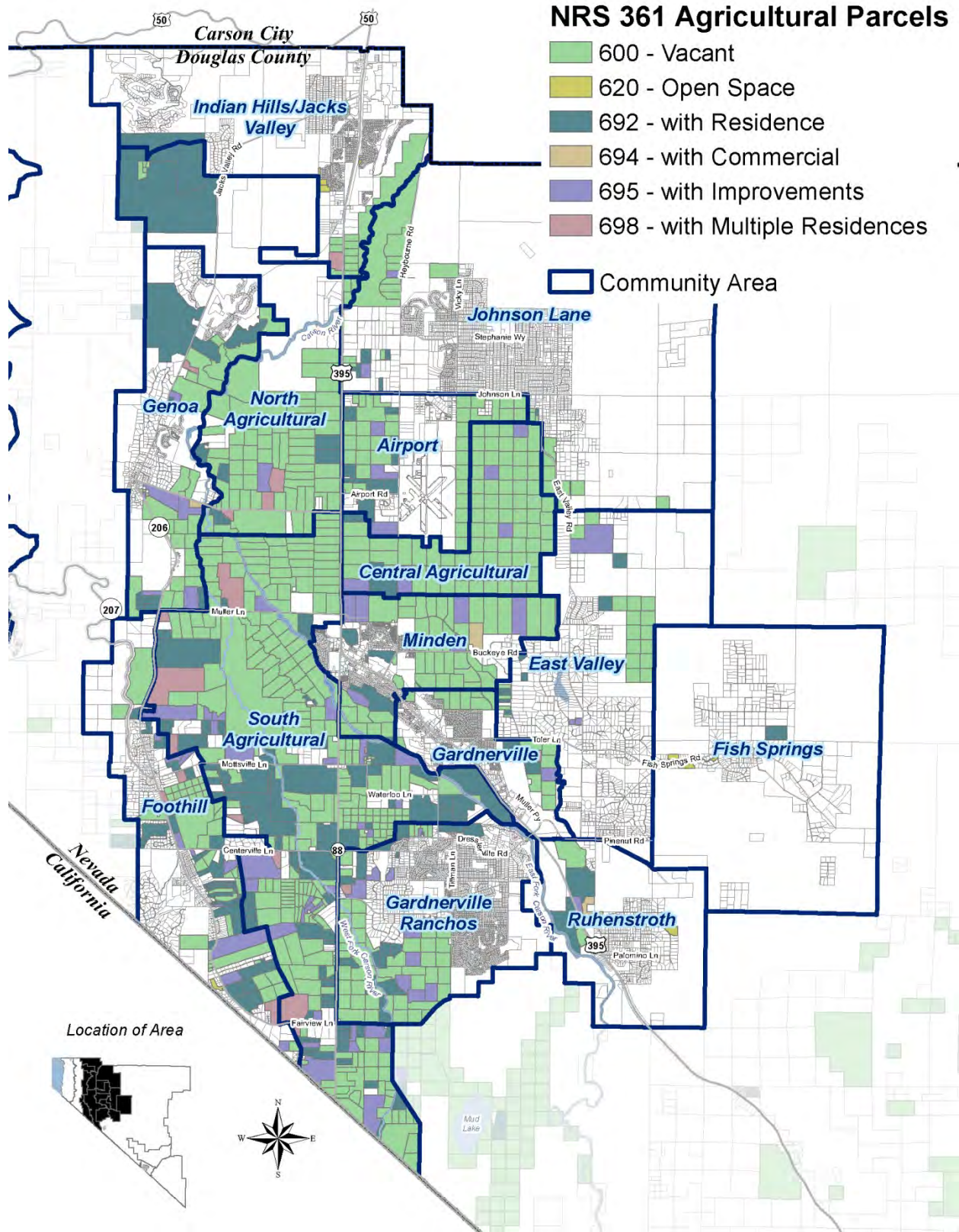
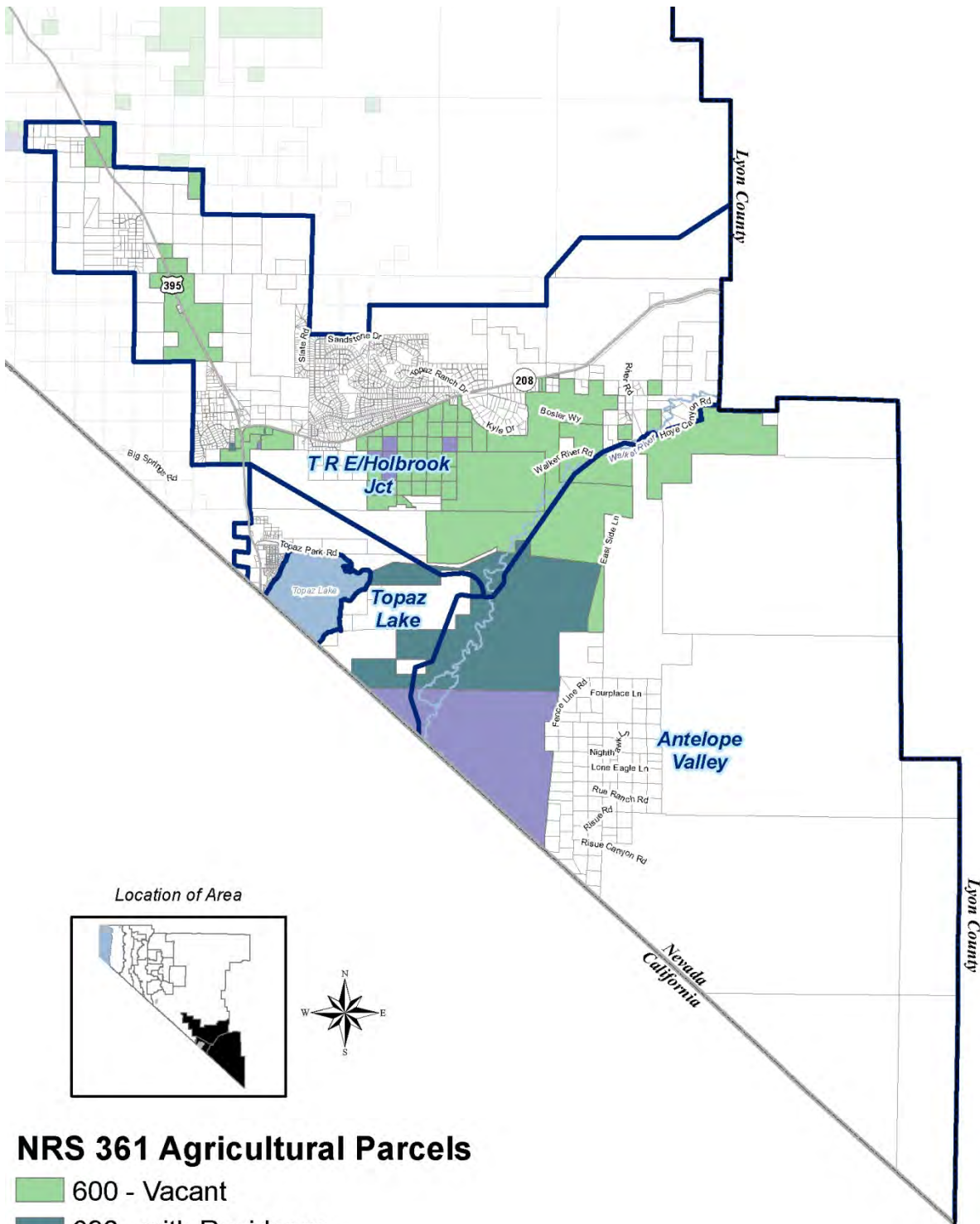


DIAGRAM A5 - NRS 361 AGRICULTURAL PARCELS IN SOUTHERN DOUGLAS COUNTY



NRS 361 Agricultural Parcels

- 600 - Vacant
- 692 - with Residence
- 695 - with Improvements

Community Area

CONSERVATION IN DOUGLAS COUNTY

Air Quality

Under the 1970 Clean Air Act, the Environmental Protection Agency (EPA) is required to set National Ambient Air Quality Standards (NAAQS) for six common-criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. The NAAQS include primary and secondary standards. The primary standards protect public health while the secondary standards protect public welfare (e.g., soils, water, and vegetation). The State Air Quality Planning Division monitors and reports on air quality for all Nevada counties except Clark and Washoe Counties.

There are two air quality monitoring stations in Douglas County. One station is operated by TRPA for purposes of monitoring TRPA thresholds and is located on Market Street in the Lake Tahoe Basin. The other is operated by the Bureau of Air Quality in the Nevada Division of Environmental Protection (NDEP) and is located in Aspen Park within the Gardnerville Ranchos General Improvement District. The Aspen Park station is a special purpose monitoring site (established 2006; recognized by EPA 2013) that monitors particulate matter (PM) pollution of 2.5 micrometers in diameter or smaller in ambient air.

One micrometer is defined as one-millionth of a meter in width; 2.5 micrometers pollution is so small that it can only be seen with an electron microscope.

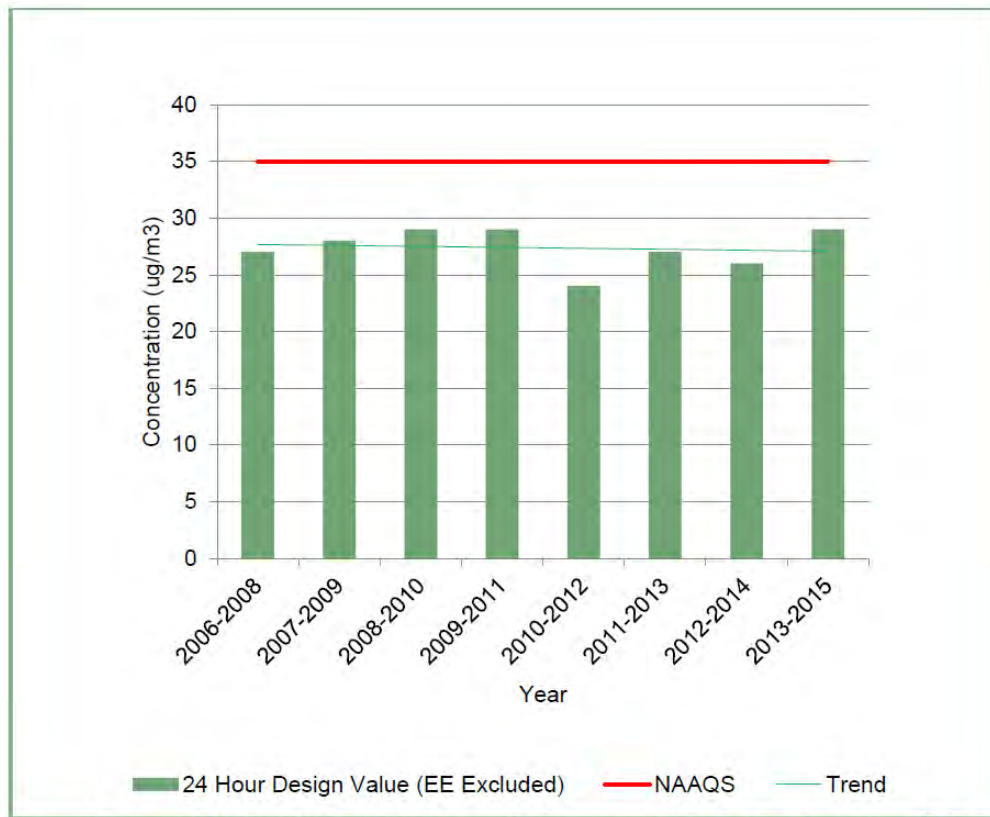
Major Sources of PM 2.5



PM 2.5 can deleteriously affect people with lung and heart conditions, especially in sensitive groups such as the elderly, pregnant women, fetuses, and children, and it contributes to visible haze (smog) in the atmosphere. Under NAAQS, PM 2.5 is not allowed to exceed 11 micrograms per cubic meter of air for the Annual Design Value or 35 micrograms per cubic meter of air for the 24-hour design value.

Figure A1 displays the 24-hour design values for PM 2.5 since 2006 at the Gardnerville Ranchos air quality monitoring station. Although this monitoring station shows that PM 2.5 standards have been below the 24-hour design value of 35 micrograms per cubic meter, there have been exceedances (EE). The EPA exception events rule allows states to “flag” data as an exceptional event and to exclude the data for this reason. NDEP believes these PM 2.5 exceedances are usually caused by wildfires in Douglas County and surrounding regions.

Figure A1 - Gardnerville Ranchos PM 2.5 Monitoring Station 24-hour Design Values (EE Excluded)



Source: Bureau of Air Quality, Nevada Division of Environmental Protection, December 2016

There are currently 17 businesses in the County that operate with NDEP air quality permits, including Starbucks, Harrah’s, Harveys, and Bing Construction. Any process or activity that is an emission source requires an air quality permit from NDEP to ensure that regulated pollutants do not harm public health or cause deteriorated conditions in areas that have clean air. Table A4 provides additional information on the companies with air quality discharge permits in Douglas County. Air quality operating permits are categorized as either Class 2 or Class 3 based on the amount of emissions.

Table A4 - Companies with Air Quality Operating Permits

Company	Class	Emissions (ton/year)
A & A Construction, Inc.	Class 3	0.8697
Aervoe Industries, Inc.	Class 2	0.0257
American AVK Company	Class 2	3.9887
Bing Construction Co. of Nevada	Class 2	14.4297
Carson Valley Veterinary Hospital	Class 3	0.5117
Columbia Properties Tahoe, LLC	Class 2	6.8817
Harrah’s Lake Tahoe Hotel Casino	Class 2	82.4117
Harvey’s Resort Hotel Casino	Class 2	12.0477
New Cingular Wireless PCS, LLC, DBA AT&T Mobility	Class 3	0.0207
North Sails Nevada	Class 2	3.1967
OS Operations, Inc.	Class 2	9.077
Starbucks Coffee Company	Class 2	152.625
Verizon Wireless	Class 3	0.171
Verizon Wireless	Class 3	0.016
Verizon Wireless	Class 3	0.009
Verizon Wireless	Class 3	0.002
Verizon Wireless	Class 3	0.010

Source: Bureau of Air Quality, Nevada Division of Environmental Protection, December 2016

PROTECTION OF OPEN SPACE AND SENSITIVE AREAS

Open space areas in Douglas County include public lands managed by the BLM and USFS, agricultural areas, and undeveloped private lands. Many of these areas include floodplains and wetlands and provide important ecosystem benefits. In addition, protection of open space areas helps preserve the scenic qualities of the County. Private open space lands can be protected from development through fee simple purchase, purchase of development rights, or conservation easements.

NRS 111.390 through 111.440 is the Nevada Conservation Easement law. Open space easements and acquisitions have been purchased through the County’s TDR program and the SNPLMA. The County’s development regulations also help protect open space through the Planned Development Overlay District and the Clustered Development provisions of the Development Code.

Transfer Development Rights Conservation Easements

The County’s TDR program was adopted in 1996 and allows property owners in “sending areas” (A-19 and FR-19 zoning districts) to transfer their development rights to designated receiving areas based on execution of conservation easements. Property owners obtain bonus development rights if the conservation easement includes floodplain acreage. To date, 4,065.40 acres of private land have been preserved as open space under the County’s TDR program. Table A5 provides information on the lands protected as open space during the last 20 years.

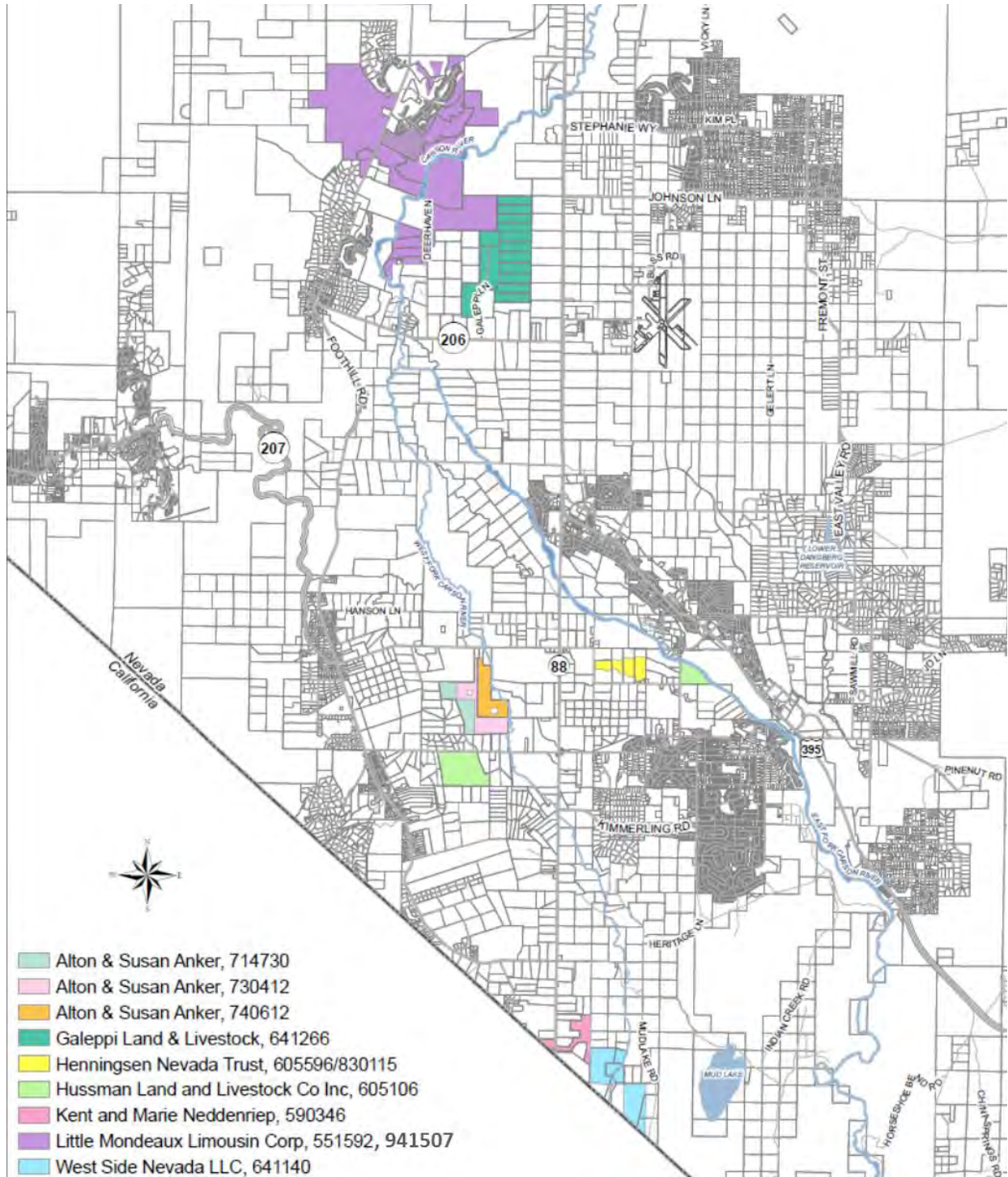
Table A5 - TDR Conservation Easements, 2002–2020

Property Owner	Conservation Easement (Acreage)
Alton and Susan Anker	375.77
Galeppi Land & Livestock	700.02
Henningsen Nevada Trust	100.48
Hussman Land & Livestock	260.74
Kent and Marie Neddenriep	100.42
Little Mondeaux Limousine Corp.	2,238.81
West Side Nevada, LLC	289.16
Total	4,065.40

Source: Douglas County Community Development Department

Diagram A6 depicts the location of the conservation easements created through the TDR program. Additional information on the development rights created by the TDR program is provided in Element 4, Growth Management & Housing.

DIAGRAM A6 - TDR CONSERVATION EASEMENTS



Southern Nevada Public Lands Management Act

The SNPLMA (Public Law 105-263) was passed in 1998 and allows the BLM to utilize the proceeds from BLM land sales in Clark County for different purposes, including acquisition of environmentally sensitive lands. The first SNPLMA environmentally sensitive land transaction in Douglas County was the 300-acre conservation easement for the Hussman property in Gardnerville.

Table A6 - Completed SNPLMA Environmentally Sensitive Land Acquisitions (2004–2020)

Project Name & Property Owner	Acres	Description
Carson Valley Conservation Easement Group A - Hussman	300.00	BLM purchased the conservation easement for this property in FY 2006.
Carson Valley Conservation Easement Group A - River Fork Ranch/Nature Conservancy	739.00	BLM purchased the conservation easement for this property in FY 2007.
Carson Valley Conservation Easement Group B - White	139.00	BLM purchased the conservation easement for this property in 2008
Carson Valley Conservation Easement Group B - Stodieck	153.00	BLM purchased the conservation easement for this property in 2009.
Carson Valley Conservation Group D - Scossa	530.00	BLM purchased the conservation easement for two parcels in 2008. The property contains hot springs and the only known colony of the Carson Valley Silverspot Butterfly in Douglas County.
Adams Canyon - Eagle Ridge at Genoa	722.47	The USFS purchased this inholding in 2007. The property includes a segment of the Pony Express Historic Trail and provides critical deer winter range habitat.
Ranch 1 - Lekumberry	357.44	BLM purchased the conservation easement for three separate parcels in 2014, including the Wasson Ranch, the Slaughterhouse Ranch, and a parcel located along Centerville Lane. The easements will protect habitat for sensitive and listed species and floodplain functions of the Carson River.
Jacks Valley Ranch Conservation Easement - Ascuaga	1,233.00	The USFS will acquire a conservation easement over 1,233 acres of ranchland and forest to protect migratory corridors, wildlife habitat, historic structures, and Native American cultural resources.
TOTAL	4,173.91	

Source: BLM SNPLMA website (www.blm.gov/snplma)

Recently, land around the Dangberg Home Ranch was chosen for SNPLMA funding. With this latest project, which is currently in progress, the BLM will acquire an agricultural conservation easement on approximately 1,373 acres of the historic Dangberg Home Ranch to consolidate federal management of other BLM-owned conservation easements and create a large unfragmented agricultural landscape. The BLM is also in the process of acquiring

SNPLMA has protected over 4,173 acres in Douglas County. An additional 15,895 acres are currently in progress for acquisition or conservation.

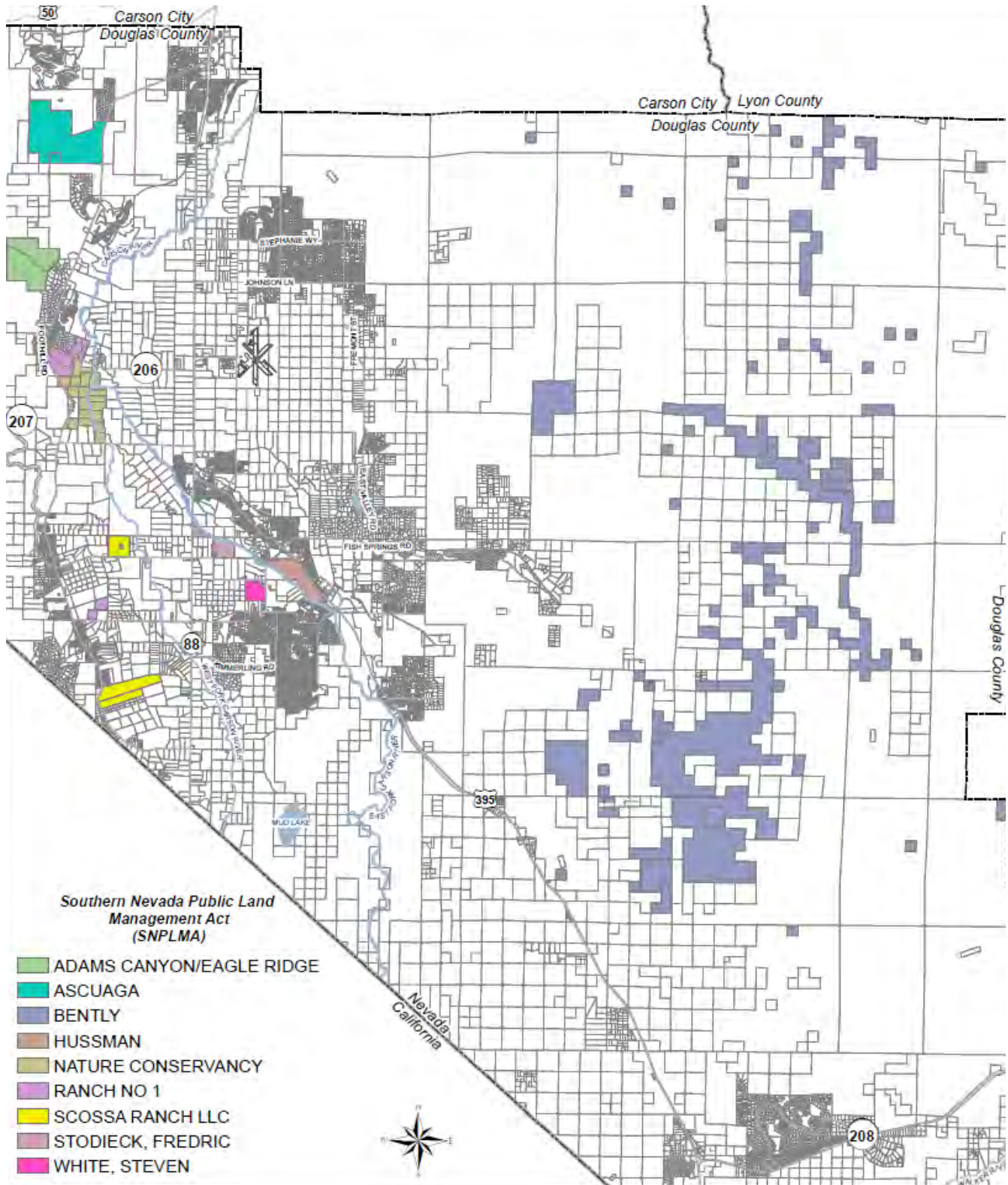
approximately 14,522 acres of vacant land located in the Pine Nut Mountain Range to consolidate federal ownership and management for the protection of bi-state sage-grouse habitat, other wildlife habitat, cultural resources, riparian areas, and improvement of public access. Once completed, these two projects will add nearly 16,000 acres of additional lands acquired or conserved through the SNPLMA program.



Staff photo. Dangberg Home Ranch 2020

Diagram A7 displays the location of completed SNPLMA conservation acquisitions and easements in the Carson Valley portion of Douglas County.

DIAGRAM A7 - COMPLETED SNPLMA ENVIRONMENTALLY SENSITIVE LAND ACQUISITIONS



FLOODPLAIN PROTECTION

Douglas County includes 31,582 acres of riverine and alluvial fan floodplains. Riverine floodplains allow floodwaters to disperse over normally flat areas adjacent to rivers and streams and reduce the energy of the water flow, thus protecting downstream properties. Riverine floodplains provide areas of groundwater recharge and wildlife habitat, and their locations are relatively predictable. Alluvial fan floodplains, on the other hand, are not easily predictable, carry high velocity flows, and often carry sediment.

Table A7 — 100-Year Floodplain Acreage by Community Plan Area

Community Plan	Total Acreage	100-Year Floodplain Acreage	Percentage in Floodplain
Agricultural, Central	4,519.71	594.91	13.2%
Agricultural, North	12,904.96	4,860.59	37.7%
Agricultural, South	15,847.30	9,024.15	56.9%
Airport	4,678.00	407.91	8.7%
Antelope Valley	47,348.90	1,573.62	3.3%
East Valley	9,922.45	757.97	7.6%
Fish Springs	12,197.05	525.72	4.3%
Foothill	6,679.16	358.00	5.4%
Gardnerville Ranchos	6,672.82	1,093.03	16.4%
Genoa	6,362.75	2,129.07	33.5%
Indian Hills/Jacks Valley	5,056.27	758.52	15.0%
Johnson Lane	17,984.13	1,348.24	7.5%
Minden/Gardnerville	4,052.55	1,785.05	44.0%
Pinenut	222,245.87	2,450.43	1.1%
Ruhenstroth	5,091.94	1,009.40	19.8%
Sierra	19,369.53	4.23	0.0%
Tahoe Basin	39,249.66	487.63	1.2%
Topaz Lake	5,145.08	204.14	4.0%
Topaz Ranch Estates/Holbrook Jct.	26,813.46	2,209.05	8.2%
TOTAL	472,141.59	31,581.66	6.7%

Source: Douglas County GIS

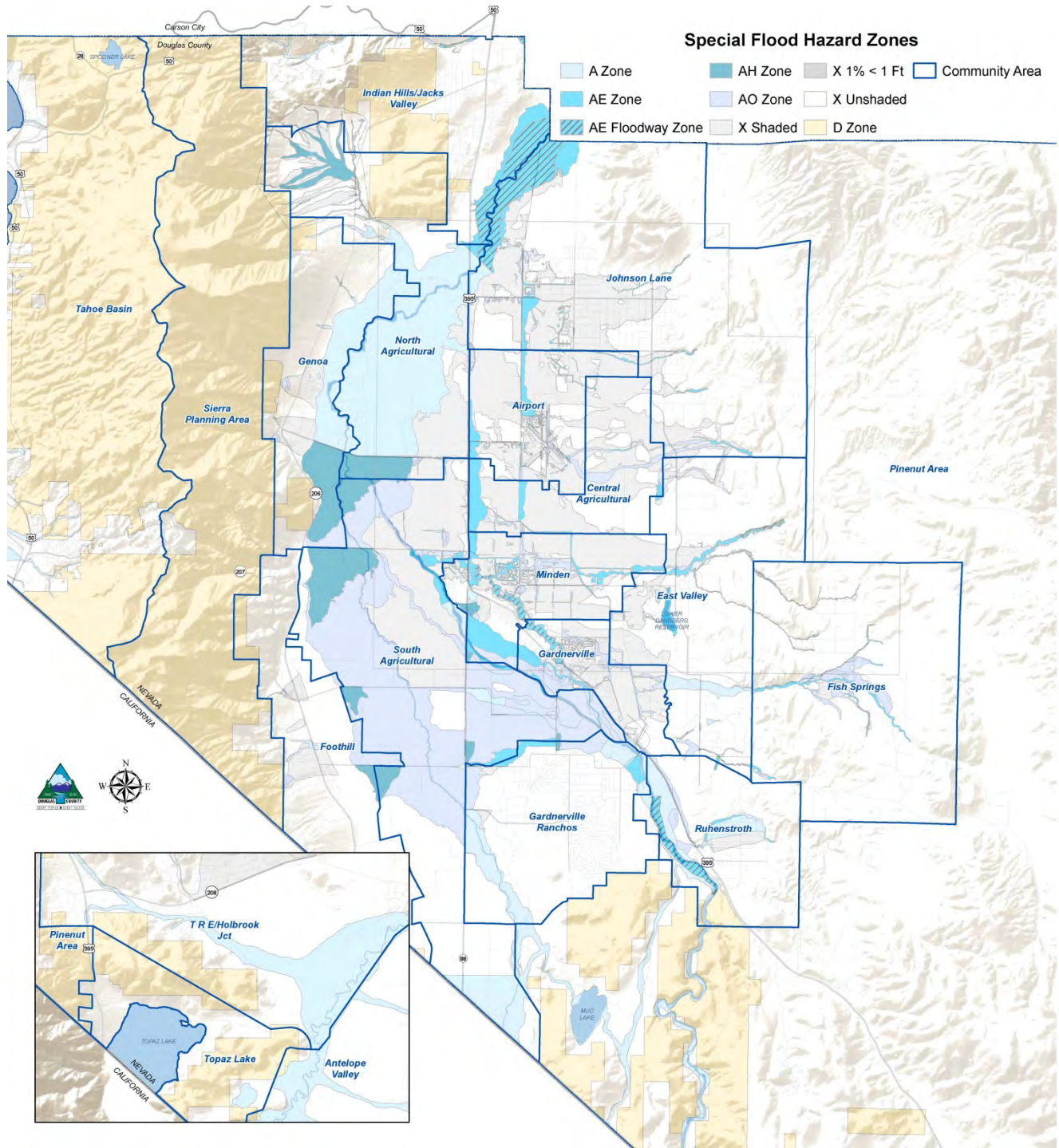
The majority of floodplain areas in Douglas County are located in the Carson Valley. Of the 31,582 acres of floodplain in the County, 24,653 acres or 78 percent are found in the Carson Valley.

Diagram A8 displays the location of floodplain areas within the Carson Valley portion of Douglas County.



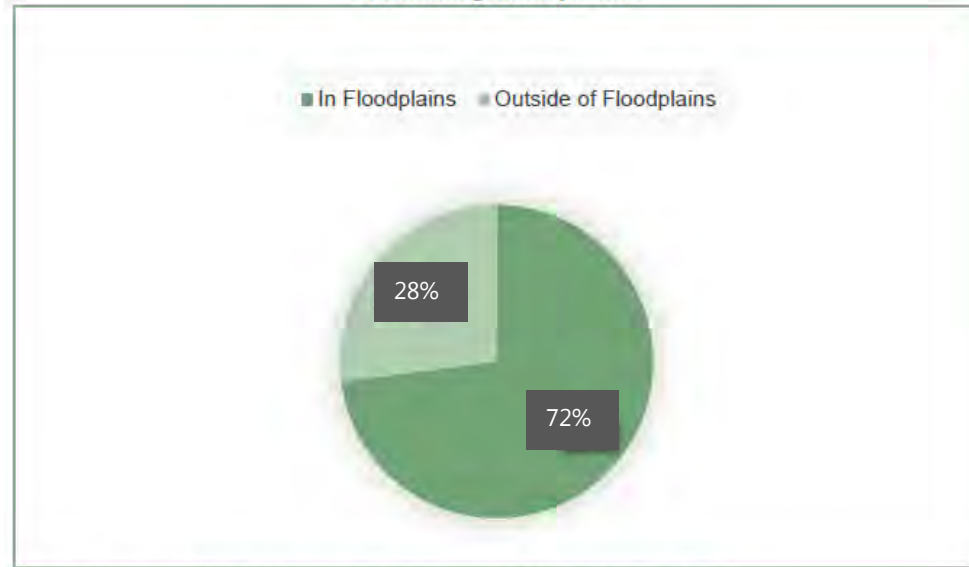
Muller Lane, December 2015

DIAGRAM A8 - FLOODPLAIN AREAS IN CARSON VALLEY



Many of the riverine floodplain areas in the Carson Valley have been protected from development through Douglas County’s TDR program. As shown in Figure A2, 72 percent of the conservation easement acreage (2,941 acres) is located inside floodplains.

Figure A2 - Douglas County TDR Conservation Easements Protecting Floodplains



Source: Douglas County Community Development, Douglas County GIS

Floodplain regulations and public safety issues are discussed in Element 6, Public Safety.

RENEWABLE ENERGY

The State of Nevada Renewable Portfolio Standard, as set forth in NRS 704.7801, has set a goal of 50 percent renewable energy by 2030. The portfolio standard requires each electric utility in Nevada to sell a percentage of electricity from renewable sources. This percentage increases every year until reaching the 50 percent standard. For calendar year 2020, not less than 22 percent of the total amount of electricity sold by the provider to its retail customers in Nevada must be from renewable sources.

The Governor’s Office of Energy manages several tax incentive, grant, and loan programs to encourage the development of clean energy in Nevada. The Office of Energy has provided six Direct Energy Assistance Loans (DEALs) to state employees who live in Douglas County. The DEAL program provides up to \$6,000 in loans for energy-efficiency upgrades. To date, the Office of Energy has not provided any renewable energy tax abatements to Douglas County.

Douglas County has amended its development regulations during the last 10 years to encourage the development of different types of renewable energy in the County. Douglas County adopted wind energy regulations in 2007 and solar regulations in 2016 that limit 10-megawatt solar facilities to FR-40 zoning only with the approval of a special use permit.

WATER

Douglas County includes 26 square miles of surface water bodies and seven different groundwater basins. The largest surface water body is Lake Tahoe, and the largest groundwater basin is the Carson Valley Hydrographic Basin. The potable water supply is largely dependent on groundwater wells while irrigation water is largely dependent on surface water. Water quality is compromised from non-point sources that threaten both surface waters and underground aquifers.

More information on water supply and water quality is presented in Diagram A9.

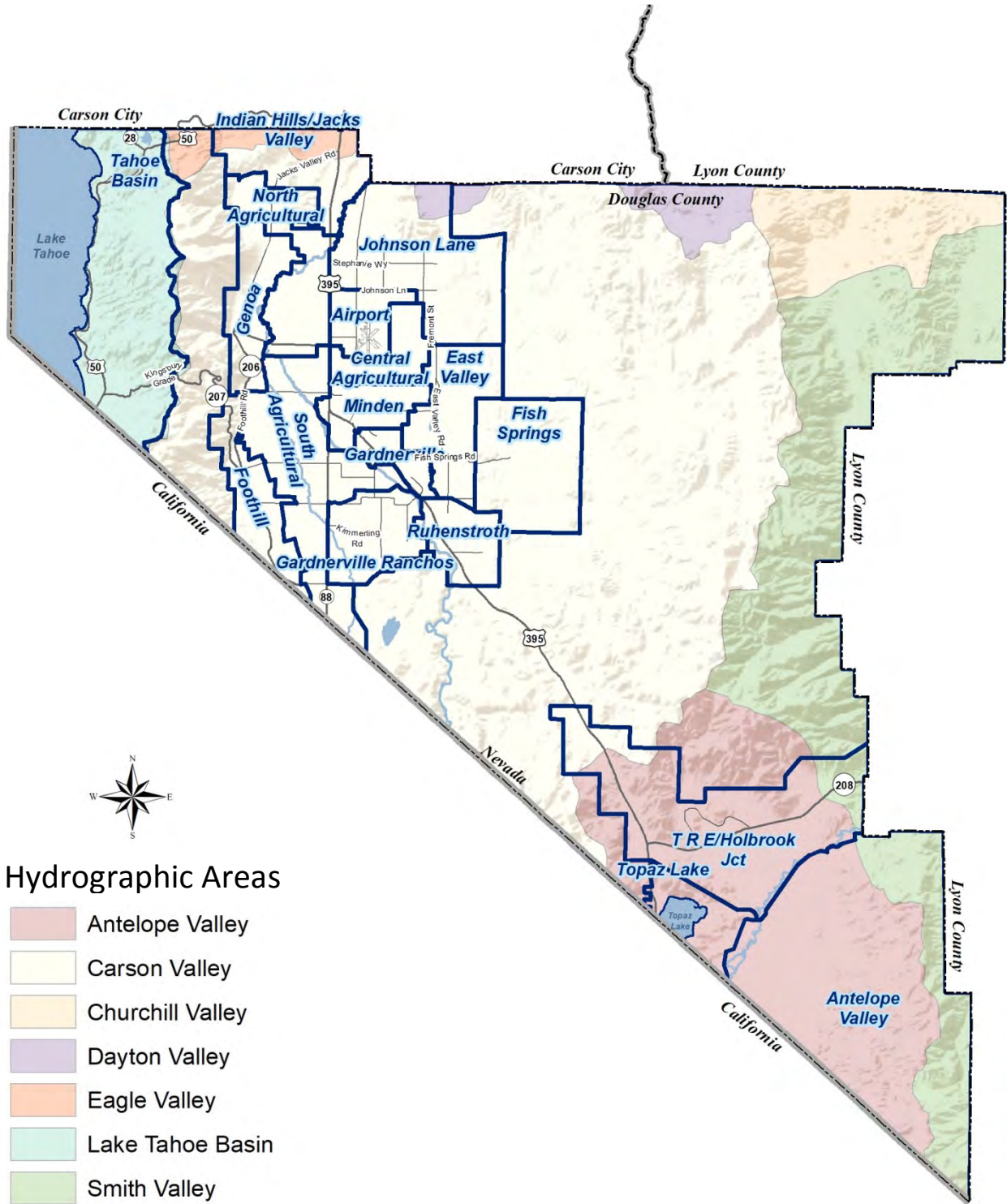
Water Basins in Douglas County

The most significant water basins are the Carson Valley, Lake Tahoe, and Antelope Valley basins. The County also includes small portions of the Churchill Valley, Dayton Valley, Eagle Valley, and Smith Valley water basins. Diagram A9 depicts the different hydrographic basins in Douglas County.



Topaz Lake. Photo by Alicia Jensen.

DIAGRAM A9 - HYDROGRAPHIC BASINS IN DOUGLAS COUNTY



Hydrographic Areas

- Antelope Valley
- Carson Valley
- Churchill Valley
- Dayton Valley
- Eagle Valley
- Lake Tahoe Basin
- Smith Valley
- Community Area

Data Source: U.S. Geologic Survey

Water Supply

The State of Nevada is responsible for protecting this critical resource by monitoring pumpage in the water basins and approving or denying applications for new water withdrawals, including transbasin diversions. Each groundwater reservoir provides a perennial yield. According to the State, “withdrawals of groundwater in excess of the perennial yield may contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, and land subsidence.”

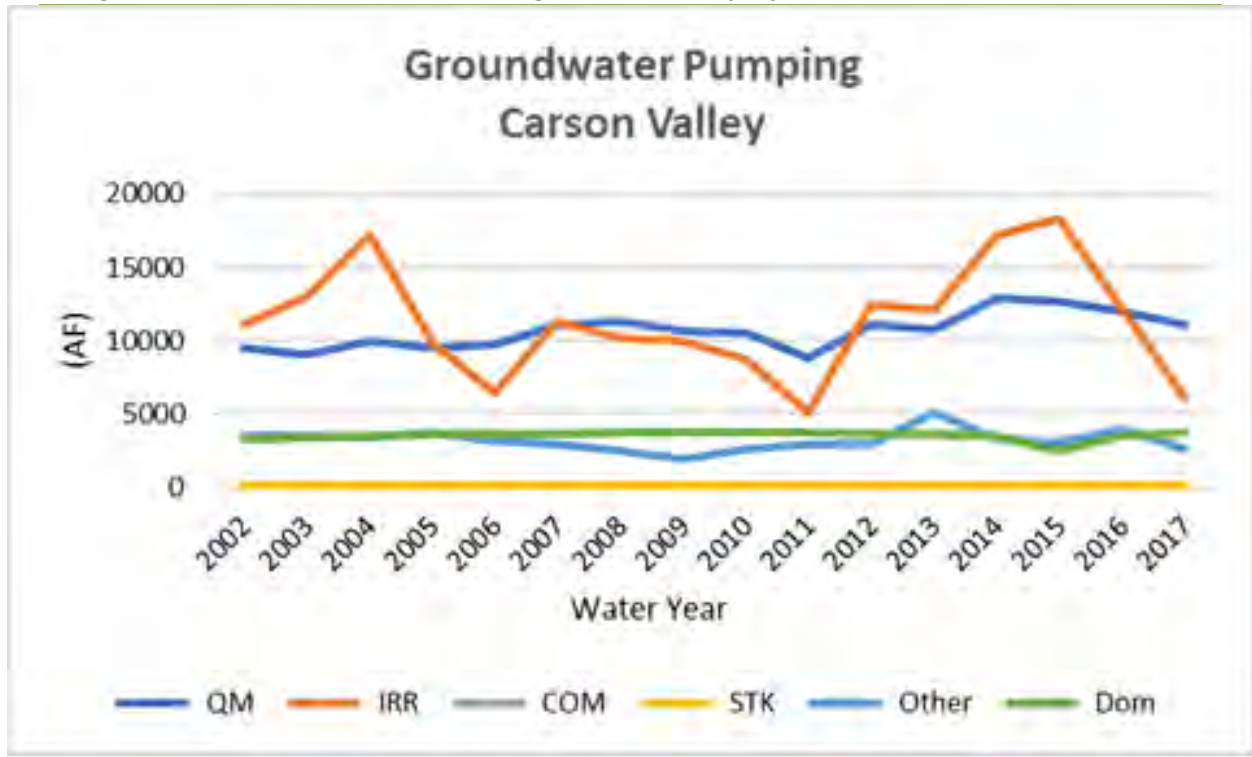
Water law in Nevada is based on prior appropriation (first in time, first in right) and beneficial use (e.g., irrigation, recreation, and municipal uses). All water uses in Nevada require a permit from the State Engineer except for domestic uses and uses that pre-date Nevada’s water laws, which are known as pre-statutory vested rights.

The water supply for Douglas County includes groundwater wells and surface water. Water is used for farm irrigation and recreation, industrial, and domestic uses. Douglas County residents obtain drinking water either through individual wells or public water purveyors. Additional information on water purveyors is provided in Element 5, Public Facilities, Services, and Recreation.

Property owners are allowed to drill wells for domestic water without obtaining a permit from the State Engineer if they pump less than two acre feet of water per year (NRS 534.180). One acre foot of water covers one acre of land to a depth of one foot and is equal to 325,851 gallons.

Annual reports for each basin describe the amount of pumpage by manner of use. These annual reports also detail when the State Water Engineer has denied new appropriations. More information on water usage in Antelope Valley, Carson Valley, and Lake Tahoe Basins can be found on the State of Nevada Division of Water Resources website, and a discussion of water resources and services can be found in Element 5, Public Facilities, Services, and Recreation.

Figure A3 - Groundwater Pumping Carson Valley by Manner of Use (in Acre Feet)



Water Quality

Clean water regulations for the country were established with the 1972 Federal Water Pollution Control Act, also known as the Clean Water Act. The NDEP is responsible for implementing the Clean Water Act with oversight from the EPA. The Carson Water Subconservancy District (CWSD) is the designated Clean Water Act Section 208 water quality planning body for the Carson River.

In 2007, CWSD completed the [Carson River Watershed Stewardship Plan](#), which was last updated in 2017. The Stewardship Plan sets forth specific water quality projects for the Carson River Watershed.

NDEP is required to submit a list of waters that do not meet the standards of the Clean Water Act, also known as the 303(d) list of impaired waters. Further, NDEP is required to develop a water quality plan or total maximum daily load (TMDL) for waters on the 303(d) list. Water quality standards are established based on the beneficial uses for each water body, such as irrigation, aquatic life, and recreation. TMDL plans establish pollution budgets for specific pollutants. The Carson River had TMDL plans approved in 2005 for phosphorus and in 2007 for total suspended solids and turbidity. The Lake Tahoe TMDL Plan for Nevada was approved by the EPA on August 16, 2011.

The 2014 Integrated Water Quality Report for Nevada provides information on the water body segments that are either still on the 303(d) list or are new additions to the list. The report includes assessments of 660 water body segments, including the Carson River, Walker River, and Topaz Lake.

Discharge of treated wastewater into Lake Tahoe or the Carson River is not allowed. Discharges into the Carson River ended in 1987. All treated wastewater in Douglas County is used as effluent for farms, golf courses, or engineered wetlands. During the 2013 water year, for example, wastewater utilities such as the Incline Village General Improvement District (IVGID) and the Douglas County Sewer Improvement District transferred more than 3,000 acre feet of wastewater from the Lake Tahoe Basin into the Carson Valley.

Since there are no direct discharges, or “point” sources of pollution, the threats to clean water in Douglas County come from “non-point” sources. “Non-point” sources include septic tanks, stormwater runoff, and agricultural activities, and to a lesser extent, airborne deposits of dust and other aerosol pollutants. Douglas County is under the Small Area Municipal Storm Sewer System (MS4) permit for the Johnson Lane, Indian Hills/Jacks Valley, and Clear Creek areas in northern Douglas County, as approved by NDEP. As such, the MS4 permit requires minimum control measures to manage non-point sources of pollution. The existing MS4 permit expired in 2015 but has been administratively continued by NDEP. The new MS4 permit is expected to be expanded to include Gardnerville, Gardnerville Ranchos, and Minden.

In 2012, Douglas County adopted the [Community Wellhead Protection Plan](#) as an amendment to the Master Plan. This plan was prepared by the NDEP with the assistance of a task force that included County, Town, and GID representatives. As documented in the Wellhead Protection Plan, certain land uses, such as gasoline stations, are known to create potential contaminants for public drinking water. Groundwater is also threatened by nitrates caused by concentrations of septic systems. There are 6,162 individual septic systems on 5,960 parcels in Douglas County (outside of the Tahoe Basin). More information on individual septic disposal systems is presented in Element 5, Public Facilities, Services, and Recreation.

WETLANDS

There are 2,786 acres of wetlands in Douglas County, including almost 900 acres of engineered wetlands created to handle effluent disposal for the IVGID. Wetlands are generally defined as areas that are periodically inundated with water or saturated with surface or groundwater on an annual or seasonal basis. Wetland areas provide breeding, rearing, and feeding grounds for many species of fish and wildlife. Wetland areas also provide flood protection and opportunities for passive recreation and help filter pollutants from stormwater runoff.

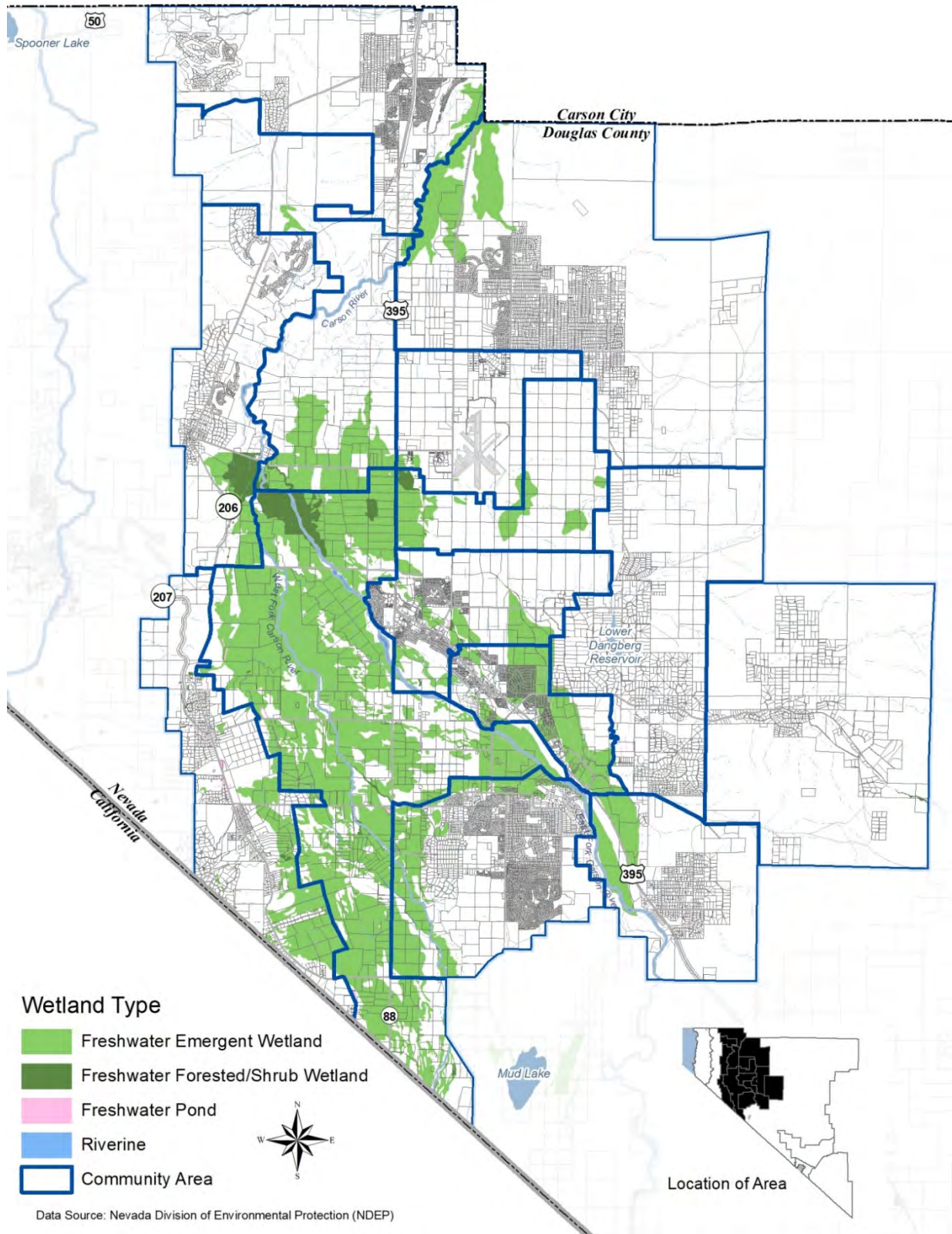
Wetlands are classified into five different systems, subsystems, and classes. Diagram A10 displays the location of different classes of freshwater wetlands riverine areas and different wetland types in the Carson Valley portion of Douglas County.



IVGID Wetlands Enhancement Facility

Source: Incline Village General Improvement District

DIAGRAM A10 - WETLANDS IN THE CARSON VALLEY



WILDLIFE

The Federal Endangered Species Act of 1973 protects endangered and threatened species of animals and plants. An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. In Douglas County, endangered species include the Sierra Nevada yellow legged frog, the cui-ui, and the Carson wandering skipper. Threatened species include the Lahontan cutthroat trout and Webber’s ilvesia. The wolverine is proposed to be listed as a threatened species. Table A9 provides additional information on current listings of endangered and threatened species in Douglas County.

Carson Wandering Skipper



Source: US Fish & Wildlife Services

Table A9 - Endangered and Threatened Species in Douglas County

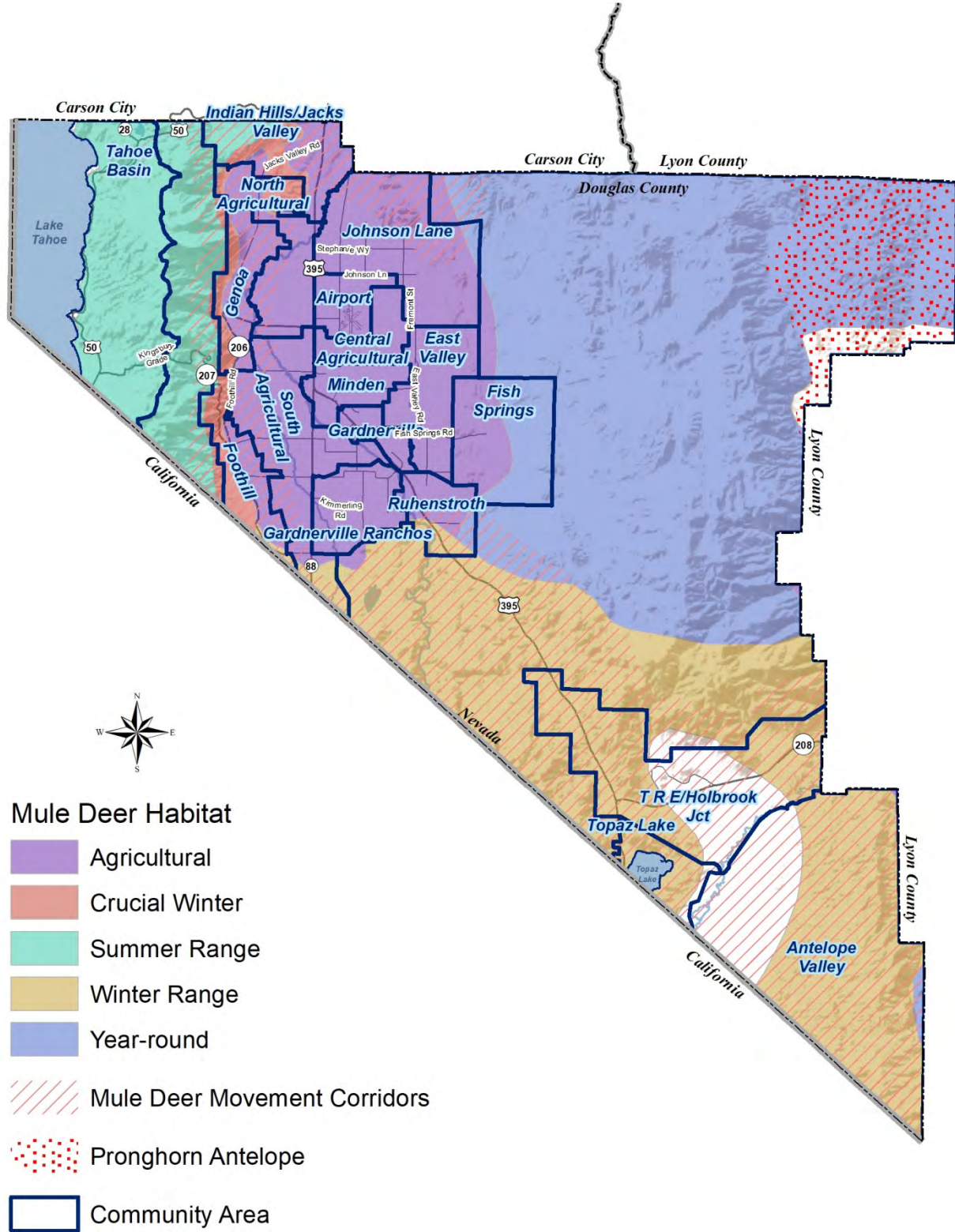
Species	Endangered	Threatened	Threats
Amphibians	Sierra Nevada Yellow-Legged Frog	None	Habitat destruction, disease
Fishes	Cui-ui	Lahontan Cutthroat Trout	Isolation, non-native species
Flowering Plants	None	Webber’s Ilvesia	Urban development, OHVs and recreation use, livestock grazing and trampling, wildfire and suppression activities. There is final critical habitat designation.
Insects	Carson Wandering Skipper	None	Livestock grazing, off-road vehicle use, development, gas and geothermal development
Mammals	None	Wolverine is Proposed as Threatened	Climate Change

Source: U.S. Fish and Wildlife Service, Nevada Office

In 2013, the U.S. Fish and Wildlife Service proposed listing the bi-state sage-grouse distinct population segment as a threatened species under the Endangered Species Act but withdrew it from the candidate species list in April 2015 as a result of the conservation plan spearheaded by the Governor’s office. The primary threats to sage-grouse are wildland fires and encroachment of piñon and juniper woodland. The U.S. Fish and Wildlife Service operates the Lahontan National Fish Hatchery, which is located south of Gardnerville and manages the recovery of the cui-ui and the Lahontan cutthroat trout.

Diagram A11 displays the distribution and movement corridors of mule deer and pronghorn antelope in Douglas County.

DIAGRAM A11 – MULE DEER AND PRONGHORN ANTELOPE DISTRIBUTION AND MOVEMENT CORRIDORS



LOOKING TO THE FUTURE

Conserving Open Space and Protecting Agriculture Lands

There are several tools available to protect key agriculture land and conserve prime open space. These tools include the TDR program (further discussed in Element 1, Land Use & Historic Preservation), Open Space Acquisition, Regulatory Exemptions and Incentives, and the Livestock Overlay Zoning District.

- Transfer Development Rights (Douglas County Development Code Section 20.500).** The TDR program allows property owners in “sending areas” (A-19, FR-19 zoning districts) to sell development rights to designated “receiving areas.” Development rights can’t be transferred off the property until the owner has obtained a TDR certificate from the County. Property owners must record a deed restriction or grant a perpetual open space access easement to the County (or another entity approved by the Board of Commissioners). Establishing a TDR bank is a strategy used in many jurisdictions and would help jump start the TDR program.

To date, the TDR program has created almost 4,000 acres of conservation easements but no new conservation easements have been established through the program since 2009.

TDR banks allow the local government to purchase TDRs and hold them for sale to developers.

- Open Space Acquisition.** County residents value the open spaces of Douglas County. To preserve these spaces, additional strategies are needed to complement private market mechanisms. Douglas County has discussed the public purchase of open space in every Master Plan since 1996, but a funding mechanism will need to be identified to create a program. However, in 2000 and 2020, Douglas County voters rejected a quarter-cent sales tax to fund the purchase of open space. More information on these issues and opportunities are addressed in the 2007 Update to the Douglas County Open Space and Agricultural Lands Preservation Implementation Plan.

- **Regulatory Exemptions & Incentives.** There are several exemptions and incentives in the Douglas County Development Code that support agriculture.
 - ✓ A **clustered development** regulation, adopted for the purpose of preserving agricultural lands and open space, requires at least 70 percent open space in a proposed development. In return, a residential development is allowed a density bonus of 2.5 units for each unit (allowed by right) in the zoning district designated as open space.
 - ✓ Subdivision of **parcels less than A-19 for ranch heritage and agricultural 2-acre parcels** allows for one-time creation of a non-conforming A-19 parcel, provided that the property owner creates a conservation easement of at least 100 acres of irrigated agricultural land. The agricultural two-acre parcels provision allows up to three parcels of two to five acres to be created every 15 years for property owners with more than 100 acres of irrigated agricultural land. There is no limit on the density created by these provisions.
 - ✓ The **Special Occasion Home Ordinance** was adopted in 2013 to allow property owners with historic properties to use them for weddings, business meetings, or retreats. The regulation allows owners of farms and ranches to obtain additional revenue.
 - ✓ The **Growth Management Ordinance** requires property owners to obtain a building permit allocation for new dwellings but exempts housing for agricultural purposes specifically for accessory dwellings on A-19 parcels as well as dwelling units created under the Ranch Heritage or Agricultural 2-acre parcels from the allocation requirements of the Growth Management Ordinance.
 - ✓ **New Opportunities** have been expressed by farmers to create a new agricultural zoning district requiring a minimum parcel size of 100 acres. The purpose would be to allow additional land uses that are currently prohibited in the A-19 zoning district. Another option would be to allow more retail and commercial activities within the A-19 zoning district.

Given the longstanding agricultural heritage of Douglas County, there may be an opportunity to create more connections between the existing agricultural industry and new residential development. The concept of developing new subdivisions with a farming component (e.g., **agrihoods**) is becoming increasingly popular. Developments that preserve existing farm structures may offer an opportunity to protect the County's agricultural heritage. . For more information on this approach, see Element 1, Land Use & Historic Preservation.

- **Livestock Overlay Zoning District.** Many local communities are loosening their residential zoning regulations to allow more agricultural activities, such as a limited number of small livestock.

The Douglas County Development Code includes a livestock overlay zoning district. The overlay district establishes criteria for allowing livestock, such as horses and goats, on residential parcels less than one acre, at specified densities of one animal unit per 10,000 square feet. By comparison, Carson City allows chickens, pigs, rabbits, bees, and goats (Sections 7.02 and 7.13) on residential parcels less than one acre; these uses are allowed by right and do not require an overlay district.



The County could consider expanding the types of animals allowed in the existing livestock overlay zoning district and/or allow some agricultural uses on residential properties less than one acre by right.

Currently, the livestock overlay zoning district only applies to 631 parcels in the Gardnerville Ranchos Community Plan area and four parcels in the Ruhenstroth Community Plan area.

Water Supply and Water Quality

Douglas County farmers rely on the Carson and Walker Rivers to provide flood and sprinkler irrigation. Farmers also rely on the effluent from

In 2016, 12 Nevada counties were declared as primary natural disaster areas due to drought. Douglas County was included in this declaration.

wastewater providers in the Carson Valley and Tahoe Basin. The majority of the farmers in the Carson Valley rely on the surface water rights that were awarded as part of the 1980 Alpine Decree settlement. Historically, groundwater has not been the primary water source for most agricultural operations in Douglas County. The State of Nevada prohibits new wells to be drilled for agricultural operations. With drought and concerns

over long-term climate change, the protection and conservation of water becomes more and more important to the state. During the 2013 session, the Nevada Legislature allowed for emergency drilling of stock water wells for counties that were under a drought declaration or contiguous to counties under a drought declaration. Emergency drilling permits are good for one year to provide water for livestock.

There is a need to reduce non-point runoff into the Carson River, which is still listed on the EPA 303 (d) list of impaired waters due to several constituent pollutants, including phosphorus, nitrogen, turbidity, and *E. Coli*. Protecting surface water and groundwater from pollution requires controlling non-point sources, and many successful strategies can be employed to reduce these pollutants.

- **Low-impact development (LID) and best management practices (BMPs)** can help filter stormwater on-site, thus removing pollutants prior to discharge into surface water bodies. Section 6.1.3.7 of the Douglas County Design Criteria and Improvement Standards Manual provides information on LID practices; however, the County currently does not require LID practices. In 2015, Tte CWSD prepared a new report on LID, [Low Impact Development in the Carson River Watershed](#). According to this report, the main goal of LID, is to “decrease the amounts of pollutants delivered to the local waterways by infiltrating stormwater on-site.” All property owners in the Tahoe Basin are already required to implement LID practices as part of the TRPA Best Management Practices Program, and Reno and Washoe Counties now require LID practices. Carson City is currently preparing a LID ordinance in conjunction with the update of the Carson City Stormwater Management Plan.
- **Agricultural BMPs** protect public health and safety. The County should work with farmers and ranchers on waste management practices and expanded setbacks along streams. Improving water quality in the Carson River will benefit all residents and property owners, will help restore aquatic life in the river, and will facilitate development of recreation activities.
- Douglas County can pursue **grant funding for water quality improvement projects** through the EPA 319 program as well as the NRCS watershed initiatives. The Carson River Watershed Stewardship Plan was prepared by the CWSD in 2007 and updated in 2017. Completion of an updated Stewardship Plan will allow CWSD jurisdictions to have 100 percent access to EPA 319 funding (although a 50 percent match is required). The NRCS watershed initiative is providing \$33 million to Churchill County for watershed improvements along the Carson River.

- The **Community Wellhead Protection Plan**, adopted in 2012, presents an opportunity for the County to take additional measures to protect groundwater wells.

Air Quality

There are several opportunities to ensure that air quality does not worsen in Douglas County in relation to PM 2.5. Voluntary programs, such as the NDEP wood stove exchange program, help retire polluting wood stoves and should be supported by the County. Similar to Washoe County, Douglas County should create voluntary no-burn days when weather conditions are adverse and should monitor new wood stove installations or replacements for statistical purposes.

Conservation Indicators or Thresholds

The data on air quality, water quality, and water supply are prepared by several different state agencies but there is no central data source that can be used to understand the trends for different natural resources. Given the importance of protecting natural resources in Douglas County, it would be helpful to develop conservation indicators that are similar to [Truckee Meadows Tomorrow](#) for lands outside of the Lake Tahoe Basin.. TRPA has adopted environment threshold carrying capacities for air, water, soil, and other environmental features.

Environmental Review

Nevada does not require an environmental review for development proposals, although legislation has been proposed in the past (e.g., Senate Bill 277 in the 2015 Legislative Session). Environmental review under the National Environmental Protection Act (NEPA) is only triggered if a project involves federal funding or federal permits. It may be appropriate for the County to develop measurable environmental review criteria for (1) significant development proposals and/or (2) projects proposed in sensitive development areas. The establishment of specific environmental review criteria could include information on prime farmland soils, brownfields, geologic hazards, riparian areas, historic and cultural resources, floodplains and wetlands, threatened or endangered species, wildlife habitat and wildlife migration corridors, wellhead protection areas, and other environmental resource matters addressed in the Master Plan and other County adopted documents.



NEVADA REBELS
DOUGLAS COUNTY



3. ECONOMIC DEVELOPMENT



PURPOSE

The purpose of the Economic Development Element is to establish goals, policies, and actions that are focused on questions of prosperity, conservation, job creation, and quality of life in a manner that is consistent with the remaining objectives of the Master Plan and the values of Douglas County residents. This Element defines a future for the Douglas County economy that enhances the quality of the downtowns, identifies economic development strategies that complement existing business clusters, and preserves the natural resources that are fundamental to the past and future character of the community. In other words, “to create an economy that matches the scenery.” The Economic Development Element discusses the County’s revitalization strategy and is centered on five guiding principles and three focus areas.

GOALS

The following goals, policies, and actions for the Douglas County Economic Development Element set forth future priorities for the County.



Goal 1

Foster a diverse regional economy that adapts to changing needs of the workforce and enables business development, retention, and expansion.



Goal 2

Emphasize the importance of creating our unique identity and developing vibrant centers for our economic prosperity.



Goal 3

Capitalize on outdoor recreation, lifestyle, and agriculture as business opportunities.



Goal 4

Provide access to high-quality education and support the development of a skilled workforce.

POLICIES



Policy E1

Continue the ongoing efforts to improve the Douglas County approval process for businesses and industry and incorporate feedback during the development permit process.



Policy E2

Continue to research, adapt, and adopt best demonstrated practices from other communities and jurisdictions.



Policy E3

Continue to recruit, retain, and expand businesses and industries that enhance our local economy.



Policy E4

Support programs aimed at strengthening the accessible labor pool, such as attainable housing, recreational opportunities, transportation alternatives, and higher/continued education.



Policy E5

Support and participate in regional economic development programs, projects, and activities.



Policy E6

Ensure that downtowns and neighborhood centers keep serving as essential community assets and comprise a significant portion of economic opportunities for our residents, with multiple benefits for the County and region.



Policy E7

Seek infrastructure improvements that support economic development efforts.



Policy E8

Promote the revitalization of Stateline through the South Shore Revitalization Plan.



Policy E9

Increase opportunities for public art by recognizing the economic benefits of promoting public art and culture through increasing tourism, creating jobs for artists, and building a source of community pride.



Policy E10

Support environmental remediation to improve the built environment.



Policy E11

Promote the revitalization of the Towns of Minden, Gardnerville, and Genoa and their Main Street program(s) and activities as key to the Douglas County local economy.



Policy E12

Continue to improve outdoor recreation opportunities to build economic development through visitation while improving quality of life for residents.



Policy E13

Promote agricultural tourism as a way to link agricultural production and processing with tourism, in order to promote local businesses.



Policy E14

Grow, diversify, and promote educational opportunities aimed at attracting and developing a qualified and accessible labor pool in order to promote business retention, expansion, and attraction efforts.



Policy E15

Capitalize on economic development opportunities spurring from the proximity to the Tahoe-Reno Industrial Center, one of the largest business parks in the world.



Policy E16

Encourage training and assistance through the University of Nevada Reno, Western Nevada Community College, and Nevada Small Business Development Center.



Policy E17

Promote cultural tourism, which is defined as “travel directed toward experiencing the arts, heritage, and special character of unique places.”



Policy E18

Ensure that the County’s zoning and land use regulations support the development of live/work space for artists in a variety of settings around the County.

CURRENT TRENDS

Douglas County’s economy was built on a foundation of agriculture, farming, and ranching. Since its establishment in 1861, the County has transitioned from an agrarian-based community to a more diverse economy that includes manufacturing, professional services, tourism, retail, and agri-business. The County’s employment base has also expanded and diversified over time. The first wave of expansion after World War II resulted from the growth of gaming and the Lake Tahoe casinos and the expansion of Bently Nevada Corporation. Along with the nation, the County went through a housing boom in the first part of the 21st century. In recent years, the economy in Douglas County and throughout Nevada has slowed due to a significant loss of jobs in Nevada’s primary industries—gaming and construction. To create an environment conducive to job growth and encourage economic development, the County developed the Economic Vitality Strategy and Action Plan, which was adopted by the Board of Commissioners in September of 2010.

ECONOMIC VITALITY VISION STATEMENT

To create a thriving economy inspired by Douglas County’s greatest assets and the values of the community and to be recognized as one of the “Best Communities” to live, work, learn, and play.

LOCAL ECONOMY AND OUTLOOK 2021

Overall, economic conditions are improving in the County, with the unemployment rate continuing to trend lower. However, the September 2020 rate was 6.8 percent as compared with 3.4 percent in September of 2019, which was the lowest unemployment rate in Douglas County history. The 2020 unemployment spike can be directly attributed to the effects of the 2020 Coronavirus pandemic on the local economy; the unemployment rate in February 2020 (pre-pandemic) was 4 percent. This compares to national and state unemployment rates for September of 7.9 percent and 12.6 percent respectively.

Residential building permits, a leading indicator of economic activity, have decreased slightly from the prior year, primarily due to issues related to the pandemic that caused delays in permitting. An average number of 177 new residential permits were issued between 2015 and 2019, an improvement over the average of 81.6 new residential permits issued between 2010 and 2014, though the full effects of the pandemic remain unseen. The sales price of residential homes in Douglas County in 2019 was 28 percent higher than in 2017, with the County’s median sales price increasing to \$481,843. Total

assessed property value in the County increased 7 percent from the prior year, for a total value of \$3,355,755,404. Additional housing and employment data is in the Executive Summary of the Master Plan, and additional Douglas County financial information is in the [Comprehensive Annual Financial Report](#) (CAFR).

DOUGLAS COUNTY LONG-TERM FINANCIAL PLANNING

The County continues to build on its strong record of long-range planning and financial stability. In June of 2017, the Board of County Commissioners approved the Fiscal Year 18–22 Strategic Plan, which focused on the areas of Organizational Stability, Safe Community, Infrastructure, Natural Resources and Culture, and Economic Vitality. More information on the strategic plan can be found on the Board of County Commissioners page on the County’s website.

The Statement of Net Position, a snapshot of account balances as of June 30, 2020, presents information on all of the County’s assets, liabilities, and deferred inflows and outflows of resources. The difference between assets and liabilities is “net position”; over time, the increases or decreases in the County’s net position may serve as a useful indicator of whether the County’s financial position is improving or deteriorating.



ECONOMIC DEVELOPMENT GUIDING PRINCIPLES

Douglas County’s economic vitality strategy focuses on improving the economic well-being of a community through efforts that entail job creation, job retention, tax base enhancements, and quality of life improvements. These efforts rely on five guiding principles:

- 1) Improve business climate
- 2) Preserve the natural environment and improve infrastructure
- 3) Enhance education and workforce
- 4) Maintain exceptional quality of life
- 5) Attract business that are unique and marketable



Bentley Science Park, Minden, NV

ECONOMIC DEVELOPMENT FOCUS AREAS

Drawing on the five guiding principles, the County’s economic development efforts are centered on three areas: (1) develop distinctive downtowns, (2) capitalize on outdoor recreation and lifestyle, and (3) develop a thriving climate for business and learning.

Develop Distinctive Downtowns

This focus area includes the Towns of Gardnerville, Genoa, and Minden and the casino core at Stateline. The County remains committed to partnering with these entities to provide assistance and funding to help revitalize the downtowns and spur investment.



This includes working with Gardnerville, Minden, Carson Valley Visitors Authority, and the Carson Valley Chamber of Commerce to implement the Valley Vision Plan (2013) and the Minden and Gardnerville Plan for Prosperity (2018). This focus area also includes collaboration on the Gardnerville Main Street program. For Stateline, this involves

working with casinos, resorts, and other property owners, Tahoe Visitors Authority, and Tahoe Chamber of Commerce in the Stateline core to implement the South Shore Vision and South Shore Area Plan update. These efforts and partnerships will continue to diversify the economy and reduce reliance on gaming revenues.

Capitalize on Outdoor Recreation and Lifestyle

As noted in the Douglas County Valley Vision Plan (page 28), “parks, natural areas, and scenic landscapes have great economic value. They help protect the Valley’s agricultural heritage, attract tourism and recreation, and ensure the integrity of naturally functioning ecosystems. Preserving scenic vistas and establishing trails to the abundant outdoor amenities also strengthens the connection that people have with their neighbors and the surrounding environment.” This focus area includes efforts to capitalize on the County’s greatest asset, its spectacular natural setting. With snow and water skiing locations, hiking and biking trails (both improved and unimproved) that surround and connect communities, and access to federal lands, the County offers residents and visitors a variety of recreation opportunities too numerous to count. The County will continue to encourage and support efforts to expand the existing trail network and to make outdoor recreation experiences and events prominent features of a thriving Douglas County economy.



Lake Tahoe ranked No. 3 on U.S. News and World Report’s “Best Small Towns to Visit in the USA”

Develop a Thriving Climate for Business and Learning

This focus area involves growing targeted sectors, identifying new employment opportunities, working closely with education partners to align curriculum and educational experiences to target the needs of manufacturing and recreation business, and evaluating opportunities for development process improvement. A number of studies have been completed to identify new employment opportunities and target centers in Douglas County, including the Douglas County Valley Vision Plan (2013) and

the Minden Gardnerville Plan for Prosperity (2018). Further discussion on this focus area is included in the “Looking to the Future” section of this Element.

COMMERCIAL AND INDUSTRIAL DEVELOPMENT

The commercial corridor of North Valley, the Towns of Minden and Gardnerville, and the industrial areas of Airport, Minden, Gardnerville, and Gardnerville Ranchos are the employment centers for the County and the Towns. The commercial core stretching along U.S. 395 through Minden and Gardnerville is a prime area for expansion of commercial use. The North Valley areas have many vacant units that need repurposing. Economic strengths include a successful downtown (Southlake Town Square) and a primarily affluent population with livability advantages that attract educated residents. There are three industrial zoning districts in Douglas County: general industrial, light industrial, and service industrial.

General Industrial (GI)

zoning district provides areas for the development of general manufacturing and heavy industrial uses. There are only two parcels in the County that are zoned GI; these are located in the Airport (Meridian Business Park) and East Valley Community Plans (Old Sawmill Industrial Park). Both parcels are developed and are used for propane tank farms.



Light Industrial (LI) zoning district is primarily located in three Community Plans: Airport, East Valley, and Topaz Ranch Estates/Holbrook Junction. The purpose of light industrial zoning is to provide areas for the development of research, light industrial, warehouse, and distribution centers. The LI zoning district is used for all of the business parks in the Carson Valley.

Service Industrial (SI) zoning district provides areas for light industrial uses with a mix of commercial and retail uses. This zoning district is more commonly found in the Gardnerville, Gardnerville Ranchos, and Minden Community Plans. In 2013, The

Community Development Department initiated amendments to the light industrial and service industrial zoning districts to allow more recreational and retail/personal services in both zoning districts and to eliminate the screening requirements for accessory solar energy systems. These amendments were approved by the Board of Commissioners on April 4, 2013.

Community Area	Future Land Use	Vacant Acres	Developed Acres	Total Acres	% Vacant
Airport	Industrial	431	461	892	48%
East Valley	Industrial	328	54	382	86%
Gardnerville	Commercial	102	181	283	36%
	Industrial	14	71	86	17%
Gardnerville Ranchos	Commercial	16	48	64	25%
	Industrial	0	14	14	0%
Genoa	Commercial	19	131	150	13%
Indian Hills/Jacks Valley	Commercial	159	165	323	49%
Johnson Lane	Commercial	4	1	5	80%
Minden	Commercial	15	143	158	10%
	Industrial	164	325	488	34%
Sierra Region	Commercial	0	5	5	0%
T R E/Holbrook Jct	Commercial	182	194	376	48%
	Industrial	35	171	205	17%
Topaz Lake	Commercial	39	25	64	61%
County Wide	Commercial	535	886	1,422	38%
	Industrial	540	635	1,175	46%

Table E1- Commercial and Industrial Future Land Use by Community Area

Diagrams E1–E4 show the location of commercial and industrial zoning in Douglas County and whether the acreage is developed or vacant. Diagram E1 shows the location of business parks in the Airport and East Valley Community Plans. Diagram E2 shows the location of service industrial parcels in Gardnerville and Minden while Diagram E3 shows the location of service industrial acreage in Gardnerville Ranchos. Diagram E4 displays the location of light industrial acreage in the Topaz Ranch Estates/Holbrook Junction Community Plan.

DIAGRAM E1 - BUSINESS PARKS AND INDUSTRIAL & COMMERCIAL ZONING IN SELECTED CARSON VALLEY COMMUNITY PLANS

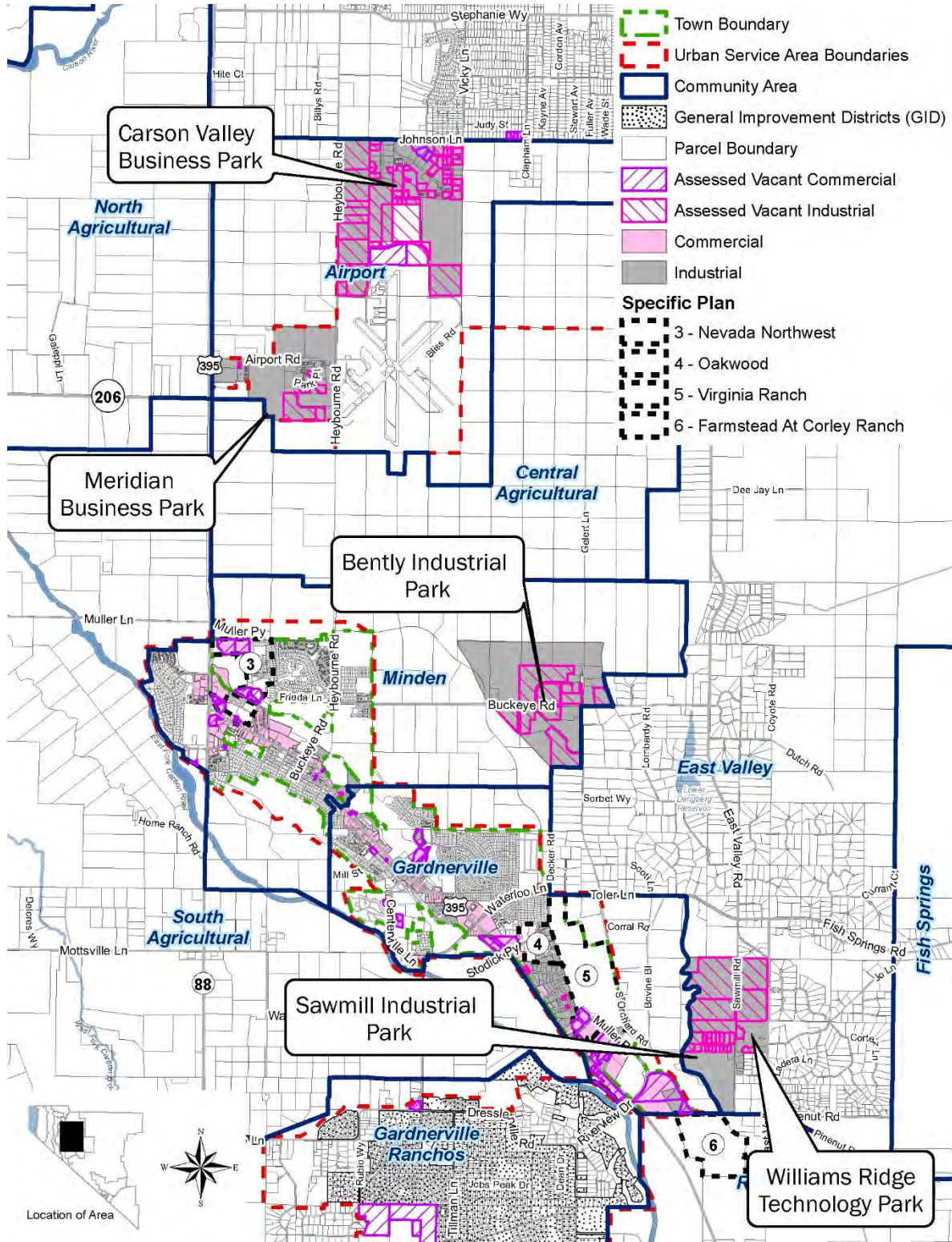


DIAGRAM E2 - INDUSTRIAL & COMMERCIAL ZONING IN SELECTED CARSON VALLEY COMMUNITY PLANS

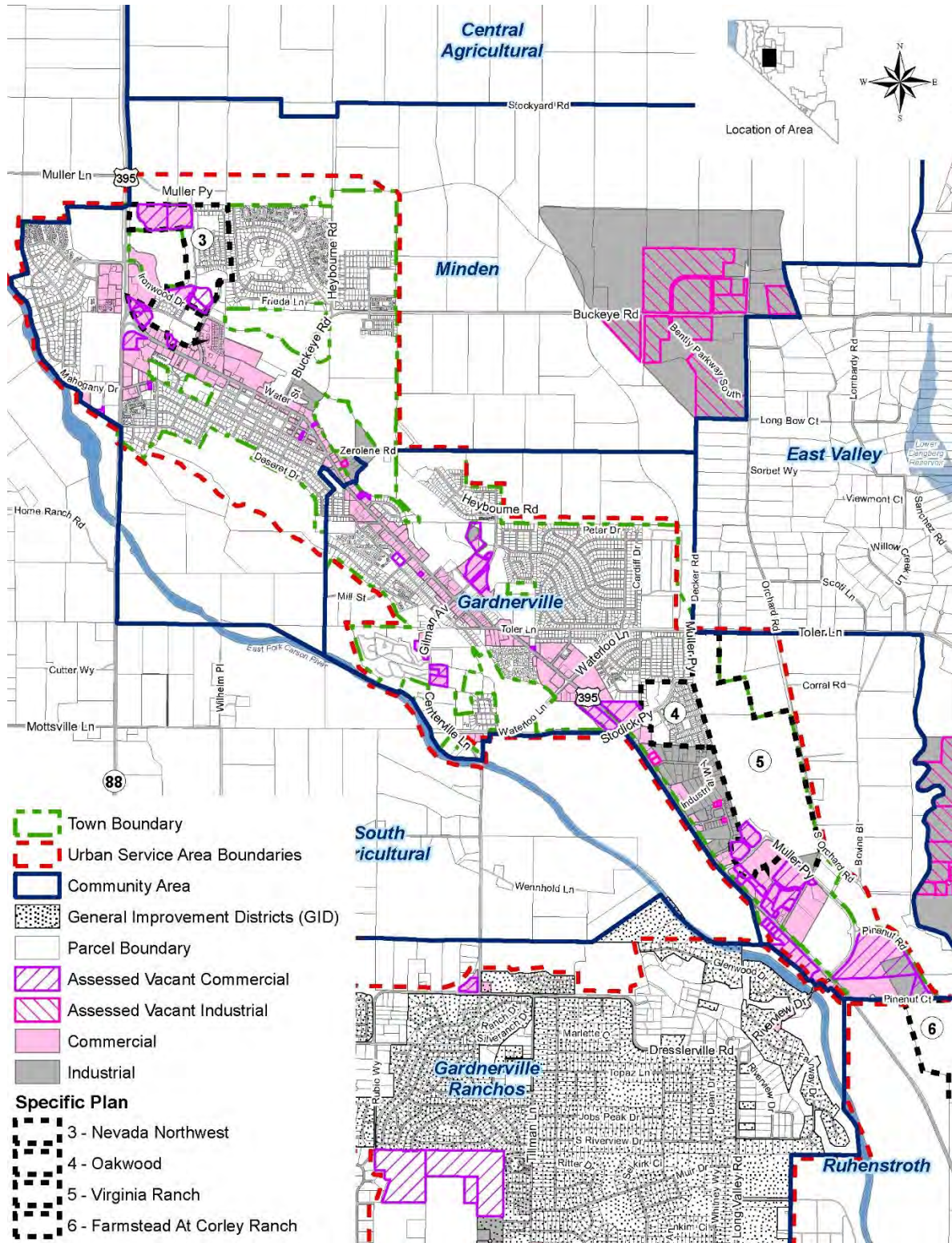


DIAGRAM E3 - INDUSTRIAL & COMMERCIAL ZONING IN GARDNERVILLE RANCHOS COMMUNITY PLAN

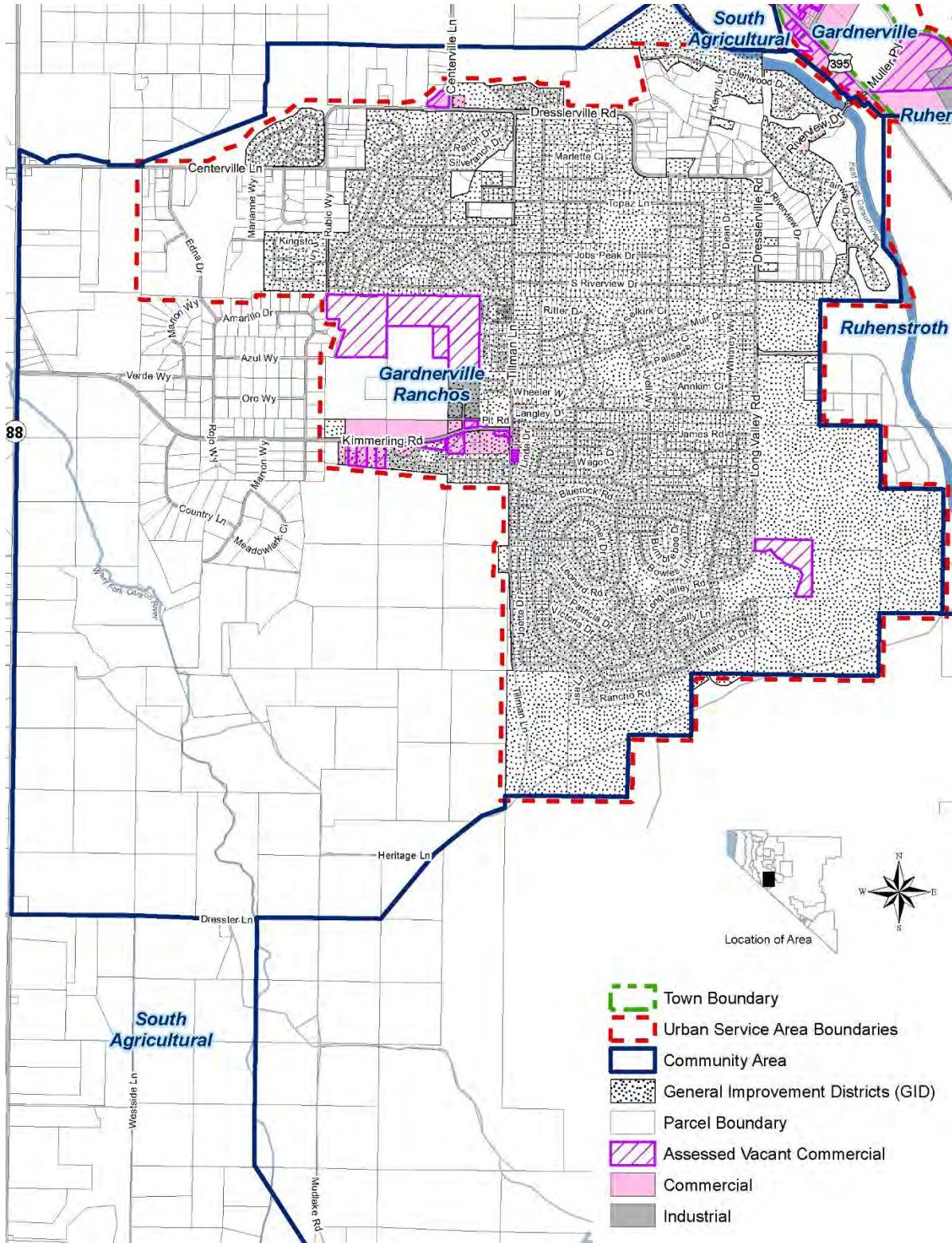
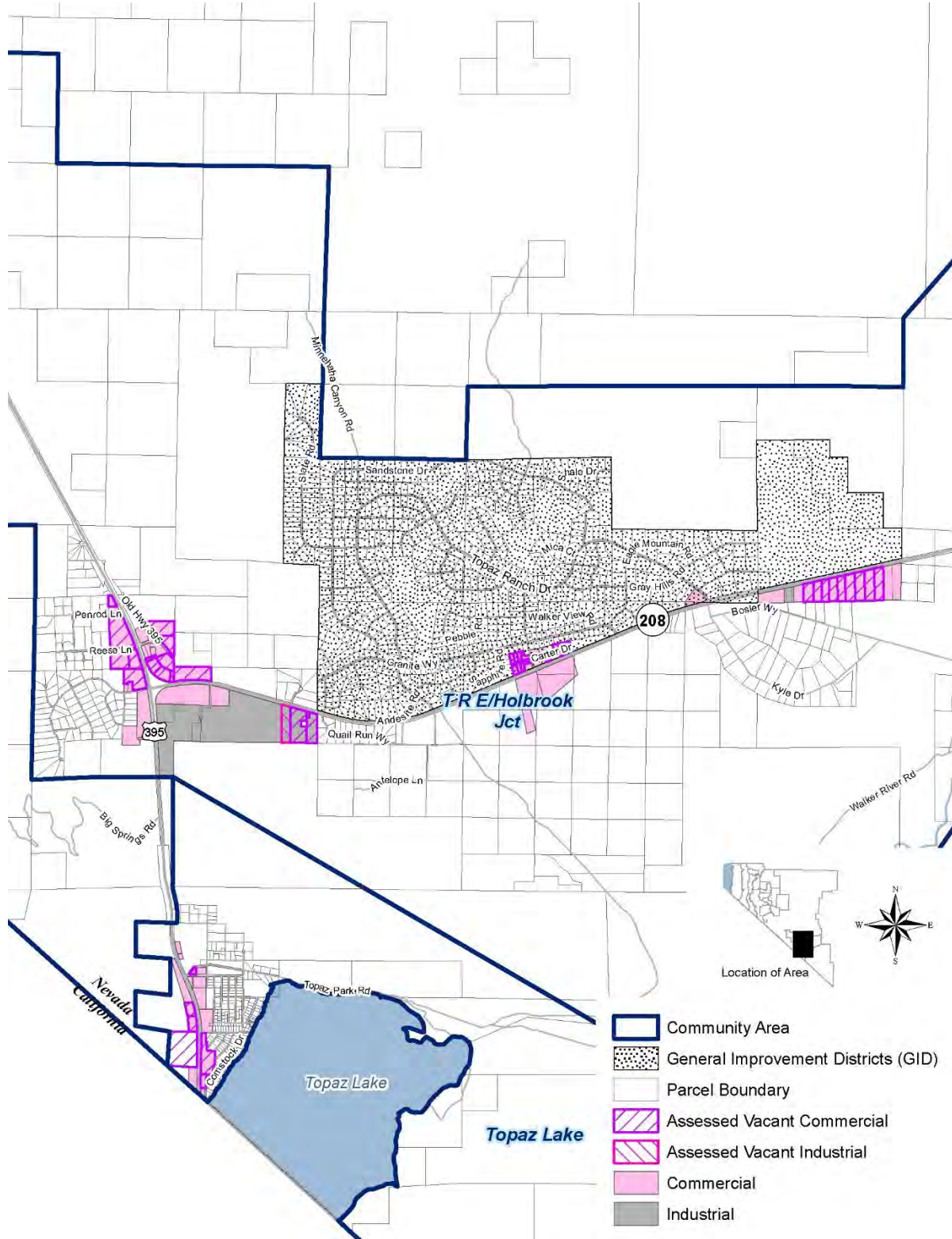


DIAGRAM E4 - INDUSTRIAL & COMMERCIAL ZONING IN TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN



LOOKING TO THE FUTURE

CRITICAL ISSUES CONFERENCE SURVEY

At the 2019 Critical Issues Conference, the participants were asked: “In less than three words, what would you tell a prospective new business about why your business is located in Douglas County?” Top answers included quality of life, life/work balance, and community. The survey asked employers if they intended to make investments in capital or equipment during the next three years. The majority of respondents (84 percent) stated that they were planning to do so.

The survey also asked employers if they planned to add new positions during the next three years. Again, the majority of respondents (69 percent) stated they did.

In response to the survey question, “Regarding housing stock to serve your employees, how does the situation compare to this time last year?”, 69 percent stated there was “worse/less housing available.” In the 2018 poll, 84 percent indicated they believed there was not enough housing stock to serve their employees. For information on proposed goals, policies, and actions to address housing needs in Douglas County, please refer to Element 4, Growth Management & Housing.



TARGET INDUSTRY OPPORTUNITIES

In 2012, the Western Nevada Development District assisted the County with funding to analyze opportunities around the advanced manufacturing sector. The study determined the County had a robust technology sector (advanced manufacturing, clean technology, and research and development companies), which represented 141 technology companies with more than 1,800 employees and accounted for \$111 million in annual wages. The average annual wage for the technology sector was \$61,666 in the first quarter of 2012, as compared to the average County wage of \$39,297 in the same quarter.

As a result of the study, the County partnered with the Northern Nevada Development Authority (NNDA) to bolster recruitment and expansion of the industry. Between 2010 and 2016, the number of companies in the advanced manufacturing sector has increased by 13.8 percent. While job numbers remain relatively flat over that period, outreach visits to local companies indicate that many are planning investments in capital projects and expansion of operations.

As of 2019, manufacturing represents 9.2 percent of the jobs in Douglas County, with an average annual wage of \$81,653. Leisure and hospitality, the largest industry in the County, represents 29 percent of jobs, with an average annual wage of less than half of the manufacturing wage. Growing the number of manufacturing businesses and jobs

presents the greatest opportunity to diversify the Douglas County economy and move away from its reliance on tourism and leisure jobs. Two strategies are in place to make this happen.

First is working with the Northern Nevada Development Authority (NNDA) and property owners to certify sites under the Nevada Certified Site Program. A Certified Site designation serves as pre-qualification; among other criteria, it indicates that a property's title is clear, that it possesses sufficient utilities and other infrastructure for commercial use, that it is properly zoned, and that it has adequate transportation access for such uses.. NNDA sponsors the Certified Sites Program to enhance the region's appeal to companies not currently located here.

Second is a continued retention and expansion effort by the County's Economic Vitality Accelerating Advanced Manufacturing team, which consists of members of the business community and JOIN, Inc. The team does regular targeted outreach to existing manufacturers to offer resources in the areas of supply chain and workforce while also addressing any issues the businesses may have related to infrastructure or regulatory matters.

Another related area of opportunity is the aerospace and aviation industry. Outreach to the manufacturing industry also identified a group of businesses that service the aerospace and aviation industry. Minden is well known throughout the world for the exceptional soaring conditions of mountain waves in winter and thermal activity in the spring and summer. Both conditions attract soaring pilots from around the globe year-

round, which is not the case in many soaring areas. Combined with investments at the Minden-Tahoe Airport to expand utilities to the east side, allowing for more private hangar and business space, this makes the area ripe for attraction of additional aviation businesses, aircraft, and jobs in the aeronautical fields.



The estimated economic impact of the Minden-Tahoe Airport, with 137 airport and aviation jobs and 390 based aircraft (2016) is \$52 million.).



ATTRACTING REMOTE, CONTRACT, AND INDEPENDENT WORKERS

The recently completed Tahoe Prosperity Center Economic Forecasting and Resilience Analysis (August 2020) makes recommendations about attracting remote workers. According to the report, “COVID-19 has changed the structure of the workforce, and more people than ever are working remotely. This enables the region to leverage its strengths to attract high-wage remote earners. The Tahoe Basin should focus on attracting workers in fields related to the clusters that exist in the region.” As a member of the Tahoe Prosperity Center (TPC), Douglas County has the opportunity to work with the TPC to explore the growth and retention of remote workers in the Tahoe Basin. Additional efforts on both a county and regional level could be explored.



EDUCATION AND WORKFORCE

Nevada is expected to have a shortage of more than 28,000 middle-skilled workers by 2024. Work-based learning (WBL) is a way to enable employers to develop a pipeline of skilled and work-ready employees who often remain on the job after completion of a WBL program.

Career Bound NV is a WBL strategy that combats issues employers face by offering students an opportunity to apply classroom instruction in real-world workplaces, ensuring that learning is relevant to the needs of students and employers. It connects to meaningful career pathways while supporting schools and employers in developing workforce solutions for Nevada. In partnership with Douglas County’s Economic Vitality Program, JOIN, Inc. facilitated WBL placements at Douglas High School beginning in fall 2019, connecting with counselors, teachers, students, and employers via dedicated case managers. Fifteen students participated in the pilot project. Future opportunities include post-pandemic expansion and a sustainable funding source for the program.



DOWNTOWN REVITALIZATION AND MAIN STREET PROGRAMS

The South Shore Vision Plan was completed in 2011, and the Valley Vision Plan in 2013. Both plans were the result of collective community processes to define how South Shore/Stateline and Carson Valley areas should evolve over the next 20 to 30 years.

Progress was made in the implementation of the South Shore Vision Plan, which influenced the update of the TRPA Regional Plan Amendment in 2012 and the adoption of the South Area Plan in 2013. It was the catalyst to begin the transformation of the South Shore from an area focused on gaming to a world-class destination where recreation and entertainment are the major attraction and gaming is an amenity. As a

result, significant private sector investments were made in resort-related properties on both sides of the state line. An update to the South Shore Area Plan is currently in draft form and is expected to be completed in the near future.

In 2020, the Tahoe Douglas Visitors Authority broke ground on the Tahoe South Event Center. The approximately 138,000 square foot building is at the corner of U.S. Highway 50 and Lake Parkway in the MontBleu parking lot. It will be a publicly owned indoor multi-use assembly, event, and entertainment venue that will attract a wide range of year-round conventions, trade shows, special events, and entertainment.

In 2018, the TRPA Governing Board approved the Tahoe Transportation District's U.S. 50 South Shore Community Revitalization Project. This project will set the stage for a major makeover to a stretch of Highway 50 in the Stateline area. The project will realign about one mile of the highway to run behind the casino core and Heavenly Village, improving traffic flow for people driving through the area. The old highway alignment will be turned into a two-lane Main Street on both sides of the state line through a process called the Main Street Management Plan and will create the first major community hub at Tahoe that is not on a major highway. Although realignment of the highway is still several years in the future, near-term efforts will focus on exploring the creation of a Special Improvement District for the management and operation of the new Main Street.

Both the Tahoe South Event Center and the U.S. 50 South Shore Community Revitalization Project are expected to significantly increase annual spending, room revenues, and tax revenues to local jurisdictions.

The Towns of Minden and Gardnerville also experienced private sector investment since the development of the Valley Vision plan in 2013. Major investments have occurred at Sharkey's Casino and the Overland Restaurant & Pub in Gardnerville and the Carson Valley Inn, TJ's Corral, and COD Casino in Minden. In 2019, the Bently Heritage Estate Distillery opened to visitors with the potential to be a catalyst spurring revitalization of downtown Minden.

Other progress includes the creation and growth of the Main Street Program, a key component of the County's Economic Vitality Program (Distinctive Downtowns). A Main Street Program was established for Gardnerville in 2008 as the first designated accreditation in Nevada and now successfully operates in partnership with Accredited Main Street America.

The Main Street Gardnerville program saw growth in the number of businesses, adding a net of 80 new businesses since 2009. There are other opportunities to support both downtown areas, including completion of the grant-funded Martin Slough Trail, which

will add a 2.5-mile urban link between the two towns, preparation of a retail market analysis and marketing strategy for the downtown areas of the towns as envisioned in the 2018 Minden and Gardnerville Plan for Prosperity, and evaluation of Development Code amendments to reduce or waive off-street parking requirements in the downtowns.

PUBLIC ART AND CULTURE



“Transforming the Copeland building into a Regional Arts Center reactivates the area and creates the opportunity for an arts district along U.S. 395.” - Douglas County Valley Vision, 2013

The integration of public art and culture into the County’s overall economic strategy has been identified as an opportunity for growth and expansion in the 2013 Douglas County Valley Vision and the 2018 Minden and Gardnerville Plan for Prosperity. Public art and culture can be an essential part of Douglas County, both intrinsically and economically, and can have a significant impact on the quality of life for residents and visitors. At the same time, however, the ability of the arts to thrive and grow in Douglas County faces challenges. Individual artists of all disciplines have limited access to funding. Nonprofit arts organizations experience tougher competition for funding to maintain stability and growth. Schools face budget constraints that may force arts programs to be cut. In addition, space for local artists’ housing, studios, and exhibits is limited. Public input has called for more arts- and culture-related venues and activities in the community.

Including arts and culture as central to revitalization plans may help make an area a pedestrian-friendly magnet for music, theater, dance, and visual arts, for dining, shopping, and entertainment, and for festivals and events. Arts facilities and cultural



events tend to attract more residents, tourists, and employees to a community. They provide employment opportunities through support services to the arts, expand tax base, and increase property values. The arts provide measurable benefits in the form of increased business, tourism, and revenue. Public art should reflect the community in which it resides, bring people together, revitalize

neighborhoods, help drive the local economy, honor local heritage and history, and enhance quality of life. Art in Public Places Programs provide an ongoing funding source through developer fees or requirements for art projects for visible projects that affect the whole community. This can include art in new developments, art in public spaces through contribution to a central fund, art at the Town's gateways, and focal points and spaces for the creation and presentation of art.



BING MATERIALS GRAVEL OPERATION

The Bing Materials gravel operation, which is located on Kimmerling Road in the Gardnerville Ranchos Community Plan, is designated as a Receiving Area and contains 178.45 acres. The gravel operation, which may end in the near future, presents a significant development opportunity for Douglas County. It may be appropriate for the County to begin discussions with the owner and community residents about potential redevelopment options for area before the next Master Plan update.

REGIONAL ECONOMIC DEVELOPMENT EFFORTS

The Western Nevada Development District has identified three economic development projects in its new five-year Comprehensive Economic Development Strategy for 2020 through 2025: development of a Douglas County Business Incubator Project, a separate Douglas County–Main Street Incubator Project, and potential future development of the Muller Parkway area. Additional region-wide economic development goals for the next five years include improved rural or non-metropolitan connectivity with larger urban population centers throughout the region and the development and execution of a regional economic resiliency plan.

Members of the Western Nevada Development District include Carson City, Churchill County, Douglas County, Mineral County, Pershing County, Storey County, Washoe County, and the individual municipalities of Fallon, Fernley, Lovelock, Reno, and Sparks. Continued emphasis on improving regional connectivity between established urban population centers and more rural or non-metropolitan communities throughout the region and within Douglas County is essential to the District’s overall goal of improving regional economic growth. As a significant portion of Douglas County’s existing population commutes out of the County to other communities throughout northwestern Nevada and as a significant portion of the workforce that works in Douglas County lives in communities in northwestern Nevada outside of Douglas County, continued regional economic growth and improved economic integration is vital to the County’s long-term economic vitality. The Western Nevada Development District will continue to work with member counties and municipalities to identify state and federal funding sources dedicated to the improvement of the region’s transportation network and infrastructure, while encouraging additional job and business creation, attraction, retention, and expansion efforts in existing population and employment centers to improve regional income and the incomes of Douglas County residents.





4. GROWTH MANAGEMENT & HOUSING



PURPOSE

The purpose of the Growth Management & Housing Element is to review current strategies to manage growth in Douglas County and to establish an adequate amount of housing inventory to meet the income levels and demands of County residents without compromising the quality of life of our community. This Element includes an overview of the housing sales and trends and a review of the County's Building Permit Allocation, Growth Management Ordinance, and Transfer Development Rights program.

GOALS

The following goals, policies, and actions for the Douglas County Growth Management Element set forth future priorities for the county.

Goal 1



Keep growth in Douglas County to a sustainable level that natural and fiscal resources can support.

Goal 2



Direct development to locations within or adjacent to existing communities where public services and facilities can easily be provided and a sense of community created or enhanced.

Goal 3



Increase awareness of the affordable housing needs in Douglas County and increase the diversity of available homeownership opportunities.

- Goal 4** Offer lifestyle options and environments that people of all ages and families can enjoy.
- Goal 5** Increase housing opportunities for households with special needs, including persons with physical and mental disabilities, the elderly, and at-risk children.

POLICIES

- Policy G1** Continue to implement the Building Permit Allocation and Growth Management Ordinance; report to the Planning Commission and the Board of County Commissioners on the effectiveness and possible improvements on an annual basis.
- Policy G2** Use Element 1, Land Use & Historic Preservation to designate areas for distinct urban and rural communities. Ensure that the designated development areas of these communities do not include land that cannot be served with adequate services and facilities during the time frame of the Master Plan.
- Policy G3** Limit extension of urban levels of public services to rural areas except in cases in which the extension is necessary for the provision of public health and safety.
- Policy G4** Ensure that projects proposed in the Capital Improvement Program are consistent with the goals and policies in the Growth Management Element of the Master Plan.
- Policy G5** Support annexations to unincorporated towns or to service areas of providers (such as GIDs) that are compatible with the Master Plan’s identified urban service areas.
- Policy G6** Prohibit new receiving areas outside of urban service areas.



Policy G7

Coordinate with service providers to consider modifications to the urban service boundaries during five-year updates of the Douglas County Master Plan.



Policy G8

Promote development that enhances the quality, desirability, and integrity of neighborhoods.



Policy G9

Continue to support and retain Nevada Rural Housing Authority and United States Department of Agriculture (USDA) first-time homebuyer programs in Douglas County.



Policy G10

Continue to pursue state and local home rehabilitation and weatherization programs to reduce ownership expenses and improve health and safety concerns.



Policy G11

Promote cooperative efforts to preserve and expand current attainable and workforce housing.



Policy G12

Allow accessory dwelling units (ADUs) and County guesthouses.



Policy G13

Promote the provision of a variety of housing options throughout the County.



Policy G14

Cooperate with developers in the production of dwelling units accessible to persons with disabilities. Encourage developers to consider incorporating minimal changes in the percentage of new units, which would make them more usable for persons with disabilities while not otherwise affecting their marketability.



Policy G15

Work with local housing groups to assist disabled persons with accessibility modifications. Encourage housing finance agencies such as USDA, Nevada Housing Division, and the Rural Nevada Housing Authority to make available housing rehabilitation funds for accessibility projects in Douglas County.



Policy G16




Support the development and update of architectural design standards or guidelines that are based on the character of the various Douglas County Communities.

HOUSING & GROWTH MANAGEMENT IN DOUGLAS COUNTY

HOUSING INVENTORY AND MARKET SEGMENTS

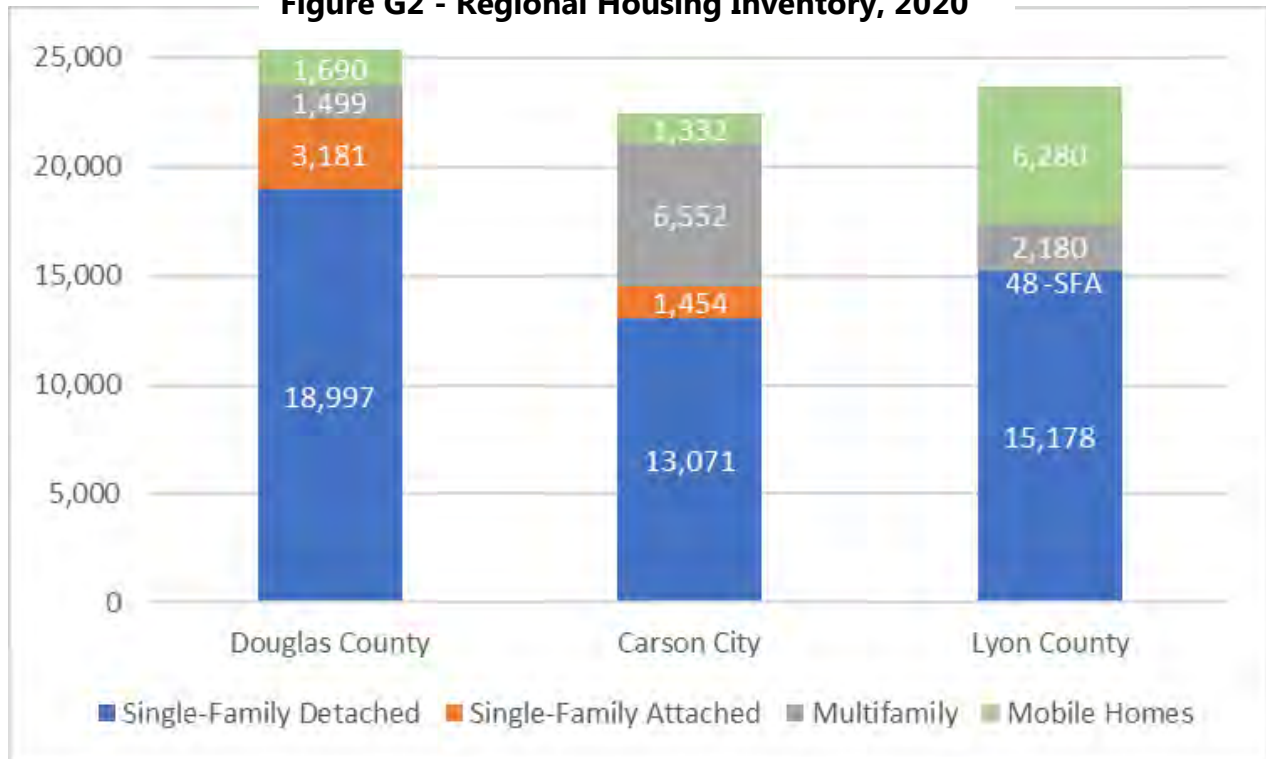
According to the Center for Regional Studies, the College of Business, University of Nevada, Reno, there are about 25,367 housing units in Douglas County. Approximately 75 percent of the housing stock are single family detached units, 12 percent are single family attached, 6 percent are multi-family residential (MFR) units, and 7 percent are manufactured housing.

Figure G1 - Housing Types

Single Family Detached	Single Family Attached	Multifamily
A free standing dwelling with one or more stories that shares no common wall with any other dwelling. Includes site-built, modular, and manufactured homes.	Two or more attached dwellings with one or more stories that share a common wall on at least one side. Land may be under separate ownership.	A multi story structure with at least 4 dwellings and at least 2 or more stories of dwellings. Common walls are shared and multiple units are stacked.
House	Townhouse Duplex Triplex	Apartment building Garden Apartments
		

Source: Douglas County Assessor

Figure G2 - Regional Housing Inventory, 2020



Source: Center for Regional Studies, The College of Business, University of Nevada, Reno; data provided by the Douglas County Assessor's Office

The County housing market includes two submarkets: **East Fork Township** and **Tahoe Township**. The Tahoe Township market continues to reflect the higher housing prices associated with real estate in the Tahoe Basin. This housing market is also more influenced by the vacation home rental industry. The housing market in the East Fork Township remains dominated by single family detached dwellings, with relatively few multi-family units constructed during the last 10 years. The housing markets in both East Fork and Tahoe Townships have been experiencing rebounds after the Great Recession, with various areas experiencing sales price increases: 28 percent in Carson Valley and 38 percent in Lake Tahoe.

AGING INVENTORY

Most of Douglas County's housing units, upward of 74 percent, were built prior to 2000. Only 6 percent of the housing units were built in the last 10 years.

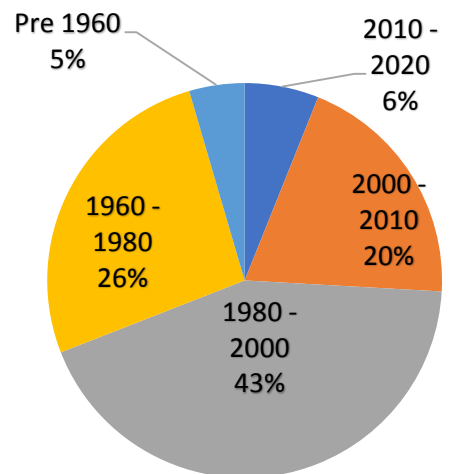


Figure G3 – Year Built, All Housing Units

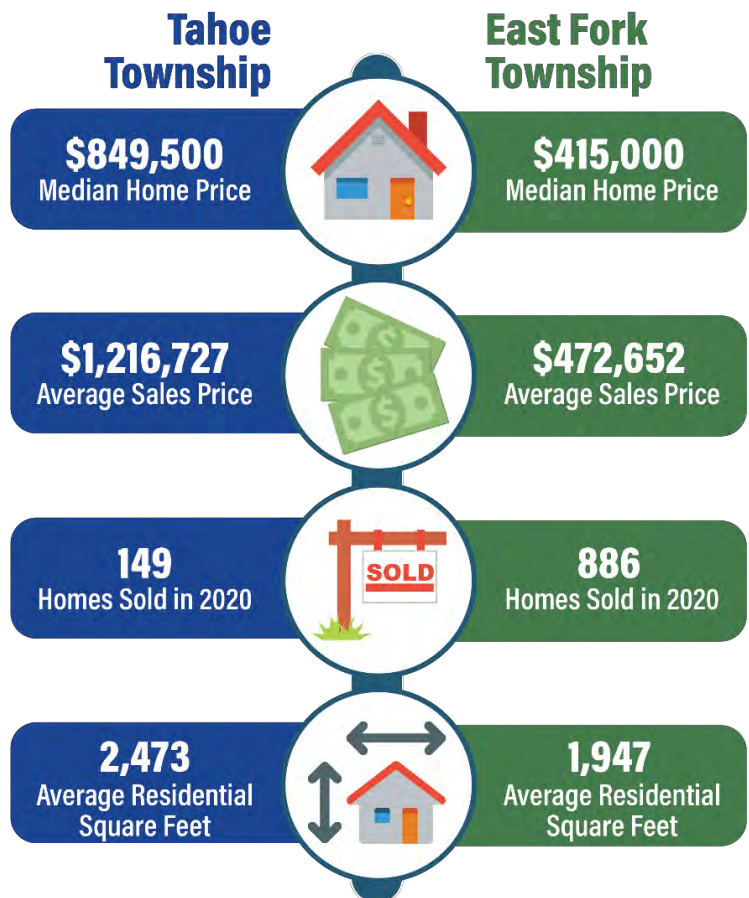
The increase in home buying has also been fueled by historically low interest rates. Improved housing markets will result in improved employment numbers for construction and related industries but will also affect housing affordability, especially if development of lower price-point products and/or rental inventory continues to shrink in favor of exclusively expensive homes. In 2020, The National Low-Income Housing Coalition (NLIHC) identified Douglas County as the third most expensive housing market in Nevada after Clark County and the Reno MSA. When compared to the latter two, however, Douglas County has a significantly lower percentage of renters—30 percent versus 47 percent and 42 percent, respectively.

WORKFORCE AND AFFORDABLE HOUSING

Services related to the housing in Douglas County are currently provided by the Douglas County Social Services (DCSS) and the Douglas Community Development Departments (DCCD). DCSS receives federal and state funding to provide emergency housing vouchers and case management. DCCD reviews all development proposals, applies for Community Development Block Grant (CDBG) funding on behalf of the County, Towns, and nonprofit organizations, and monitors the deed restricted units at Arbor Gardens.

The County is in the process of adopting a Memorandum of Understanding (MOU) with the Nevada Rural Housing Authority that supports the development of affordable housing, rehabilitation of existing structures, and various affordable housing initiatives. One of the first steps in the MOU is to develop a task force to review impediments to affordable housing. Many low-income renting families spend over half of their income on housing costs, largely due to

Figure G4 - House Sales Information



Source: Douglas County Assessor, 2020

stagnating wages combined with overall living cost increases. Only very low-income families qualify for affordable housing programs, leaving many in the limbo of not making enough money to feel secure but making too much to qualify for assistance. Moreover, not everyone who is entitled to participate in assistance programs gets help. Under those conditions, a growing number of people across the nation are living one misstep or emergency away from eviction. Evictions are a traumatic experience for everyone involved, especially the tenants who lose their homes; in most cases, the experience will have lifelong consequences for them and their families.

Employee Housing

The lack of affordable housing in Douglas County that is based on the family's income level makes it difficult to recruit new public- and private-sector employees. This directly impacts economic development strategies—and during past stakeholder interviews, a similar issue has been brought up repeatedly by a variety of employers. Higher house pricing and a lack of diverse housing types lead employees to choose to live outside of Douglas County and commute to work. Similarly, many employment and educational opportunities for younger people of working age generates a reverse commute pattern of County residents living in single family homes but travelling daily toward Carson City and Washoe County. This adds to traffic congestion on county, state, and federal roads, particularly on U.S. 395. Achieving a better balance of housing and job inventory diversity could minimize certain infrastructure costs and negative external-factors and ultimately increase the overall quality of life in the County. Developers should be encouraged to recognize this need in the planning process, and the County should consider incentives during the permit process to encourage new developments to include these types of units in their proposed development.

Exceptions for Affordable Housing

The County's Growth Management Ordinance has been amended over the years to provide exemptions for certain types of housing. Currently, deed-restricted affordable housing is exempt from the Growth Management Ordinance, and developers do not need to secure allocations for the affordable units. All property owners who wish to construct an ADU on their property, however, must currently apply for a Building Permit Allocation under the County's Growth Management Ordinance. Since many of the ADUs provide affordable housing for relatives and/or a small number of tenants, revising the Growth Management Ordinance to exempt ADUs from portions of it would be beneficial to our residents that fall within lower income brackets.

Douglas County adopted the Density Bonus and Affordable Housing Agreement Ordinance in 1996. Prior to 2001, the ordinance allowed affordable housing developers

to request a density bonus of up to 25 percent when either: (1) up to 20 percent of the units are affordable to households earning between 51 percent and 80 percent of the County’s median income or (2) at least 15 percent of the units are affordable to households earning up to 50.9 percent of the median income. In 2001, the County amended this ordinance to also allow a density bonus if at least 20 percent of the units are owner-occupied single family residences for households with incomes up to 110 percent of median income. The density bonus ordinance requires developers to record a deed restriction maintaining affordability for 30 years for rental housing or 15 years for for-sale housing. The only development containing affordable owner-occupied housing is Arbor Gardens. This 160-unit development includes 78 deed-restricted units, most of which were purchased between 2003 and 2006. The Affordable Housing Agreement for Arbor Gardens requires the developer to restrict the sale of these homes to households with incomes at 110 percent or less of the County median income. The Fiscal Year 2020 Median Income in Douglas County for a family of four was \$74,741 (see Table ES12 in the Executive Summary).

Applying the 110 percent income qualification would mean that a family of four could have a household income as high as \$82,215. The 15-year deed restrictions for the affordable units at Arbor Gardens began to expire in 2018. Although DCCD communicates with realtors who represent potential buyers of deed-restricted units to ensure the potential buyer meets the income restrictions, it has been noted that some of the deed-restricted units have either been rented or sold to buyers who are not income-qualified. The Density Bonus Program was last used in 2007 for the Summit Crest Apartments on Mica Drive in the Indian Hills GID.



Photo: Arbor Gardens



Photo: Summit Crest Apartments

There are seven locations totaling 309 units in Carson Valley (see Diagram G1) that offer affordable units to the public. Of the products available, Arbor Gardens is the only one that includes detached single family residences, and Parkway Vista (30 units) is the only senior living complex. Both of these are located in the Town of Gardnerville. Another complex, Summit Crest Apartments, is located in Indian Hills. The remaining four apartment complexes are located in the Towns of Minden and Gardnerville and contain 173 units. The Tahoe Basin (Diagram G2) has four apartment complexes containing 133 units of affordable housing; additional housing is needed there.



Photo: Aspen Grove

DIAGRAM G1 - AFFORDABLE HOUSING IN THE EAST FORK TOWNSHIP

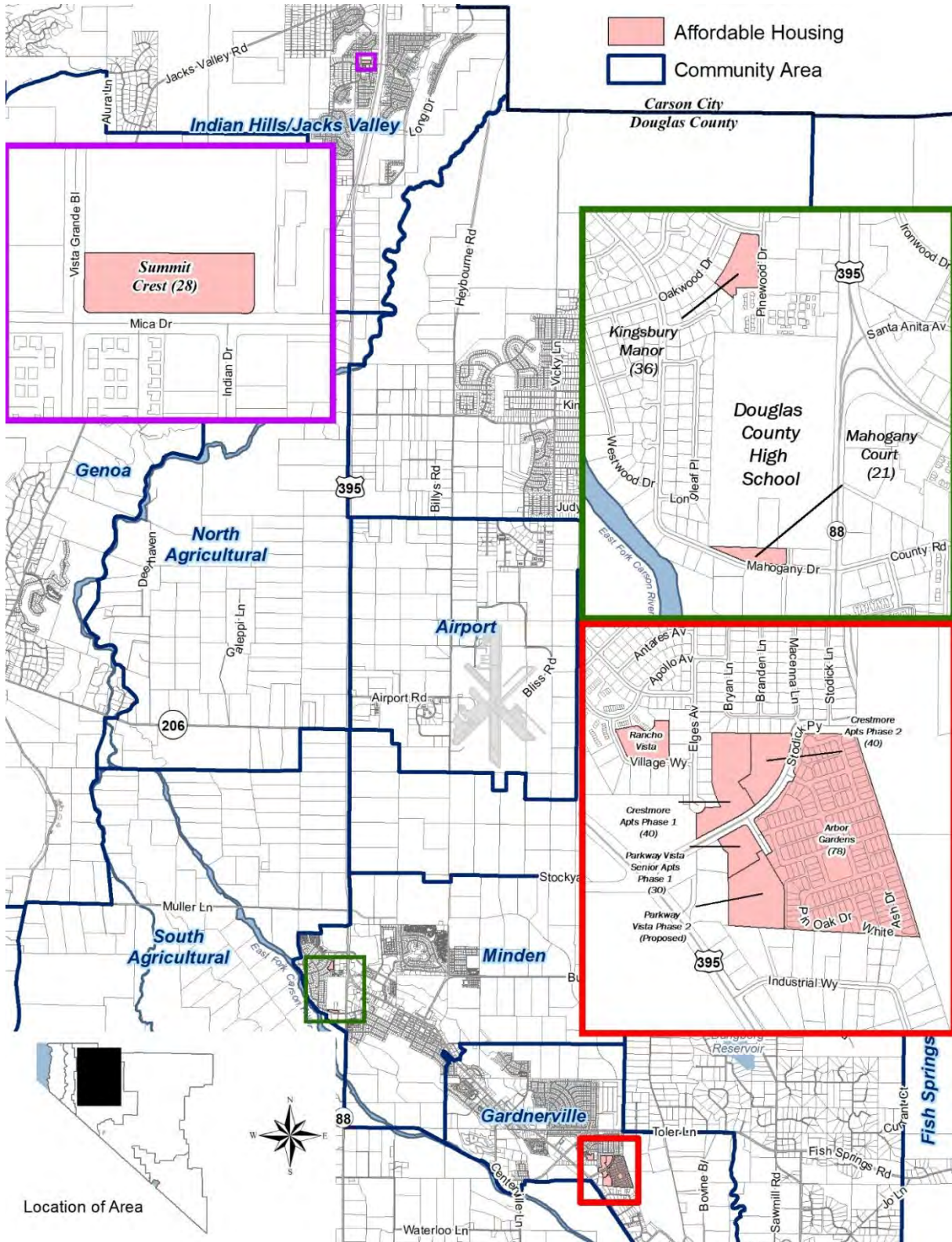
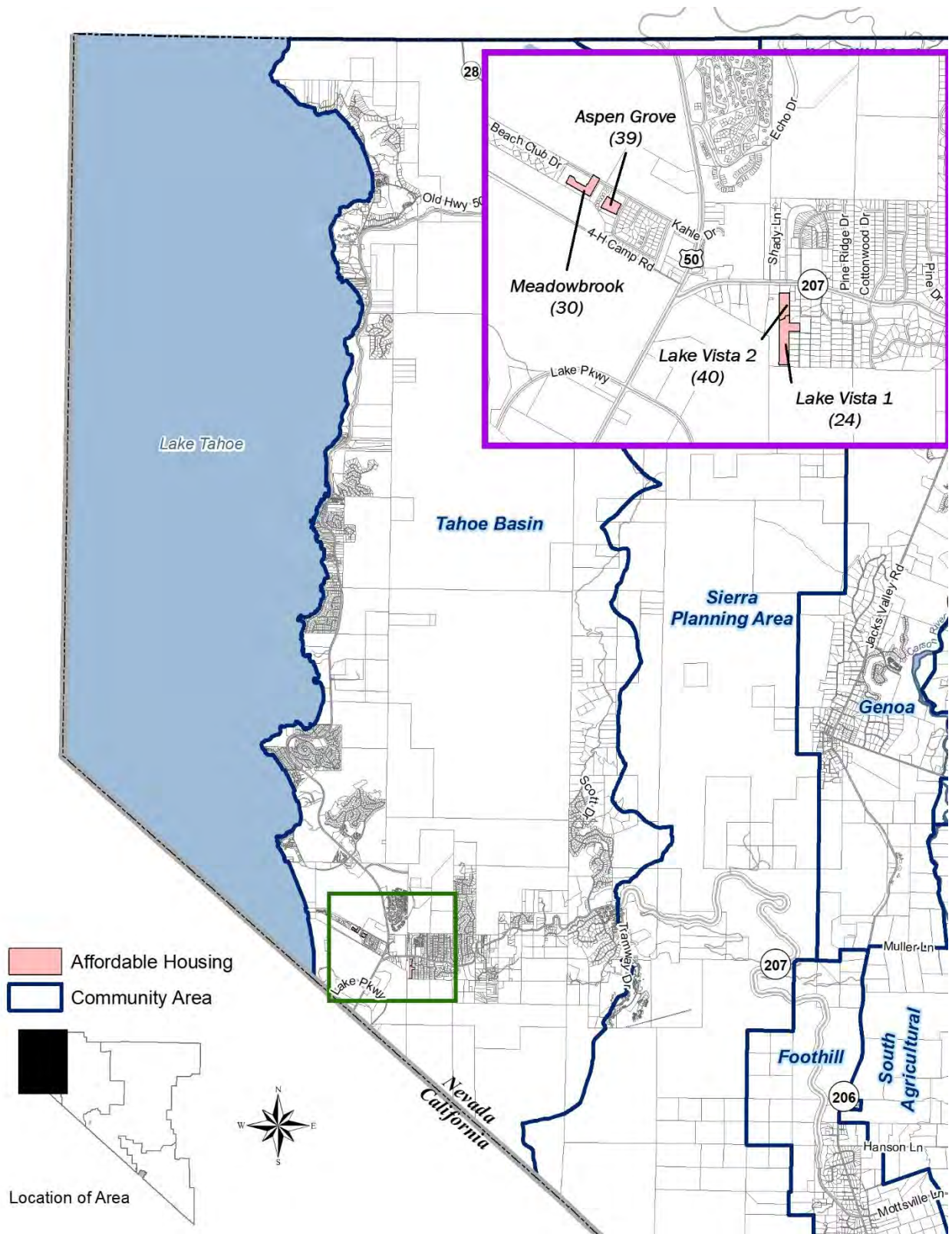


DIAGRAM G2 - AFFORDABLE HOUSING IN TAHOE TOWNSHIP



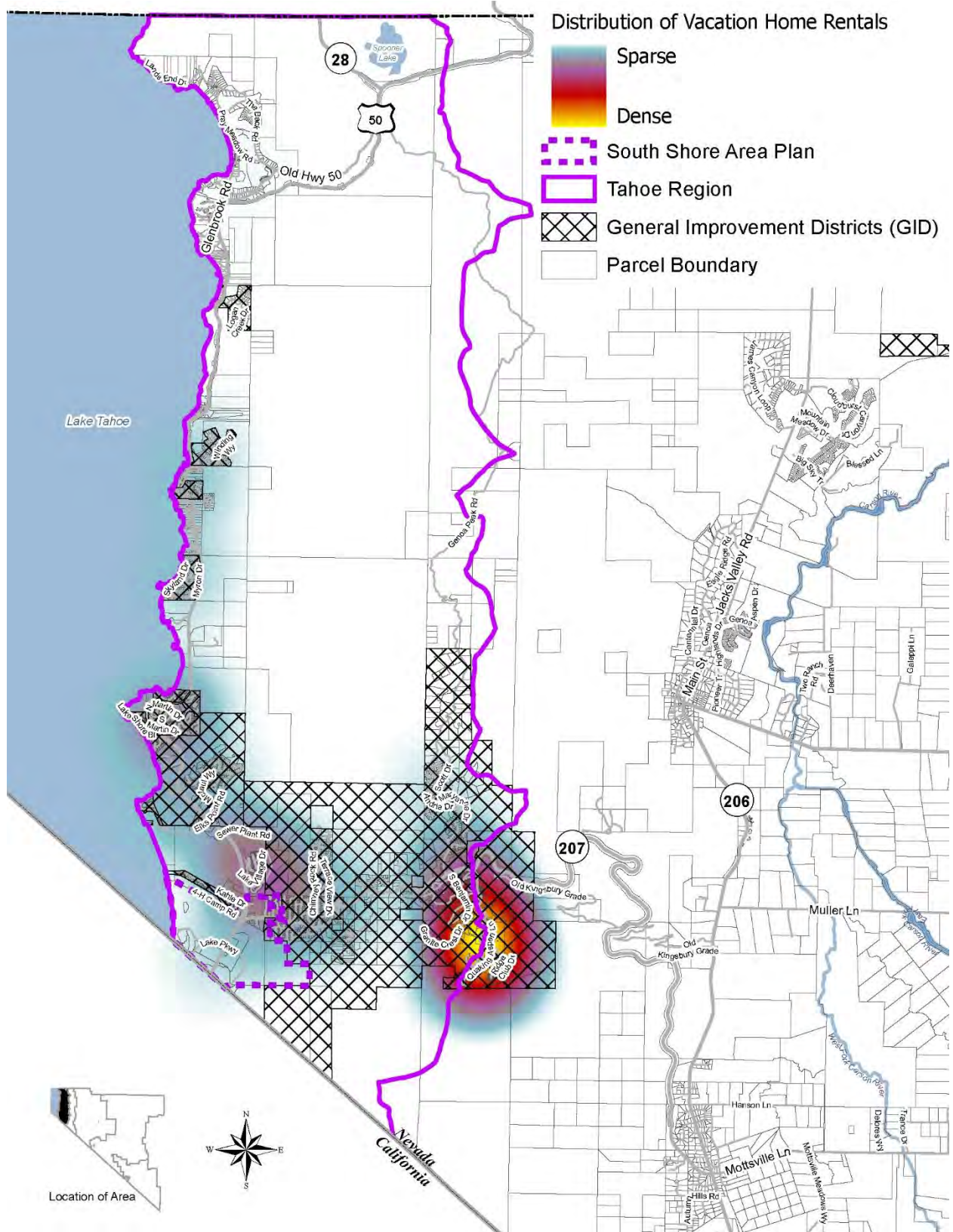
VACATION HOME RENTALS

Douglas County originally adopted a Vacation Home Rental (VHR) Ordinance in 2005. The ordinance only applies to properties located in the Tahoe Township (See Diagram G3). As of May 2020, there are over 500 registered VHRs in the Tahoe Township. Although VHRs are prohibited in the Carson Valley (East Fork Township), a review of VHR websites indicates that there are several VHRs operating in the Carson Valley. Douglas County is now considering amendments to the existing ordinance that may include stricter regulations and expansion of the VHR ordinance to the East Fork Township.

In 2019, the Board of County Commissioners gave direction to create a VHR Taskforce to make recommendations to the County Manager. In 2020, a Task Force of 15 diverse stakeholders, which was coordinated by the Assistant County Manager and supported by staff members of Community Development, Sheriff's Office, Tahoe Douglas Fire, and East Fork Fire, submitted a report to the County Manager regarding possible changes to the program. The report included specific recommendations for setting caps on VHRs in Douglas County, establishing a tiered permitting system, revising parking requirements, establishing noise monitoring at certain tiers, placing a priority on health and safety, creating an appeals/advisory board and public education, revising fees, and increasing staffing for administration and enforcement. For more information on the VHR Task Force recommendations or to review the full report, click [here](#).

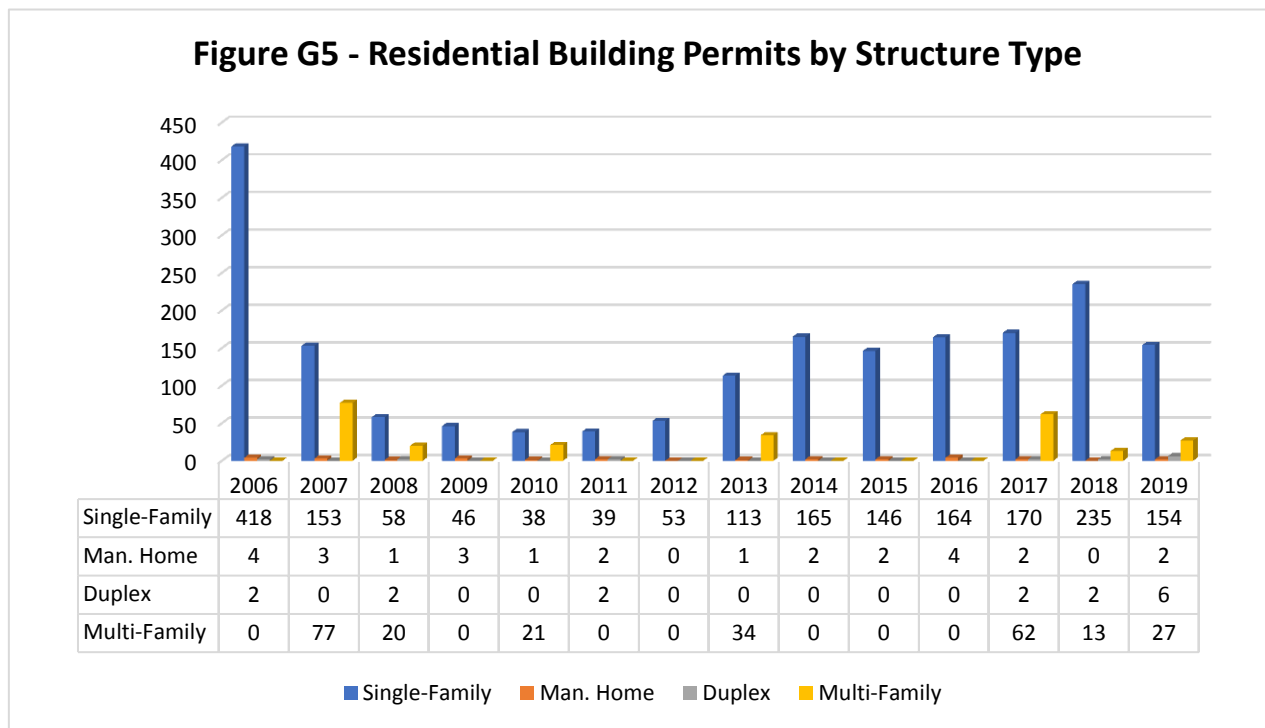


DIAGRAM G3 - VACATION HOME RENTALS IN THE TAHOE TOWNSHIP



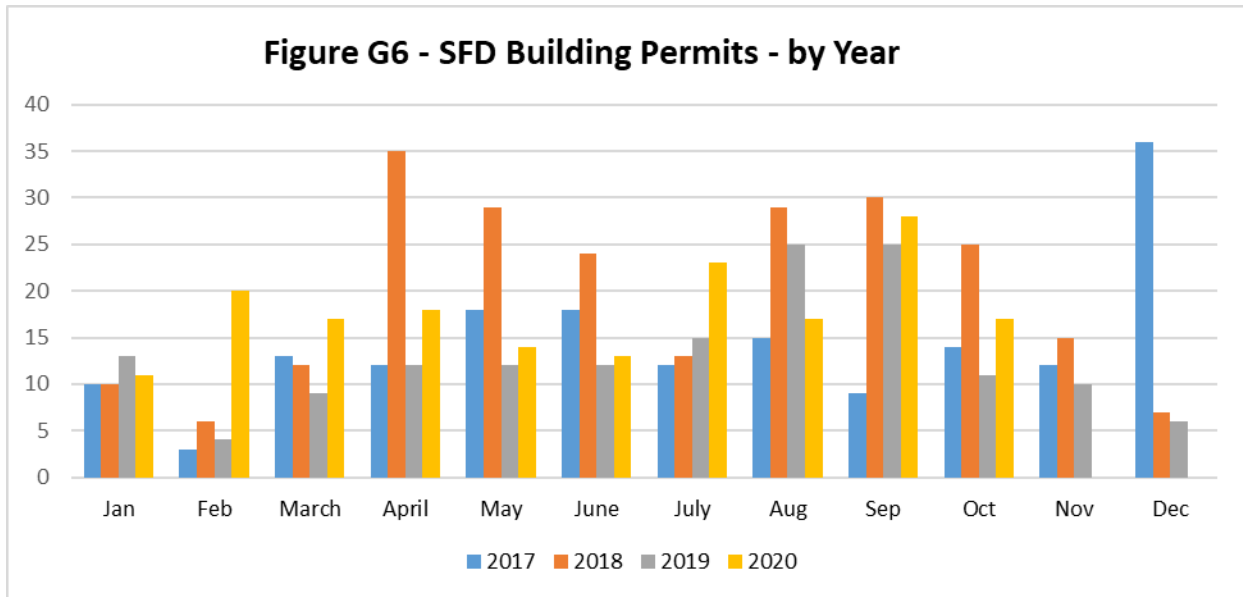
GROWTH MANAGEMENT

Building permit activity in Douglas County has increased since the Great Recession period. Permits for new single family homes totaled 418 in 2006 but dropped to 38 in 2011. Permits for new single family homes exceeded 100 in all calendar years following 2013. Although the single family market is improving, the multi-family market has remained lackluster. Since 2006, only six duplex units and 152 multi-family units have been constructed in Douglas County. The 21 multi-family units constructed in 2010 were for the Mahogany Court affordable apartments in Minden, and the 34 units constructed in 2013 included 30 units for the Parkway Vista Affordable Senior development in Gardnersville. Building permits for new manufactured single family homes have been consistently less than four per year.



Source: Douglas County Building Department 2020

Figure G6 shows building permits issued for single family dwellings (SFDs) in Douglas County from January 2017 through October 2020. A total of 235 SFD permits were issued in calendar year 2018 as compared to 154 SFD permits issued in 2019, which is a 35 percent decrease. Calendar Year 2020 is on track to exceed 2019 permit totals, with 178 SFD permits issued through October 2020.



Source: Douglas County Community Development

Growth management involves balancing protection of the natural environment with new urban and suburban development using tools such as annual building permit caps and/or urban growth boundaries. Growth management seeks to balance the need for investment and reinvestment—which is vital to the healthy renewal of revenue sources used to provide services to our residents—against the need for sustainable use of natural resources and provision of amenities at a desirable per capita rate. There is often a concern that growth management strategies may be too restrictive and cause increases in housing prices and/or raw land prices; on the other hand, an overly rapid increase in population and excessive urbanization are not part of the vision for a County that seeks to remain mostly rural and prizes its lower-density status and abundant open spaces.

The Douglas County Master Plan and the Douglas County Development Code provide the guidance and regulations regarding the appropriate types and location of different types of development. To help ensure that new development does not strain resources, the County has adopted three main growth management tools that are further analyzed in the sections below: (1) building permit and growth management allocation ordinance, (2) transfer development rights program, and (3) urban service areas.

Growth Management Ordinance

The County's Building Permit Allocation and Growth Management Ordinance was adopted in 2007 to "preserve and enhance the quality of life for the communities and inhabitants of Douglas County." The Growth Management Ordinance was adopted on the basis of a 2 percent annual population growth rate (compounded annually) for the County over a 50-year period for the Douglas County population outside of TRPA jurisdiction. The non-Tahoe Basin population was projected to reach 47,389 by 2016 in the original ordinance using a 2 percent compound growth rate. The annual growth rate for the entire County averaged 1.39 percent between 2000 and 2010 and has averaged 0.3 percent per year since 2010. The total number of annual residential allocations was set at 317 permits in 2007, for example, and gradually increases to 837 allocations by the year 2056. Of the 26,812 allocations available between 2007 and 2056, 4,773 are available for vested projects and 22,039 are available for project (6,612) and individual (15,427) allocations.

All new residential buildings, including ADUs, require a building permit allocation from the County. The ordinance allows no more than 2,200 exempt allocations over the 50-year period. Exemptions are allowed for:

- 1) Residential units that are part of a "vested" project or a development agreement with the County
- 2) Residential units for a parcel created under Ranch Heritage or Agriculture - Two-acre parcels
- 3) Residential units for an accessory dwelling unit on an A-19 parcel
- 4) Residential unit deed restricted affordable housing

The Board of Commissioners is required to review the ordinance every five years, and such review may occur during a Master Plan review. The review must determine if administrative procedures should be changed but prohibits changing the number of allocations.

Table G1 - Available Residential Allocations by Category

Year	(a) Total Allocations Available	(b) Less Vested Project Allocations*	(c) Remaining Allocations** * (a-b)	(d) Remaining Allocations Available for Individuals** (70% of c)	(e) Remaining Allocations Available for Projects** (30% of c)
2007–2008	317	149	168	118	50
2008–2009	323	151	172	120	52
2009–2010	330	155	175	123	53
2010–2011	336	158	178	125	53
2011–2012	343	161	182	127	55
2012–2013	350	164	186	130	56
2013–2014	357	168	189	132	57
2014–2015	364	171	193	135	58
2015–2016	371	174	197	138	59
2016–2017	379	178	201	141	60
2017–2018	386	182	204	143	61
2018–2019	394	186	208	146	62
2019–2020	402	190	212	148	64
TOTAL	4,652	2,187	2,465	1,726	740
Total Issued	1,178	831	347	483	114
Excess	N/A	N/A	2,118	1,243	626

Source: Douglas County Community Development, January 2020

* 4,767 Vested Allocations were available through 2032, but 1,356 Vested Allocations have expired and were not put back into the allocation pool.

** If allocations are not used within one year, they expire and are put back into the pool.

*** This table does not reflect the individual and project pools of allocations, which contain the sum of unused allocations from previous years. As of 10/31/2020, the individual pool contains 1,344 allocations and the project pool contains 592 allocations.

Transfer of Development Rights Program (TDR) and Receiving Areas

The TDR program allows property owners in sending areas (A-19, FR-19 zoning districts) to sell development rights to parcels designated as receiving areas in the Douglas County Future Land Use Map. The TDR program is described in greater detail in Element 2, Agriculture and Conservation.

Table G2 - Available Residential Allocations by Category Status of TDR Program

Certified TDR	TDR Transferred	TDR Remaining	Conservation Easement Acreage
3,921	3,715	206	4,065.40

Source: Douglas County Community Development

There are 4,559 acres designated with a future land use of receiving area in the Douglas County Master Plan (see Table G3). The receiving area designation means being set up to receive TDR that are transferred off County sending areas (A-19 and FR-19 zoning districts). Receiving areas are land use designations and do not affect the existing zoning on the affected parcels. Most receiving areas have approved developments, such as Clear Creek in the Jacks Valley/Indian Hills Community Plan, Virginia Ranch in the Gardnerville Community Plan, and Heybourne Meadows in the Minden/Gardnerville Community Plan. Some receiving areas lack any approved development plans and have remained undeveloped for decades. The potential population growth associated with this build-out of approved developments within the receiving areas is 7,216 persons (3,032 units x 2.38 person per household [PPH]).

Table G3 - Receiving Area Acreage by Community Plan

Community Plan Area	Receiving Area		Total Acres	% Vacant
	Vacant Acres	Developed Acres		
Airport	444.9	-	444.9	100%
Central Agricultural	660.4	-	660.4	100%
Gardnerville	307.9	274.4	582.3	53%
Gardnerville Ranchos	708.1	193.7	901.8	79%
Indian Hills/Jacks Valley	142.9	164.4	307.3	46%
Johnson Lane	177.9	-	177.9	100%
Minden	1,111.2	-	1,111.2	100%
Ruhenstroth	131.1	-	131.1	100%
TRE/Holbrook Junction	21.4	220.4	241.8	9%
Total Receiving Area in Douglas County	3,705.9	853.0	4,558.9	81%

Source: Douglas County GIS, Douglas County Community Development

Table G4 - Douglas County VESTED Project List (2020)

Date: 10/31/2020	Total Remaining Lots / Units Approved =	4336	7482
Valley Total VESTED Units Approved =		5552	
Valley Total PROJECT (Sub/PD/SP) Units Approved =		1930	
Vested Lots Remaining=	2542	Tahoe Approved Units =	195
Projects Lots Remaining =	1794	Tahoe Units Remaining =	145

VESTED Subdivision List (projects approved prior to 2007 Growth Ordinance)						
Community Area	Project Name	Year Approved	Number of units approved	Lots recorded thru 9-2020	Permits Allocated thru 10-2020	Lots Remaining 10-2020
East Valley	Grandview Est PD	1999	64	64	30	34
	Sterling Ranch Est PD	2002	32	32	31	1
	SDB, LLC PD (Spring Crk sub) PD 05-011	2005	8	8	3	5
	Huntsinger PD (LDA 08-055)	2008	5	5	1	4
Fish Springs	Finch Ranch (Serial TPM LDA 04-088; -089)	2005	14	14	2	12
Gardnerville	Virginia Ranch	2004	1020	0	0	1020
	Chichester Est	1997	778	778	777	1
Gardnerville Ranchos	Pleasantview	2001	199	199	197	2
	Rocky Terrace Est PD	2003	90	90	83	7
	Rain Shadow #1 / Aloha (PD 04-002-1)	2004	17	17	15	2
	Cottages @ CV (aka Kit Carson PD) (excl. 140 unit Heritage NV senior living which has exp.)	2005	59	59	58	1
Genoa	Eagle Ridge PD (PD 04-001) (55 lots + 2 Open Sp)	2004	57	57	23	34
	James Canyon PD/Montana (Recorded=Canyon Crk Mead=44 PD 00-16, Canyon Crk Est=42 PD 05-012, Mtn Meadows=38, Summit Ridge 3A=69, 3B=35; Montana 2A&2B=43, Montana 2C,2D&2E=55 PD 05-001 (Not Rec/Approved=Summit Ridge 3C-3E=71)	2000 & 2005	395	326	227	168
	Genoa Lakes PD (218 lots + 2 Open sp)	early 90's	218	218	212	6
Indian Hill/Jacks Valley	Cottages @ IH (aka Mica Dr LLC) (PD 05-002)	2005	48	48	0	48
	Clear Creek LLC (Phase 1A & 1B=121 (2016); Unit 2=56 (2017); Unit 3A = 46Res 2020)	2003	384	223	48	336
	Sunridge Heights III (Currently PH7)	2005	278	278	274	4
	Valley Vista I (PH7)	2006	261	261	240	21
Johnson Lane	Saratoga Springs PD (Ph 8)	2004	541	541	540	1
	Sage Crest PD (05-006) now SDDM Inv-JL	2005	13	13	9	4
Minden	Nevada Northwest ORD shows 303 units; (AATG PD 18-002 = SF-S 80 (Vill@MT rec 8-2020=28); MF-S 53; MF-N = 108 (minus Mossdale); MUC-S 56; MUC-N=32) =329 Inc. Deverill(18)=96; Inc. Downes@MV(20)=51		303	28	7	296
Minden/Gardnerville	Ranch @ Gardnerville (Anker) (PD 04-008-04)	2007	633	254	155	478
Ruhenstroth	Saddlerock (Jilk) (LDA 06-030; -070; 071)	2006	7	7	5	2
Sierra Planning/Foothill	Job's Peak Ranch PD	1997 +/-	122	122	73	49
Topaz	Kahn PD (must record map by 12/4/21)		6	0	0	6
Total Valley VESTED Permits Allocated / Remaining					3010	2542
Totals Valley VESTED Units Approved / Recorded			5552	3642		




Source: Douglas County Community Development (2020)

*Residence 1861 Apartments is approved as Phase II of Parkway Vista at the current time.

Table G5 - Douglas County PROJECTS List (2020)

Date: 10/31/2020	Total Remaining Lots / Units Approved =		4336	7482
Valley Total VESTED Units Approved =		5552		
Valley Total PROJECT (Sub/PD/SP) Units Approved =		1930		
Vested Lots Remaining=	2542	Tahoe Approved Units =	195	
Projects Lots Remaining =	1794	Tahoe Units Remaining =	145	



PROJECT - Subdivision/PUD/SP (approved after 2007 Growth Ordinance)

Community Area	Project Name	Year Approved	Number of units approved	Lots recorded thru 9-2020	Permits Allocated thru 10-2020	Lots Remaining 10-2020
East Valley	Pinion Ridge (LDA 01-083) Rec 2003	2001	43	43	2	41
Fish Springs	Hunters Point (LDA 17-027)	2018	11	11	2	9
Gardnerville	Hathoof/Peri (55 older)	2019	158		0	158
	Residence 1861 (MFR)	2018	81		0	81
	Thoroughbred Crossing (MFR-LDA 18-005) Ex9/20	2018	20		0	20
	Stahl MUC (Design Rev 15-22 units) (ex 11/20)	2017	15		0	15
Gardnerville Ranchos	Chapel Crest (DP 19-0260) EXP 9-11-23	2019	8		0	8
	Holstein Farms LLC (LDA 18-007) (exp 9/6/22)	2018	10		0	10
	Rain Shadow #2 (PD 04-002-2) Rec 2017	2016	11	11	9	2
	Rain Shadow #3 (PD 04-002-2) Rec 2018	2016	16	16	13	3
	Rancho Sierra DP 19-054	2020	239		0	239
	Suncrest (DP18-0167)	2018	8	8	7	1
Genoa	Genoa Lakes North (LDA 17-0008/PD 17-001)	2017	54	11	8	46
	Mountain Meadows (patio style) EXP 11-20-22	2018	75		6	69
Indian Hill/Jacks Valley	Big George (NDC-SP) SF	2020	179		0	179
	Riverwood (NDC-SP) SF	2020	119		0	119
	Sunridge #3 (PD 16-001/LDA 16-007 ex 7-7-2020)	2016	21		0	21
	Valley Knolls (PD 17-002 & LDA 17-028) SFR	2018	178		0	178
	Willow Hills (DP 18-0391)	2019	16		0	16
	JC Valley Knolls (DP 18-0244) 32 Triplex Bldgs	2018	96		0	96
Johnson Lane	Schneider Ranch Sub (Freedom) (LDA 17-022)	2017	16		8	8
	Cormorant Holdings LLC (DP18-0296)(ex 1/23)	2019	7		0	7
	Parkhaven (Armill) EXP 10-9-22	2018	25		0	25
Minden	CTH Minden Senior Living (DA 17-001) 90/60	2017	150		0	150
	La Costa at MV #3 (PD 02-004-2/LDA 16-001)	2002	30	30	29	1
	La Costa at MV #4 (PD 02-004-2) (exp 4-7-24)	2002	20		0	20
	Mackland #4 (LDA 17-033)	2018	14	14	6	8
	And Away They Go (This is the excess from Vested above due to amendments to Splan)	2018 -Amd	26		0	26
Ruhenstroth	Townhomes at Monterra (PH3) (DP18-0200)	2002 Mod2018	46	46	46	0
Corley Ranches (55 older) SPlan (20yr)	MUC: 12 units; Active living 42 units; Cottage Homes 136 units; Ranch homes 60 units	2015	238		0	238
	Total - Valley PROJECT Units Allocated / Remaining				136	1794
Total -Valley PROJECT (Sub/PD/SP) - Units Approved / Recorded			1930	190		
Tahoe	Tahoe Beach Club (LDA 15-026 & 17-020)	2015	143	46	44	99
	Huntsinger (DP 18-0053)	2018	8	0	0	8
	Sierra Colina LLC (PD 15-002) (PD 15-002-1)(44 res units)	2015	44	44	6	38
Totals - Lake Tahoe Permits Issued / Remaining					50	145
Total Lake Tahoe Units Approved / Recorded			195	90		

Source: Douglas County Community Development (2020)

DIAGRAM G4 - RECEIVING AREAS IN NORTH COUNTY

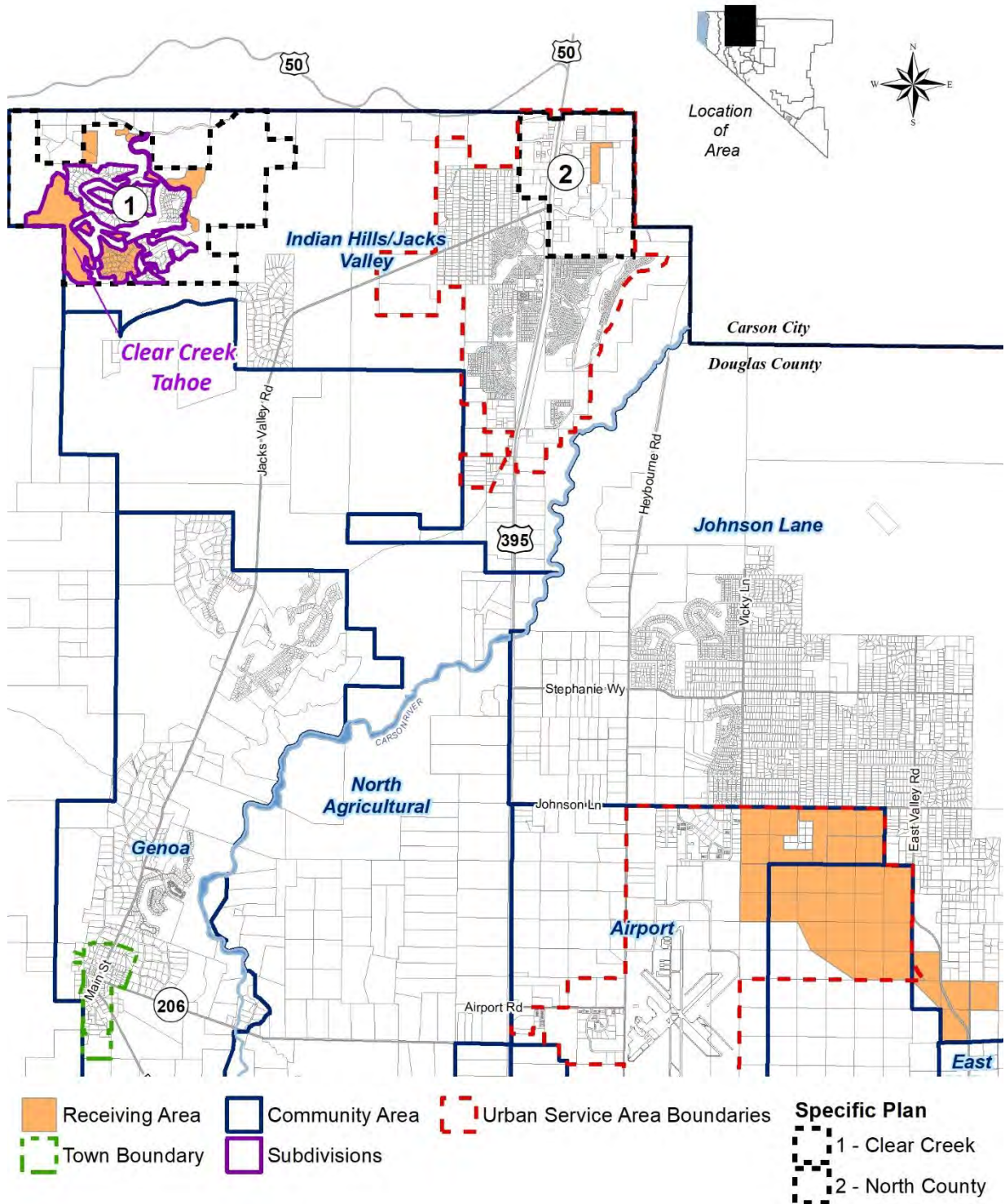


DIAGRAM G5 - RECEIVING AREAS IN AIRPORT AND AGRICULTURAL AREA

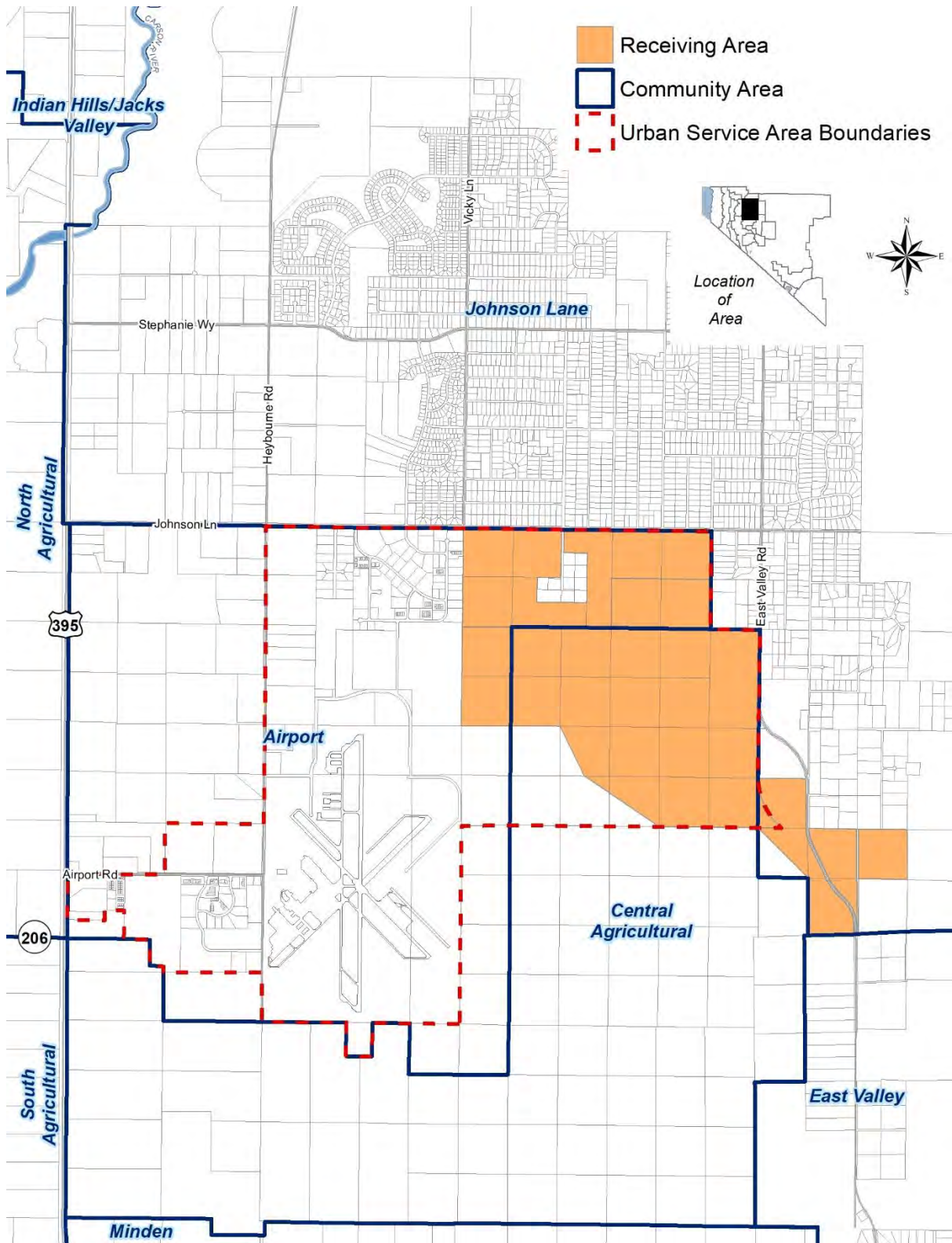


DIAGRAM G6 - RECEIVING AREAS IN GARDNERVILLE, GARDNERVILLE RANCHOS, MINDEN, AND RUHENSTROTH

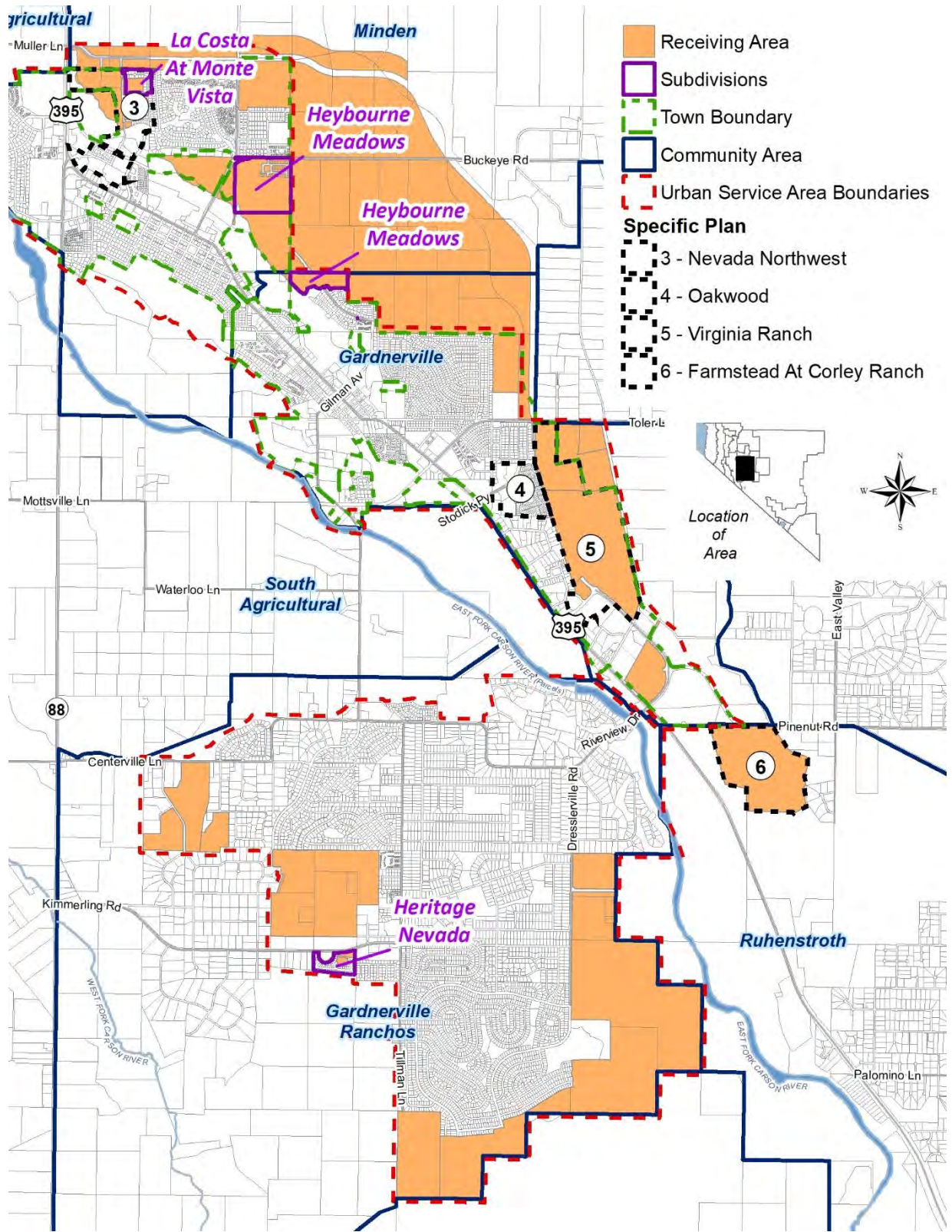
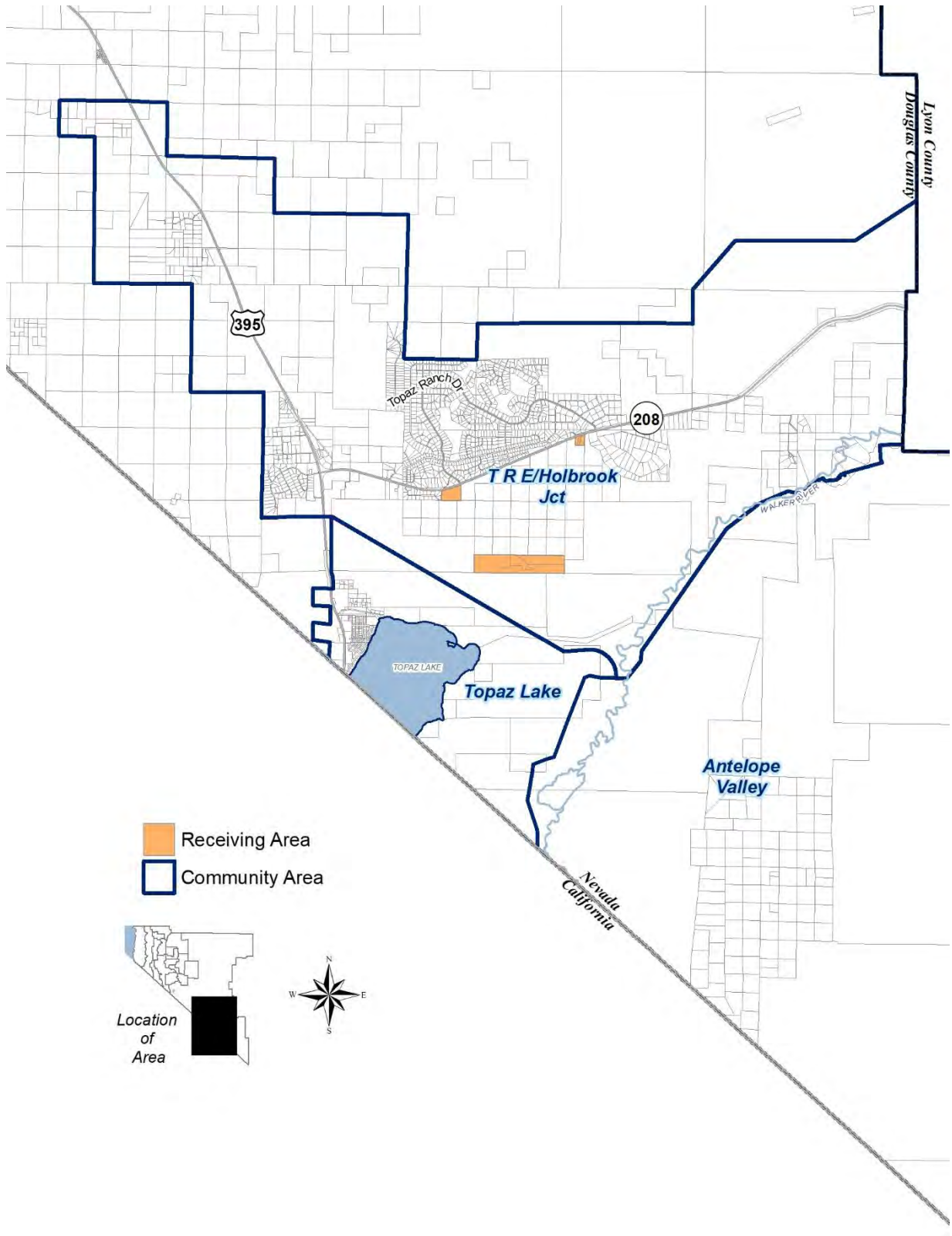


DIAGRAM G7 - RECEIVING AREAS IN THE TOPAZ REGION



Urban Service Areas

Urban service areas were established in 1996 and are located in the Carson Valley portion of Douglas County. The purpose of urban service areas is to force high-density residential development and commercial and industrial development, due to availability of infrastructure and established development patterns. Many of the urban service areas have boundaries that are nearly similar to existing GIDs and town boundaries. Urban service areas help concentrate urban scale development in areas with public services and utilities. They are intended to serve residential development at densities of one unit per 0.5 acre or greater and with urban services, such as paved roads and public water and wastewater services. Development outside of urban service areas, on the other hand, is planned for rural residential development, which equates to residential densities of one dwelling unit per 0.5 acre or lower. The lowest density residential zoning district is the RA-10 district (one dwelling unit per 10 acres or 0.10 units per acre). See Table L1 in Element 1, Land Use & Historic Preservation for more density values per zoning district.

Residential Build-out Analysis

Table G6 provides an updated analysis of potential residential growth outside of the Tahoe Basin; information on residential growth in the Tahoe Basin is available in the South Shore and Tahoe Douglas Area Plans. According to this review of undeveloped residential parcels, there are 9,485 acres of vacant residential-zoned land that could create 10,285 dwelling units (an average of 1.08 dwelling units per acre) based on allowable density for each zoning district. It should be noted that the residential build-out analysis does not take into account any agricultural ranch heritage parcels of two to five acres.

Table G6 – Undeveloped Residential Acreage Outside Receiving Areas by Residential Zoning District*

Residential Zoning Districts	Total Acreage	# of Potential Dwelling Units	Potential Population Growth (DU x 2.38 PPH)
RA-10 (0.1 dwelling unit per acre)	81	8	19
RA-5 (0.2 dwelling unit per acre)	5,663	1,133	2,696
SFR-2 (0.5 dwelling unit per acre)	1,498	749	1,783
SFR-1 (1 dwelling unit per acre)	1,378	1378	3,280
SFR-1/2 (2 dwelling units per acre)	180	359	855
SFR 12,000 (3.63 dwelling units per acre)	105	315	705
SFR 8,000 (5.45 dwelling units per acre)	285	1,282	3,051
MFR (16 dwelling units per acre)	264	3,169	7,541
MUC (16 dwelling units per acre)	31	374	891
TOTAL	9,485	8,768	20,867

Source: Douglas County GIS, September 2020

LOOKING TO THE FUTURE

ESTIMATED POTENTIAL GROWTH FOR DOUGLAS COUNTY

The potential growth in the County is based on the approved developments in receiving areas and the vacant residential parcels located outside of receiving areas. For this analysis, the conversion from acres to dwelling units is not assumed to have a direct density based on the listed minimum dwelling units per acre allowed for each project's land use zone. With every project, there are design inefficiencies with parcel layout being larger than the minimum parcel sizes, road rights-of-way, and parks or drainage facilities. These inefficiencies reduce the actual dwelling unit per acre used for this estimate of potential growth. An assumed reduction of 25 percent is used for this exercise. The analysis shows the following:

A. Current Population

- a. The current population of Douglas County is 49,418, per Table ES1 in the Executive Summary.

B. Receiving Areas

- a. Build-out for receiving areas: At 16 units / acre X 0.75 X 4,559 acres = 54,707 units creating an additional population of 130,203, this estimate is not feasible.
- b. Based on approved developments and densities within each community plan area: 9,746 units could be created in vacant receiving area (average 2.14 units per acre).
- c. Population build-out: Receiving area 9,746 Units X 2.38 persons / dwelling unit = 23,196.

C. Undeveloped Residential Parcels Outside of Receiving Areas:

- a. Build-out for undeveloped residential parcels, including all projects listed in the project and vested projects list and not including the 0.75 inefficiencies deduction: 8,768 units.
- b. Population build-out for undeveloped residential parcels: 8,768 units x 2.38 = 20,867 persons.

Total Build-out:

- a. 18,514 dwelling units on 14,045 acres (average 1.31 units per acre)
- b. 93,481 overall potential population for Douglas County

A significant amount of vacant residential land is located outside of urban service areas and will remain low density and rural in character. Most of the approved developments

located in receiving areas are vested projects and will not be constrained by the County's Growth Management Ordinance. These vested project units will expire in the next 36 years, ending in 2056. Development of vacant residential parcels outside of receiving areas may not happen for another 40 to 50 years with the current trend in the County's growth.

INCREASING HOUSING DIVERSITY

The housing stock in Douglas County continues to contain more than 70 percent single family detached units. While this product is marketable to many people, there are two cases to make in favor of housing diversity:

- 1) Treating the housing portfolio as any other kind of investment would result in a larger variety of housing inventory that makes the local market more resilient in times of crisis or during consumer preference shifts.
- 2) Providing different lifestyle options to different groups gives more choices to residents in household configuration, design, and amenity types.

To encourage more housing diversity and more affordable owner- and renter-occupied residential development, the County could pursue the following options:

- a. Identify zoning code and building code barriers to certain types of developments that are currently under-represented because they are technically not allowed or are too costly, such as tiny homes, modular units that can be assembled on-site, container homes, and small footprint and low-density multi-family products such as duplexes and fourplexes. After doing so, code amendments could be brought forward for consideration.
- b. Remove the requirement that multi-family residential development obtain multi-family residential land use designation for MFR zoning, and permit MFR zoning as a permitted zoning district within the commercial land use category.
- c. Lower the percentage of commercial usage required in mixed-use commercial (MUC) zoning districts.



BUILDING PERMIT ALLOCATION AND GROWTH MANAGEMENT ORDINANCE

The County's Building Permit Allocation and Growth Management Ordinance was adopted in 2007, and the Board of Commissioners is required to review the ordinance every five years; such review may occur during a Master Plan review. The first review of the Growth Management Ordinance occurred in October 2011, but no changes were made.

TRANSFER OF DEVELOPMENT RIGHTS (TDR) PROGRAM

The County's TDR program has successfully preserved over 4,000 acres of agricultural lands in the Carson Valley. The program transfers development rights to designated receiving areas, but property owners do not need TDRs outside of the receiving areas for rezoning proposals. Since there have not been many new TDRs certified since 2009, it may be time to re-examine the effectiveness of the entire program.

The County may want to consider whether all or some rezoning requests within the urban service areas (or town or GID) should require TDRs. The demand for TDRs would likely increase if all rezoning actions for higher density residential development and commercial or industrial development required TDRs. For example, if a property owner wanted to rezone a vacant residential property in Gardnerville from SFR-12,000 to multi-family residential, the County could require TDRs as part of the rezoning application. In some jurisdictions, such as in King County, Washington, there are no receiving area land use designations; the receiving areas are specific zoning districts. For Douglas County, this would eliminate the future land use designation of receiving area, and a Future Land Use Plan would need to be created in its place so the County could plan future land uses within those areas.

The County could also explore the establishment of a TDR bank, as well as a well-managed and transparent "development rights marketplace" for owners and developers to coordinate and transfer such rights. A TDR bank can typically purchase, hold, and sell development rights and sometimes can use the proceeds to buy more development rights, thus creating a revenue source for open space acquisition or public purpose project development. Successful TDR banks operate in King County, Washington and Palm Beach County, Florida.

UPDATE THE DENSITY BONUS AND AFFORDABLE HOUSING AGREEMENT ORDINANCE

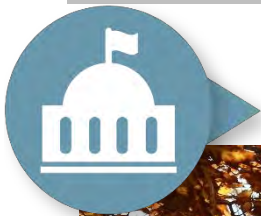
The County could increase the supply of affordable housing by requiring developers of large subdivisions to provide a certain percentage of the units as affordable housing.

Arbor Gardens is a good example of how this can work. Several changes to the County's Density Bonus Ordinance could be considered:

- 1) Remove the 2001 amendment that raised the income limit to 110 percent of median income for the deed-restricted units in the Arbor Gardens subdivision.
- 2) Remove the reference to special needs populations in the current ordinance. None of the affordable housing agreements target special needs populations.
- 3) Remove the "adverse impact" language in the current ordinance. This is a broad term that raises possible fair housing concerns.
- 4) Make the Density Bonus Agreement mandatory for all residential developments (owner- and renter-occupied units) with more than 50 dwelling units. For example, a proposed subdivision with 160 units would be given a density bonus in return for the provision of affordable housing units.
- 5) Explore incentives for landlords to accept Housing Choice Vouchers. Many do not accept these, which can restrict the supply of housing available for voucher holders.







5. PUBLIC FACILITIES, SERVICES, & RECREATION







PURPOSE

The purpose of the Public Facilities, Services, and Recreation Element is to review the availability and capacity of various public facilities, services, and parks and recreation in Douglas County and to properly plan for and mitigate the impact of growth on those areas.

GOALS

The following goals, policies, and actions for the Douglas County Public Facilities, Services, and Recreation Element set forth future priorities for the county.

- 
Goal 1 Support regional approaches to providing public services and facilities in coordination with General Improvement Districts, the Towns, the State, and other jurisdictions.
- 
Goal 2 Maintain service delivery standards that are consistent with County values and that promote a high quality of life.
- 
Goal 3 Ensure the timely provision of community facilities, services, and infrastructure, requiring that new development pays its equitable share of the costs for public services and facilities that are needed to serve it.
- 
Goal 4 Preserve and enhance public lands throughout the County and promote a broad distribution and connectivity of trails, parks, open spaces, natural areas, sensitive habitat(s), and recreational resources.



Provide and maintain an integrated transportation system for the safe, efficient movement of people and goods throughout Douglas County.

POLICIES



Continue to acquire and develop facilities through partnerships with other public and private entities, including Douglas County School District, Nevada Division of State Parks, Tahoe Regional Planning Agency, Nevada Department of Transportation, and private enterprises.



Promote and encourage a coordinated regional approach to the disposal and use of treated effluent and wastewater management.



Promote and encourage a coordinated regional approach to water service, water conservation, and water resource management.



Participate in the development of an interjurisdictional approach to protect critical aquifer recharge areas.



Facilitate the coordinated development of goals, policies, and programs for water resource management in the County, working with agencies such as the Carson Water Subconservancy District, General Improvement Districts, the Towns, the Washoe Tribe, and other appropriate water purveyors.



Constantly seek out new sources of traditional, private, and alternative funding for facility construction and maintenance.



Promote broadband connections and high-speed internet access throughout public facilities.



Expand recycling efforts and implement additional waste diversion programs.



Policy PF9 Ensure that neither new development nor the expansion of service areas are allowed to decrease a system's level of service below state or federal standards.



Policy PF10 Rural areas may be served by individual sewage disposal systems if groundwater quality will not result in degradation beyond federal and state standards.



Policy PF11 Identify barriers and develop strategies to meet service delivery goals.



Policy PF12 Analyze, evaluate, and plan for the expansion/reduction of public buildings and facilities to meet increased/decreased demand for government services.



Policy PF13 Continue to make available to County residents and visitors a variety of active and passive park facilities and recreation programs that satisfy their needs, improve their physical and mental well-being, and enhance their quality of life.



Policy PF14 Create an edifying and positive public image for the community through the appropriate maintenance of parks and publicly owned landscaped areas.



Policy PF15 Foster an atmosphere in which members of the community can voice ideas and concerns related to the proper planning and management of county facilities and services.



Policy PF16 Operate and maintain indoor facilities that appeal to the recreational and social needs of citizens of all ages.



Policy PF17 Continue to support the development of single-track trails, multi-use trails, bike lanes, and trailheads that provide access and connection between neighborhoods, recreation facilities, points of interest, and places of employment.



Policy PF18 Continue development of adventure-related facilities, such as skateboard parks and BMX tracks, in appropriate areas of county-owned and managed properties.



Policy PF19 Include special use areas for dog owners and their pets, whether on- or off-leash, in future park developments, as deemed appropriate.



Policy PF20 Continue to plan for the needs and preserve the rights of current and future residents, especially their access to public parks and recreation opportunities.



Policy PF21 Maintain clear and simple mechanisms by which the public can make donations for art, park, and recreation improvements for public facilities and programs.



Policy PF22 Continually recruit and develop volunteer resources, which are deemed critical to the success of our recreational endeavors.



Policy PF23 Continue to support the joint use agreement with the Douglas County School District, which supports joint free use of County and school facilities.



Policy PF24 Develop and maintain facilities that support the cultural and performing arts interests of our residents and visitors.



Policy PF25 Conserve open space to promote recreation opportunities and the responsible use of public lands.



Policy PF26 Coordinate with and strongly encourage the Bureau of Land Management to plan, design, and maintain trails and public access points to federal lands. Plan hiking, bicycling, and equestrian trails with appropriately designed trailheads.



Policy PF27 Assist the Carson Valley Trails Association and Tahoe Rim Trail Association in developing new trails by providing access to federal lands within Douglas County.



Policy PF28 Continue to promote increased library visitation through an awareness campaign and the hosting of local events.



Policy PF29 Cooperate with other service providers to coordinate the timing of capital projects, in order to ensure that requirements of adequacy and concurrency are met and to develop programs to reduce the cost of providing public services and facilities.



Evaluate potential capital projects according to an established set of criteria to determine their importance in implementing the Master Plan’s goals and policies, with priority given to projects identified in the Master Plan.



Identify opportunities for studios, rehearsal halls, theaters and concert halls, dance rehearsal and performance spaces, exhibition spaces and galleries, multi-purpose centers, classrooms, administrative offices, and art storage facilities.

CURRENT TRENDS

Fundamental to the effective management of growth and development in a community is proper planning and providing for services and facilities to support and mitigate the impact of that growth. In Douglas County, these services and facilities include those operated and maintained by the County and by other public or private agencies. The services that are most impacted by growth are transportation, water and wastewater service, solid waste, and floodplain management. The [Douglas County Transportation Plan](#) was adopted by the County Commission in 2019 and is available online. Floodplain management is addressed in Element 6, Public Safety. General government services, libraries, schools, and parks and recreation are discussed in this Element.

GENERAL IMPROVEMENT DISTRICTS

GIDs are authorized under NRS Chapter 318 and provide many different services, including streets, sidewalks, and storm drainage. Under Chapter 318, the governing body may collect tax revenues for each GID and issue debt for various infrastructure projects. A governing body cannot initiate GIDs if they are proposed within seven miles of the boundary of an incorporated city or unincorporated town.

There are currently 17 GIDs in Douglas County that were established under NRS 318. Beginning in the 1960s, several GIDs were approved by the Douglas County Board of Commissioners to provide a mix of different urban services, including streets, sidewalks, streetlights, drainage, water and sewer service, and parks and recreation, to specific communities such as Gardnerville Ranchos (created by County ordinance on April 9, 1965). Diagrams PF1–PF3 display the location of GIDs in the

Douglas County has more GIDs than any county in the State of Nevada.

Carson Valley Region, the Topaz Region, and the Tahoe Basin Region. Diagram PF4 displays the location of the unincorporated towns.

Table PF1 - Douglas County General Improvement Districts by Region*			
General Improvement District	# Parcels	Total Acreage	Number of Dwelling Units (2016)
Carson Valley Region			
Gardnerville Ranchos GID	4,174	2,410.56	4,277
Indian Hills GID	1,862	1,389.67	1,831
Sierra Estates GID	67	65.06	70
<i>Subtotal</i>	6,103	3,865.29	6,178
Tahoe Basin Region			
Cave Rock GID	132	65.02	90
Elk Point GID	97	22.24	101
Kingsbury GID	2,840	4,980.33	2,358
Lakeridge	101	31.01	78
Logan Creek GID	72	67.10	22
Marla Bay GID	122	29.28	126
Oliver Park GID	92	39.14	453
Round Hill GID	634	667.96	577
Skyland GID	237	73.65	232
Tahoe-Douglas GID	N/A	N/A	705
Zephyr Cove GID	79	21.99	77
Zephyr Heights GID	291	83.88	240
Zephyr Knolls GID	94	22.94	63
<i>Subtotal</i>	4,791	6,104.54	4,417
Topaz Region			
Topaz Ranch Estates GID	909	2,852.08	779
<i>Subtotal</i>	909	2,852.08	779
Grand Total	11,803	12,821.91	11,374
Total County Private	28,395	450,678.38	24,663
Percentage GID	41.6%	2.8%	46.1%

Source: Douglas County GIS parcel data, Douglas County Assessor 2016 Housing Counts. Table PF1 does not include Douglas County Paramedic/Ambulance; Minden-Gardnerville Sanitation District, Tahoe Douglas Fire Protection District, and Mosquito Abatement District.

DIAGRAM PF1 - GIDs IN CARSON VALLEY REGION

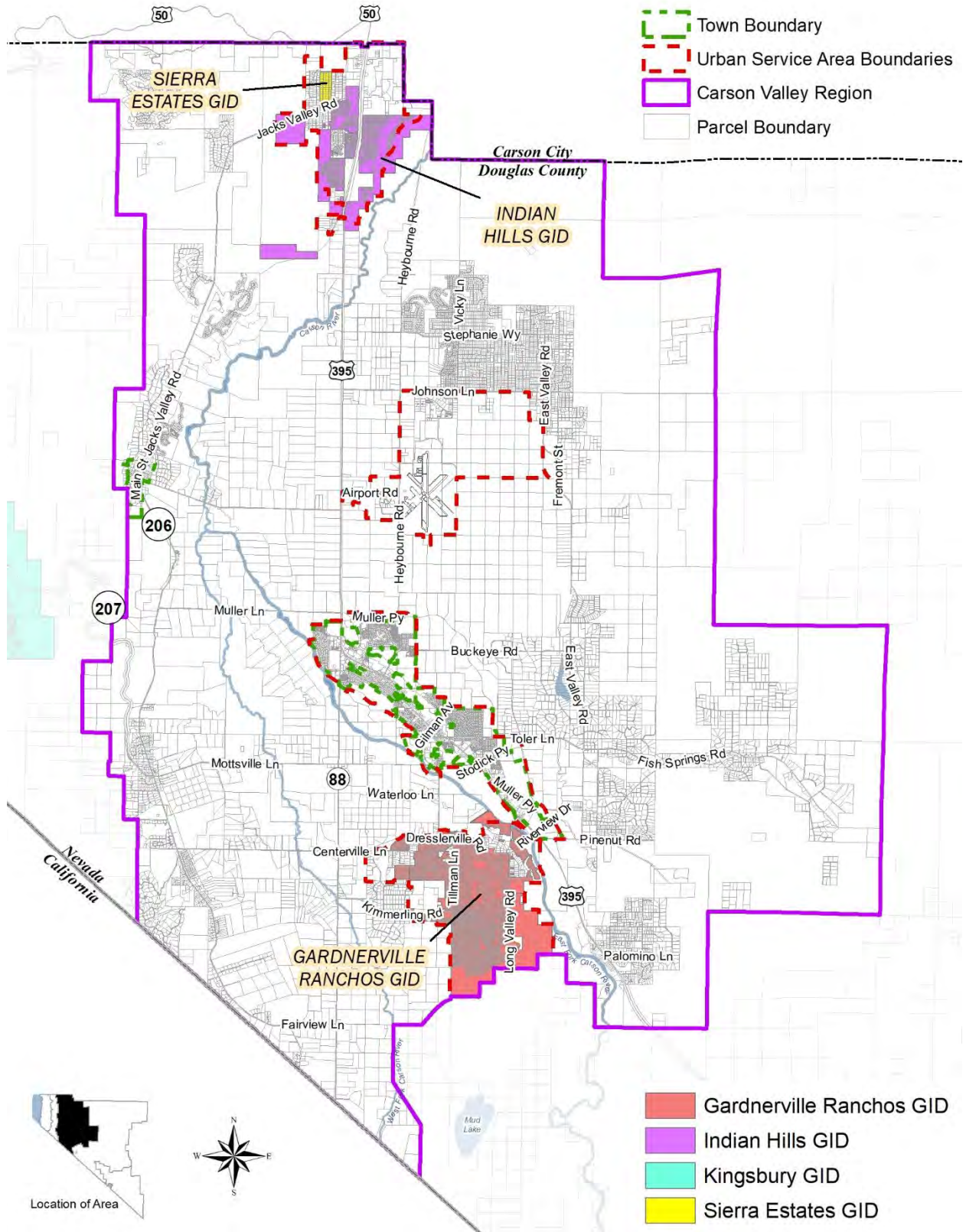


DIAGRAM PF2 - GIDs IN TOPAZ REGION

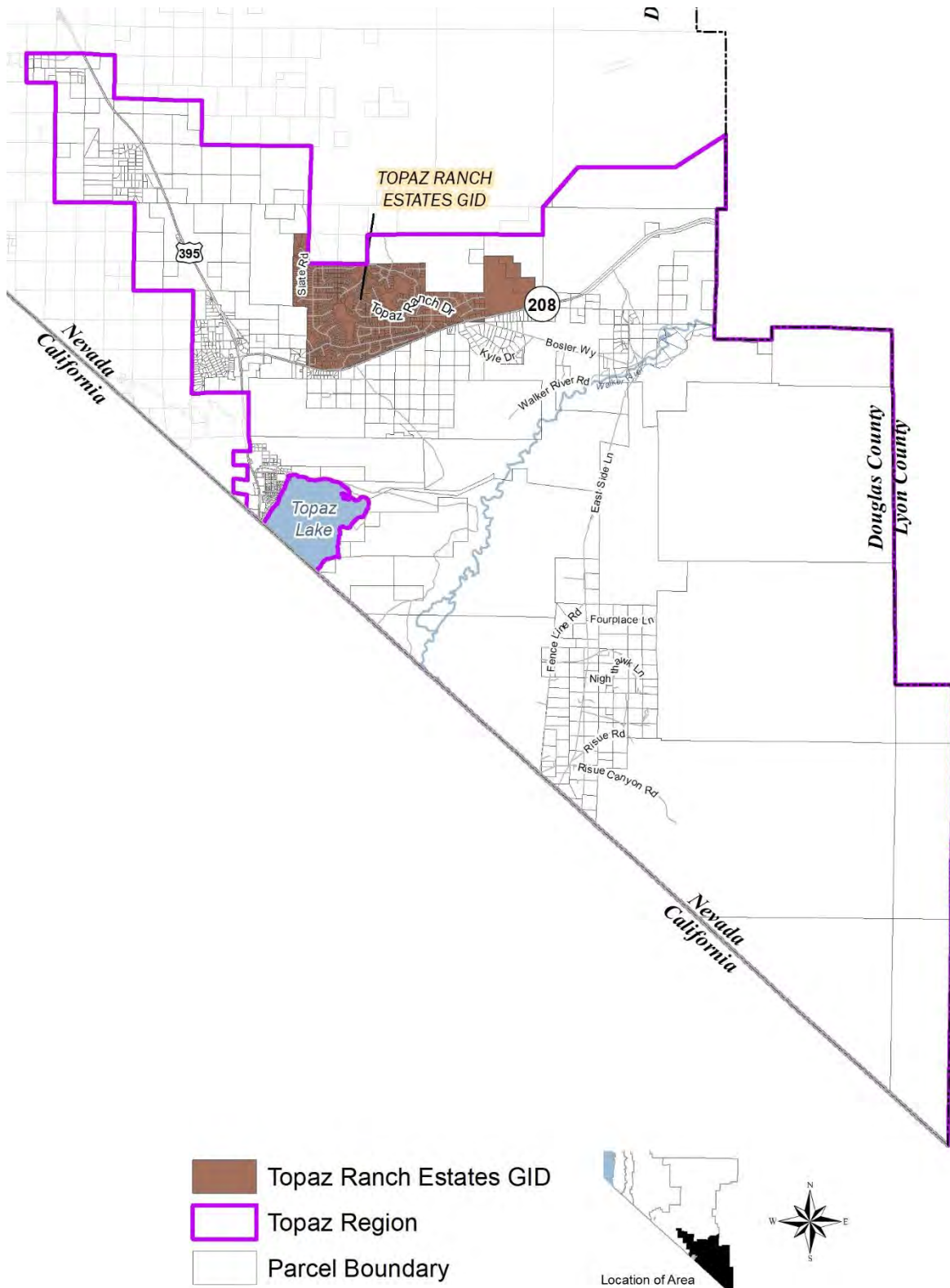
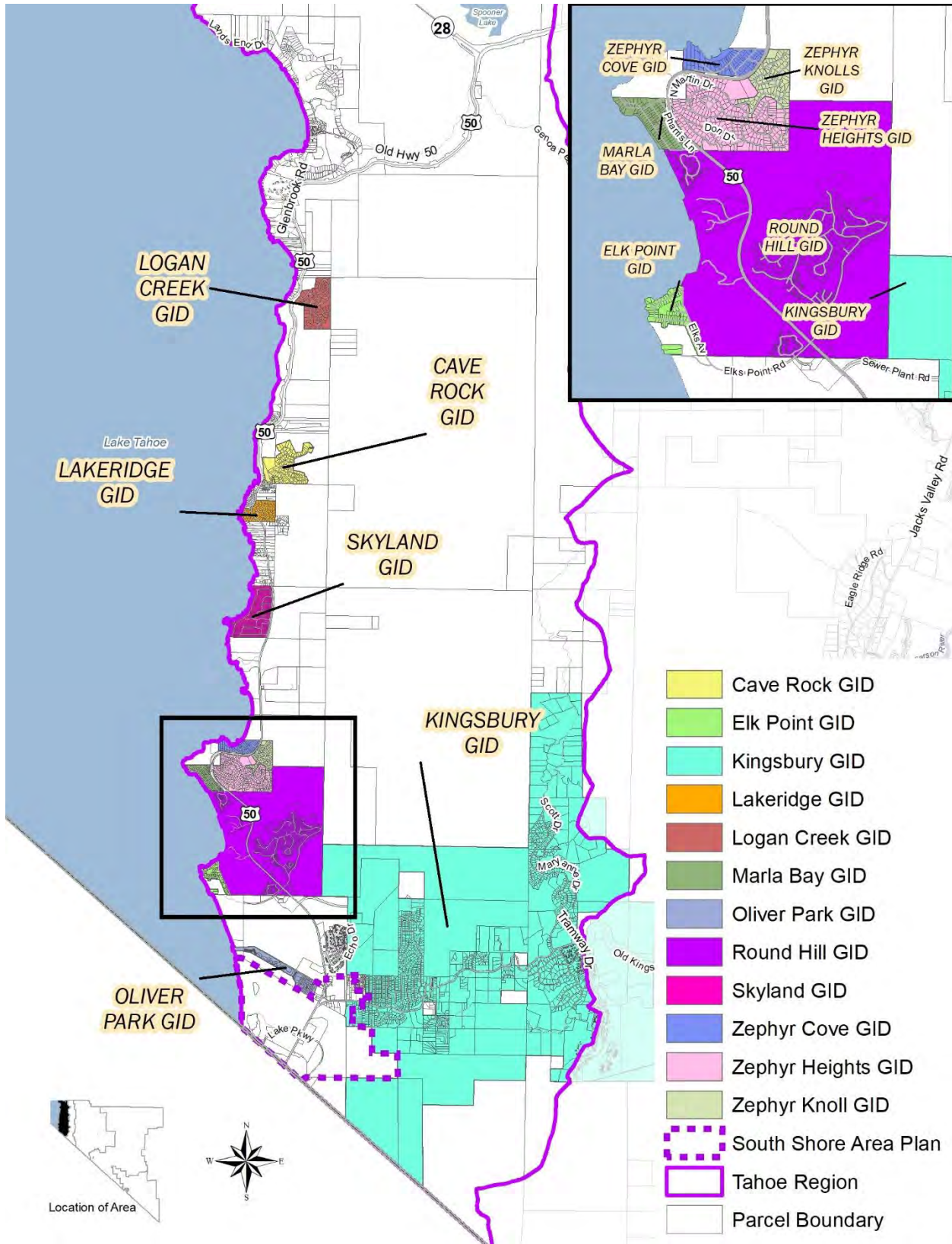


DIAGRAM PF3 - GIDs IN THE TAHOE BASIN



UNINCORPORATED TOWNS

The Towns of Genoa, Gardnerville, and Minden were created by the Board of County Commissioners in accordance with NRS Chapter 269, Unincorporated Towns. Each of the three Towns provides a different combination of services permitted by NRS and the County Code, including streets, sidewalks, streetlights, drainage, water service, trash, and parks and recreation. Under Chapter 269, the County Commission may levy a tax for each Town.

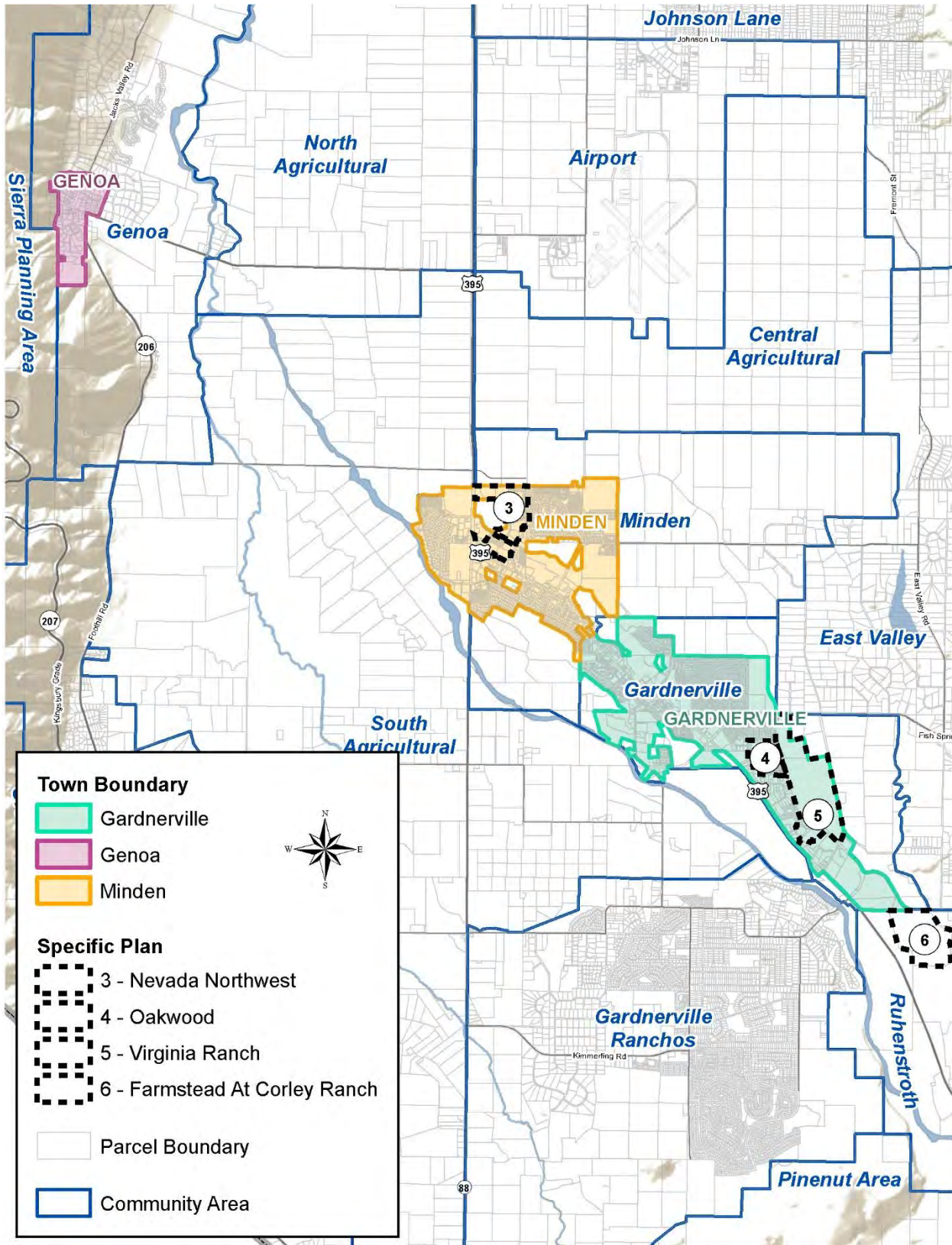


Table PF2 - Douglas County Unincorporated Towns

Unincorporated Town	# Parcels	Total Acreage	Number of Dwelling Units (2020)
Gardnerville	2,430	1347.81	2,794
Genoa	152	176.88	120
Minden	1,976	938.50	1,671
Grand Total	4,558	2,463.19	4,585



DIAGRAM PF4 - UNINCORPORATED TOWNS



WATER SERVICE AND RESOURCE MANAGEMENT

There are 39 public water systems in Douglas County: 26 in the Carson Valley and Topaz Regions and 13 in the Tahoe Basin Region. Public water systems have at least 15 connections or serve an average of 25 people for at least 60 days per year. Water systems are classified as either community systems, non-transient non-community, or transient non-community.

Under the Douglas County Development Code, new development is exempt from connecting to a public water supply if the area is not identified in the Master Plan as anticipating connection to or construction of a water system. In areas where public water supply is currently within 2,000 feet, developments must be approved with conditions requiring installation of a water distribution system that connects to the public water supply.

Douglas County’s Carson Valley Water Utility serves residential, commercial, and industrial development in the Airport, Johnson Lane, and Genoa areas, the Clear Creek development south of U.S. Highway 50, and developments along Foothill Road and the Douglas County Fairgrounds east of U.S. Highway 395. The Gardnerville Water Company serves the Town of Gardnerville, adjacent areas, and the Washoe Tribe Travel Plaza/Casino south of Pinenut Road. The Town of Minden provides water to portions of Douglas County, the Indian Hills GID, and Carson City (as a result of the inter-tie project). The Gardnerville Ranchos GID provides residential and commercial water service to residents and businesses south of the Towns and west of U.S. Highway 395, with over 4,400 residential customers.

Table PF3 - Major Water Systems in Carson Valley

	Carson Valley Water Utility (Douglas County)	Gardnerville Water Co.	Gardnerville Ranchos GID	Town of Minden	Indian Hills GID	Sierra Estates GID
Active Wells	14	7	7	9	3	2
Storage Tanks	14	2	2	1	5	1
Service Connections	3,429	2,400	4,479	1,600	1,810	67
Population Served	8,161	5,712	10,660	3,808	4,308	160

*Source: NDEP, Drinking Water Branch, Water Systems
Population was calculated by taking the number service connections multiplied by 2.38 people per connection.*

The Topaz Ranch Estates (TRE) Water Utility serves residents that are part of the TRE GID, located near Topaz Lake on Highway 208 in southern Douglas County, approximately 17 miles south of Gardnerville.

The Topaz Lake Water Company is a small system that serves 14 connections in southern Douglas County outside of the GID.

Table PF4 - Major Water Systems in Topaz Region

	Topaz Ranch Estates	Topaz Lake Water Co.
Active Wells	2	3
Storage Tanks	4	N/A
Service Connections	748	14
Population Served	2,100	40

Source: NDEP, Drinking Water Branch, Water Systems

In the Tahoe Basin, Douglas County operates the Cave Rock, Skyland, Uppaway, and Zephyr Water Systems. Other major water system providers include Edgewood Water Company, Elks Point, Kingsbury GID, Logan Creek, and Round Hill. Most water systems in the Tahoe Basin rely on Lake Tahoe intake systems instead of groundwater.

Table PF5 - Major Water Systems in Tahoe Basin

	Cave Rock & Skyland	Uppaway	Zephyr	Edgewood Water Co.	Elks Point	Kingsbury GID	Logan Creek	Round Hill
# Wells or Intake	Intake	2	Intake	Intake	2	Intake	1	Intake
Tanks	6	3	1	2	3	8	1	5
Service Connections	546	35	465	21	88	2450	22	479
Population Served	1267	85	1209	3800	325	3839	60	1200

Source: NDEP, Drinking Water Branch, Water Systems

Diagrams PF5–PF8 depict the service areas of public water systems in Douglas County.

Diagram PF6 depicts the existing service area of the Gardnerville Water Company and the Expansion Area contained in the Water Company’s 2007 Master Plan. Almost the entire existing service area is within the County’s urban service boundary, except for a parcel adjacent to Stodick Park north of Toler Lane and the Washoe Tribe Travel Plaza south of Pinenut Road.

Diagram PF7 depicts water purveyors in the Topaz Region. Besides the Topaz Ranch Estates GID, there are smaller water systems located at Holbrook Junction and near Topaz Lake.

DIAGRAM PF5 - WATER SYSTEMS IN THE CARSON VALLEY

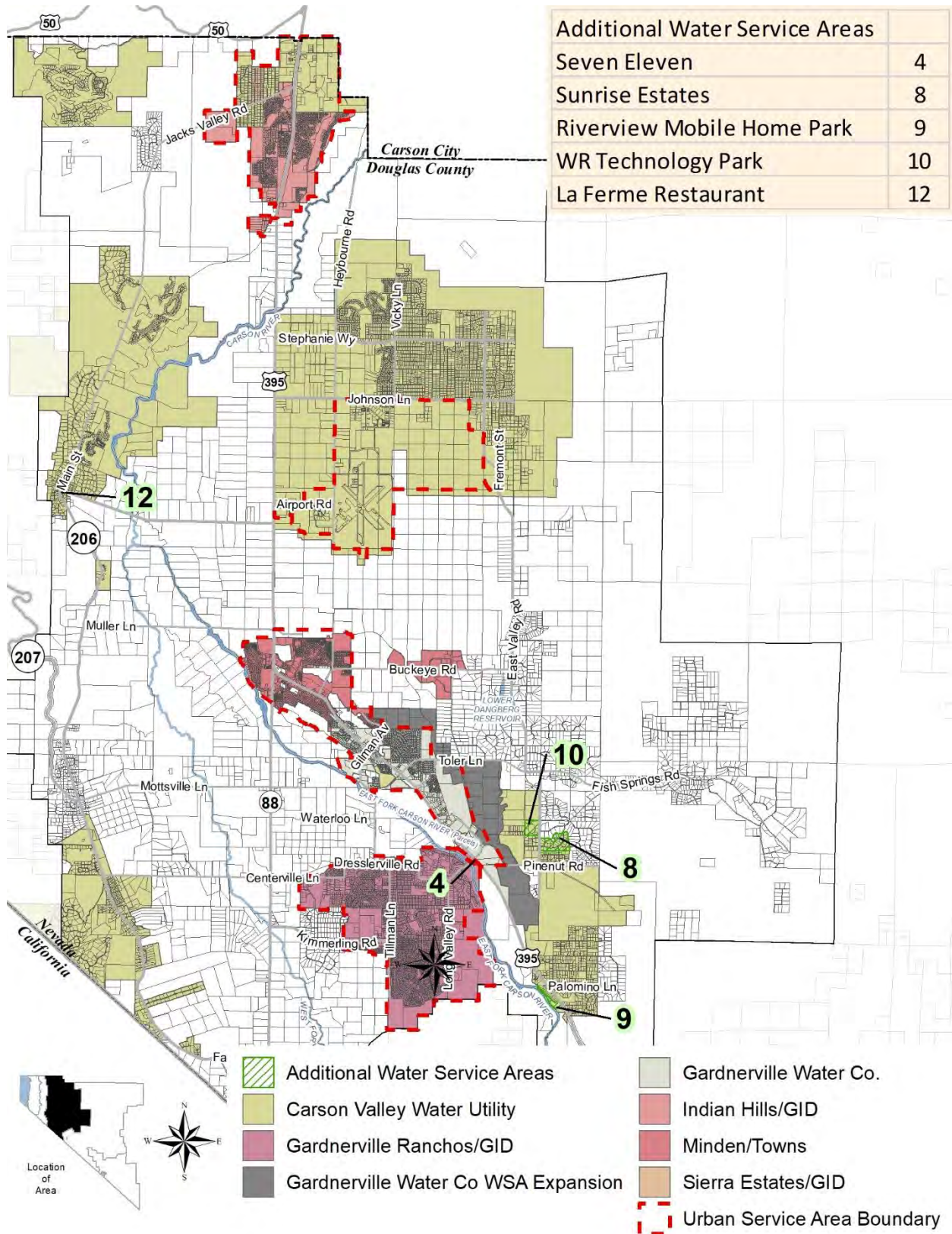


DIAGRAM PF6 - WATER SYSTEMS IN GARDNERVILLE

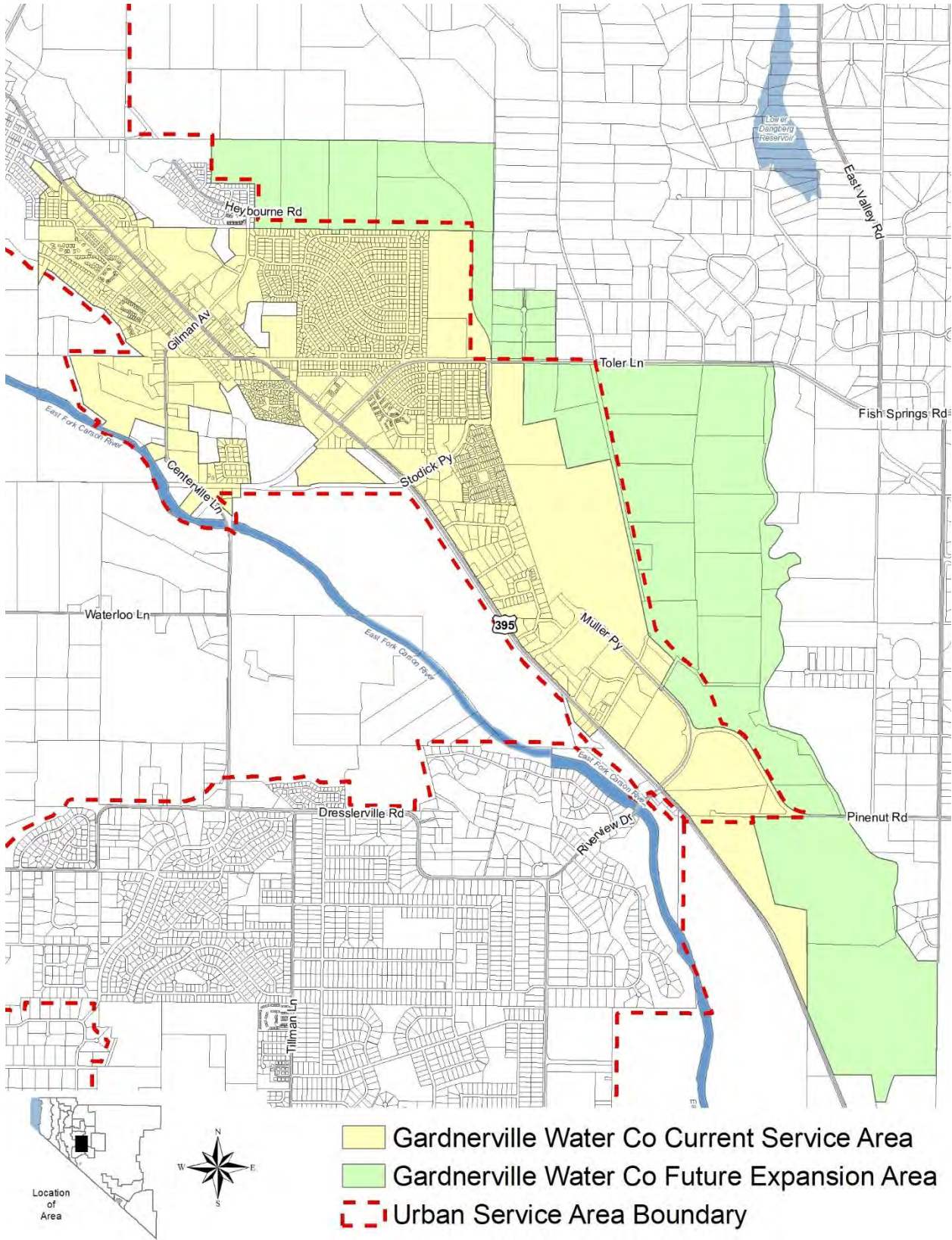
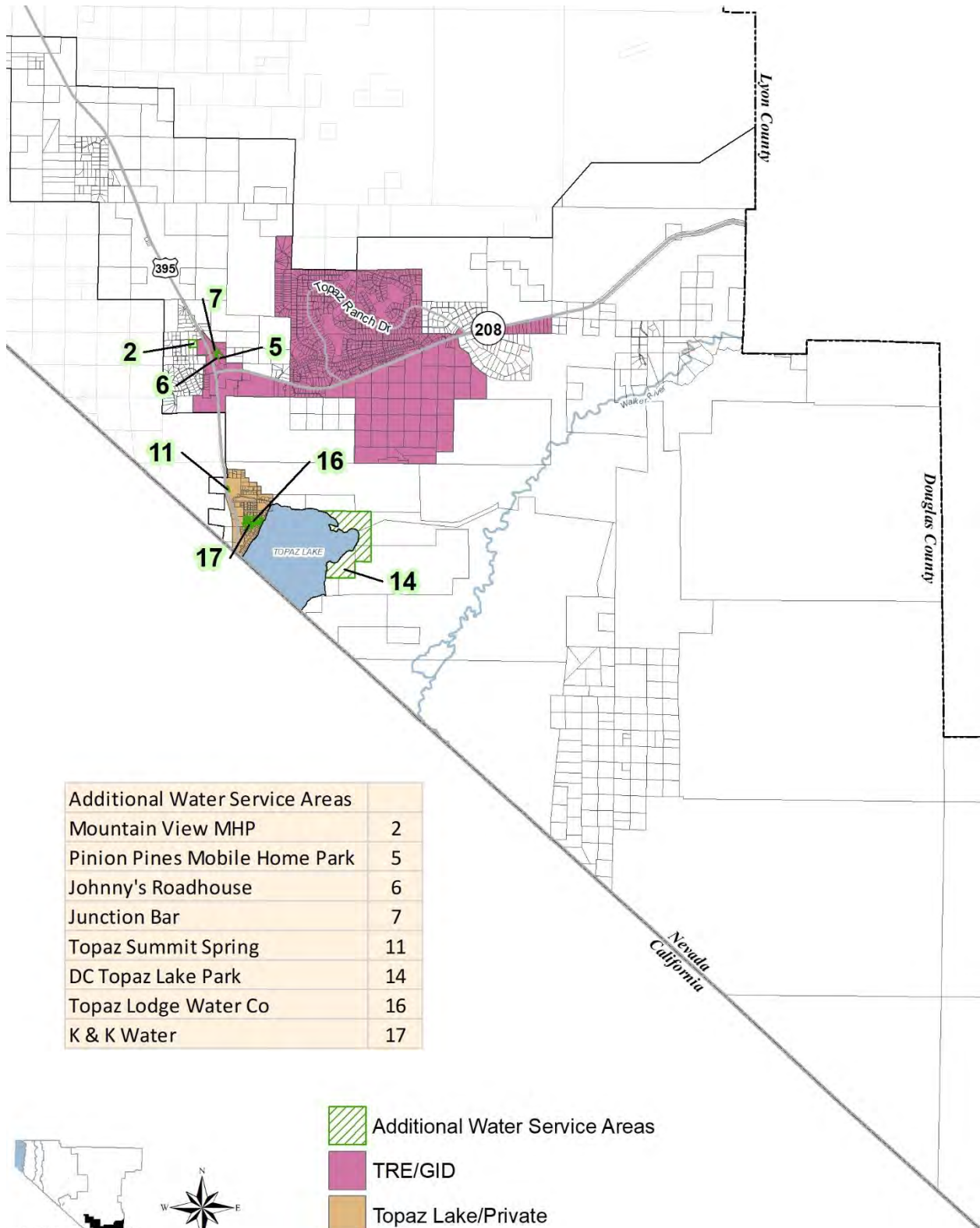


DIAGRAM PF7 - WATER SYSTEMS IN THE TOPAZ REGION

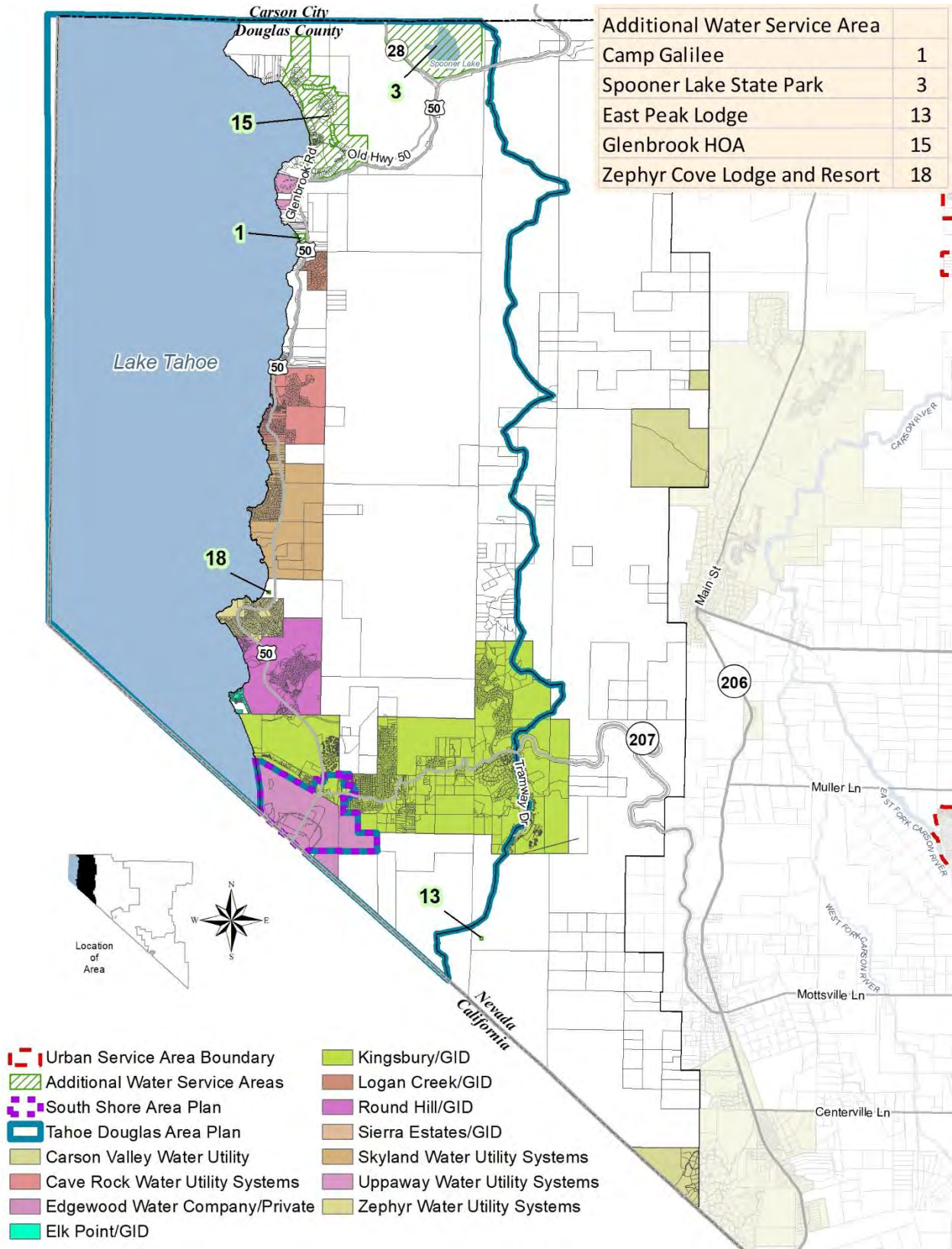


Additional Water Service Areas	
Mountain View MHP	2
Pinion Pines Mobile Home Park	5
Johnny's Roadhouse	6
Junction Bar	7
Topaz Summit Spring	11
DC Topaz Lake Park	14
Topaz Lodge Water Co	16
K & K Water	17

 Additional Water Service Areas
 TRE/GID
 Topaz Lake/Private



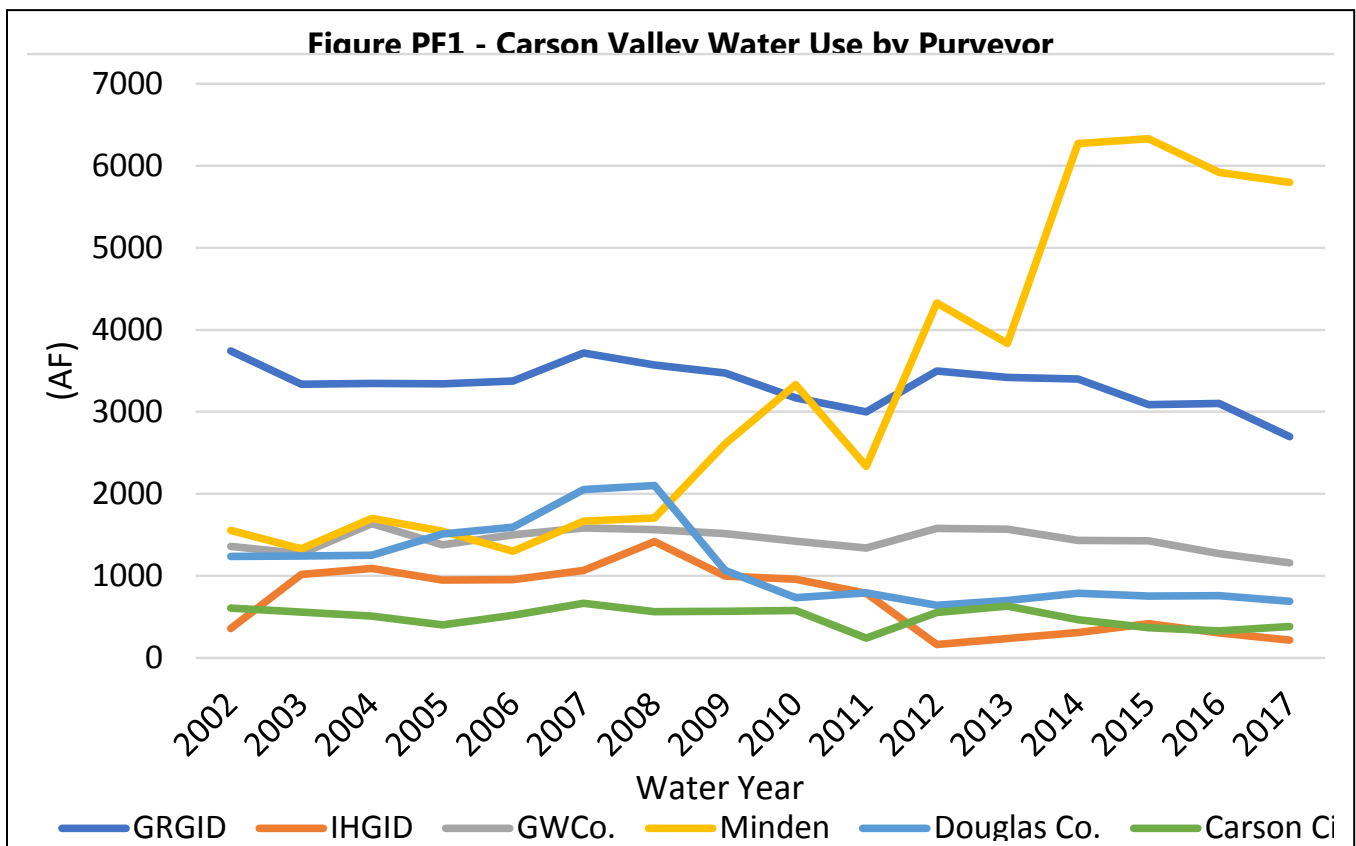

DIAGRAM PF8 - WATER SYSTEMS IN THE TAHOE BASIN



Water Service Planning

The Town of Gardnerville, the Town of Minden, the Gardnerville Ranchos General Improvement District and North Douglas County water services areas are projected to experience the most population growth in the County over the next 10 years. The capacity of public water systems in Douglas County to meet water demand for residential, commercial, and industrial customers will depend on the following factors:

- Future water levels for groundwater and surface water during drought periods
- Water Conservation measures, including metering and potential state restrictions on water use
- Maintenance of existing infrastructure to meet high demand periods during the summer days
- Protection of wellheads from contamination
- Need for backup systems, as required by the Nevada Administrative Code



The major challenges for water purveyors in the County include fixing old piping, maintaining or replacing groundwater wells, carrying out water conservation measures, meeting fire flow requirements, complying with Clean Water Act regulations (e.g.,

reducing arsenic levels), and properly planning for future demand. Douglas County has acquired older water systems in the Tahoe Basin and the Carson Valley that did not meet Clean Water Act regulations and continues to spend funds on upgrading older water systems. To meet federal arsenic standards in the Carson Valley, the County has constructed the 24-inch inter-tie project and purchases wholesale water from the Town of Minden.

Douglas County Consolidated Water Utilities

Over time, Douglas County has hired consultants to carry out preliminary engineering reports (PERs) to identify deficiencies and provide recommendations and costs for needed improvements to the County's water systems in the valley and at the lake. In 2018, Douglas County combined the county-operated valley and lake systems into one water utility, and in 2019 adopted a revised water rate structure to ensure that the operational and maintenance needs of the combined systems were met. The consolidation of the County systems and the revised rate structure will allow the County to address the most critical and the critical capital improvement projects more quickly and to spread the cost of these much-needed improvements across a larger base of customers, mitigating the impact of proposed rate increases. Douglas County's Capital Improvement Program includes planning and funding for over \$30 million in water facility upgrades for the Douglas County Water Utility over the next 10 years. In 2019, Douglas County worked with Manhard Consulting to update a portion of the 2009 North Douglas County Water System Analysis. This update included the North Douglas County Specific Plan, which encompasses the revised land use areas and water system layout of three future developments: Riverwood, Big George Ventures, and Valley Knolls. The process is underway to complete, in June 2021, a Carson Valley Water Facilities Master Plan that will include a current system evaluation and operations analysis to assist the County with future operational and management decisions. The Plan will evaluate the Carson Valley area of the Douglas County Water Utility, including East Valley, North County, Clear Creek, West Valley (including Montana, Genoa, and Walley's), Foothill (including Sheridan Acres, Job's Peak, and Sierra County Estates), and the Fairgrounds.

The plan will provide the County with:

- An overview of existing systems within the plan area, including current system size, supply sources, distribution facilities, and storage components
- A summary of surface and underground water rights that are either currently owned by the County or potentially available in the administrative basin and that could support the County

- A Capital Improvement Plan (CIP) defining key infrastructure necessary to provide services within the plan area and/or interconnect existing utilities
- A comprehensive planning document to guide future decisions related to managing a reliable and sustainable water system

Town of Minden Water Utility

In 2017, the Town of Minden contracted with Sunrise Engineering to conduct a Water System Analysis to assist the Town with planning the prudent management of the Town's water resources. In 2018, the Town amended its water system analysis to include a future service area identified in the Town's Plan for Prosperity. This future service area included all 1,044 acres of the Park Ranch Holdings and extended to the south side of the Minden-Tahoe Airport. As calculated, based on the average Minden residential use, each residential unit would utilize 656 gallons of water, and 2,500 homes would use approximately 1,250 gallons per minute or the equivalent of one new municipal well in the Town.

Gardnerville Water Company

The Gardnerville Water Company (GWC) is a nonprofit company owned by the property owners of Gardnerville. GWC is managed by a five-member board of directors, the members of which are elected by the property owners. GWC has approximately 2,400 water service connections, including residential, commercial, and irrigation. GWC has its own Master Plan, which is currently under contract with Resource Concepts, Inc. (to be updated). The updated Master Plan will be available through the water company and will include planned growth for the system and its future service area. GWC has established reserves, which it will use to fund needed infrastructure improvements or repairs within the system. The GWC Master Plan shows that the company has sufficient water supply, water rights, infrastructure, and water quality to meet projected demand.

Gardnerville Ranchos General Improvement District Water Utility

The Gardnerville Ranchos General Improvement District (GRGID) projects water demand at future potential service area build-out, including remaining receiving area, based on anticipated land use of 4,400 additional residential dwelling units. The GRGID Board advises in a Water System Status and Outlook 2020 report that the development of a study/analysis of the Carson Valley watershed is essential to future growth and water service planning for the GID. This analysis should include the impact of projected development for the region on the availability of water resources in the Gardnerville Ranchos. The GRGID outlook report outlines the following growth considerations for GRGID:

- Accommodate future growth at 10-year and 20-year demand projections, additional well(s), storage capacity, and additional water sources will have to be identified to accommodate continued growth beyond the 20-year demand projections.
- Future growth may require the construction of one or more arsenic treatment facilities.
- As future growth is planned, the water model should be updated to reflect actual development densities, water demands, and connection points to determine the need and timing for upgrades within the GRGID water system.
- Future growth projects will be funded through a special assessment levied upon new development within the district; this is currently set at \$4,431 per Equivalent Dwelling Unit (EDU) effective November 12, 2019 for newly created parcels. One EDU equals one single family home.

WATER RESOURCE MANAGEMENT

In 2012, the U.S. Geological Survey (USGS) published Scientific Investigations Report 2012-5262¹: *Assessing Potential Effects of Change in Water Use with a Numerical Groundwater-Flow Model of the Carson Valley, Douglas County, Nevada, and Alpine County, California*. To gauge the impact of increased growth and development on the aquifer, the USGS used a groundwater model to analyze four water-use scenarios against a base water scenario (total water pumped in 2005) over 55 years. “The four scenarios included: (1) total pumping rates increased by 70 percent, including an additional 1,340 domestic wells, (2A) total pumping rates more than doubled with municipal pumping increased by a factor of four, (2B) maximum pumping rates of 2A with 2,040 fewer domestic wells, and (3) maximum pumping rates of 2A with 3,700 acres removed from irrigation” (USGS Scientific Investigations Report 2012-5262, page 69). According to the summary section of the report (page 69), the water model predicted that increasing groundwater pumping to meet the maximum level of demand under the most extreme of the four different scenarios “would result in 40–60 ft. of water table decline on the west and east sides of the Carson Valley” and “would be offset primarily by decreased flow in the Carson River by a loss of groundwater storage.” Under the most extreme scenario input in the model, the total amount of municipal water pumped would increase by four times over what it was in 2005 for all of Carson Valley, with 3,700

¹ Yager, R.M., Maurer, D.K., and Mayers, C.J., 2012. Assessing potential effects of changes in water use with a numerical groundwater-flow model of Carson Valley, Douglas County, Nevada, and Alpine County, California: U.S. Geological Survey Scientific Investigations Report 2012–5262.



acres removed from irrigation. The USGS report also states that additional monitoring of water levels is needed to verify the accuracy of the water model. Recently, members of the County Commission and several Carson Valley water purveyors expressed a desire to partner with USGS to update this study and model. Developing a

complete understanding of the availability and quality of water in the Carson Valley/Carson River Basin will be critical to protecting water resources for the future. Water is a finite resource; collaborative management strategies are needed to ensure that use does not exceed the amount of perennial yield in the basin. The Tahoe Basin Region of Douglas County is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA), which was established in 1969 under the Bi-State Tahoe Regional Planning Compact (Public Law 91-148) to control growth and development and protect Lake Tahoe's clarity and environment. The California-Nevada Interstate Compact controls water supply for the Lake Tahoe Basin and allocates 11,000 acre-feet annually to the State of Nevada. Water resources at the lake should continue to be collaboratively managed by local governments, the existing water purveyors, TRPA, and the Nevada State Division of Water Resources.

WASTEWATER SERVICES

Wastewater services in the Carson Valley region of Douglas County are provided by three public wastewater systems and several private package systems. In the Lake Tahoe Basin region of Douglas County, several GIDs and Sewer Improvement Districts (SIDs) provide wastewater services. Under the current Douglas County Development Code, property owners are not required to hook up to public wastewater systems if the wastewater service area is not identified and are permitted to use individual sewage disposal systems (ISDSs). For properties located within an anticipated public wastewater service area but not within 2,000 feet of a sewer main, an ISDS may be utilized on an interim basis. However, the property owner must make provisions for connections to the system, including installation of sewer laterals and dry sewer lines within the project or mandatory connection when located within 330 feet of an existing sewer line.

Carson Valley Region

The three public wastewater systems in the Carson Valley are (1) the Douglas County North Valley Wastewater Treatment Service Area (NVWTSA), (2) the Minden-Gardnerville Sanitation District (MGSD), and (3) Indian Hills GID (IHGID).

Table PF6 - Wastewater Service Providers in the Carson Valley

	Douglas County North Valley	MGSD	Indian Hills GID
Current Treatment (MGD)	0.30	1.5 to 1.6	0.30
Treatment Capacity	0.68	2.8	0.60
Number of Equivalent Dwelling Units (EDUs)	2,599	7,513	N/A

Source: 2015 CH2M Hill Technical Memos on North Valley Wastewater Treatment Plant (NVWTP), MGSD Interview, MGSD Master Plan (2012). Treatment and capacity are noted in millions of gallons per day (MGD).

North Valley Wastewater Treatment Service Area

The NVWTPSA currently encompasses the regions of East Valley/Johnson Lane, North County, Airport, Walley’s, Genoa, Genoa Lakes, and Canyon Creek/Montana. The North Valley Wastewater Treatment Plant recently completed a facility upgrade to double the treatment capacity to 680,000 gallons per day (0.68 MGD). With this facility expansion, the NVWTP has the capacity to treat an additional 3500 EDUs.

Minden Gardnerville Sanitation District

The MGSD Wastewater Treatment Facility is located in Minden and serves the Towns of Minden and Gardnerville. By contract, they also service the Gardnerville Ranchos area, as well as other developments such as the Bently Science Park and the Washoe Tribe, which are not located within the annexed area of the district but are within the district service area. The secondary treated effluent is stored in 600 acre-foot reservoirs located on Muller Lane. Effluent disposal is by irrigation on approximately 2,000 acres of land at the Gallepi Ranch (formerly Dangberg Ranch) and Bently property, which are located north of the treatment facility. MGSD is currently treating approximately 1.5 to 1.6 MGD with a treatment capacity of 2.8 MGD. The MGSD facility has the capacity to treat an additional 10,000 EDUs.

Indian Hills General Improvement District

The IHGID Wastewater Treatment Facility is located in the southern portion of the district and serves the Indian Hills/Jacks Valley community and portions of the Genoa community. Effluent is stored in a series of storage ponds, and disposal is on the Sunridge Golf Course located east of Highway 395. The IHGID is currently treating 300,000 gallons per day (0.3 MGD) and has a treatment capacity of 600,000 gallons per day.

Topaz Region

The Topaz Lodge in the Topaz Lake Community Plan is served by the Topaz Lodge Wastewater Treatment System, a package treatment plant with a secondary treatment process, extended aeration, and filtration and chlorination. Effluent disposal is through a leach field. The rated capacity of the treatment plant is 0.025 MGD, which can be reached on a busy weekend day, according to the Topaz Lake Area Water & Wastewater Master Plan. This facility serves only the Topaz Lodge; all other uses in the Topaz Region are served by individual sewage disposal systems.

Tahoe Basin Region

In the Lake Tahoe Basin Region of Douglas County, there are five public wastewater systems: (1) Douglas County Lake Tahoe Sewer Authority (formerly DCSID), which provides service to its own service area as well as four additional separate Districts, (2) Kingsbury GID, (3) Elk Point Sanitation District, (4) Tahoe Douglas Sewer Improvement District, and (5) Round Hill GID. The Douglas County Lake Tahoe Sewer Authority has a rated treatment capacity of 3.75 MGD. After treatment at their facility, the reclaimed effluent is pumped out of the Lake Tahoe Basin to the east side of the Carson Valley, where it can be used for agricultural irrigation purposes.

1. Douglas County Lake Tahoe Sewer Authority

The Douglas County Lake Tahoe Sewer Authority serves five separate Districts: KGID, RHGID, Elk Point Sanitation District, Tahoe-Douglas District, and its own service area. The facility has a rate capacity of 3.75MGD. After treatment, the reclaimed wastewater is pumped out of the Lake Tahoe Basin to the Carson Valley, to either the Park Cattle Company Land Application Site or Bently Reservoir. Effluent is stored at the Bently Reservoir until it is used to irrigate seasonal crops (alfalfa) at the Bently Agro-dynamics Land Application Site. The Buckeye Creek effluent storage reservoir is currently off-line.

2. Kingsbury General Improvement District (KGID)

KGID, a Tahoe-based system, collects wastewater from the portion of the Summit Village and Tahoe Village areas, which extend into the Sierra Regional Plan. KGID contracts with DCSID (not affiliated with Douglas County) for sewer treatment and disposal services.

Diagrams PF9–PF11 display the service areas for different wastewater providers. Diagram PF10 displays the MGSD service boundary and the current district boundary. It should be noted that district boundary does not reflect areas where MGSD provides contracted services.

3. Elk Point Sanitation District

The Elk Point Sanitation District, established in 1969 per NRS 318, funds operations furnishing sanitary sewer facilities within the Elk Point area.

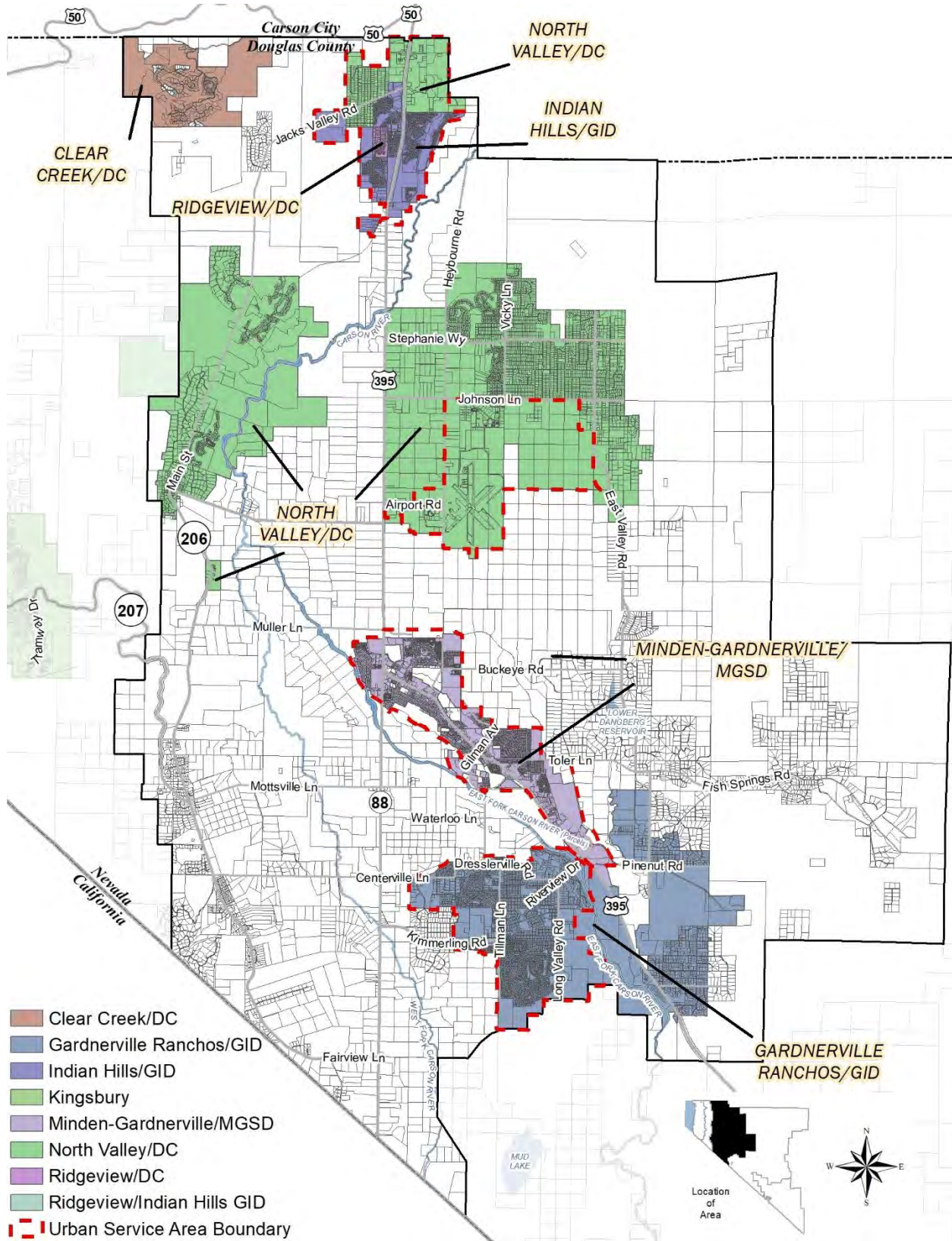
4. Tahoe Douglas Sewer Improvement District (TDSID)

TDSID, established in 1969, per NRS 318, is a sewer collection district on the east shore of Lake Tahoe. The District maintains 19 pump stations and 40 miles of sewer line.

5. Round Hill General Improvement District (RHGID)

RHGID, a Tahoe-based system, collects wastewater from the area in the Round Hill Community Plan. RHGID contracts with the Douglas County Lake Tahoe Sewer Authority (not affiliated with Douglas County) for sewer treatment and disposal services.

DIAGRAM PF9 - WASTEWATER SERVICE AREA IN THE CARSON VALLEY REGION



**DIAGRAM PF10 - WASTEWATER SERVICE AREA, MINDEN-GARDNERVILLE
SANITATION DISTRICT**

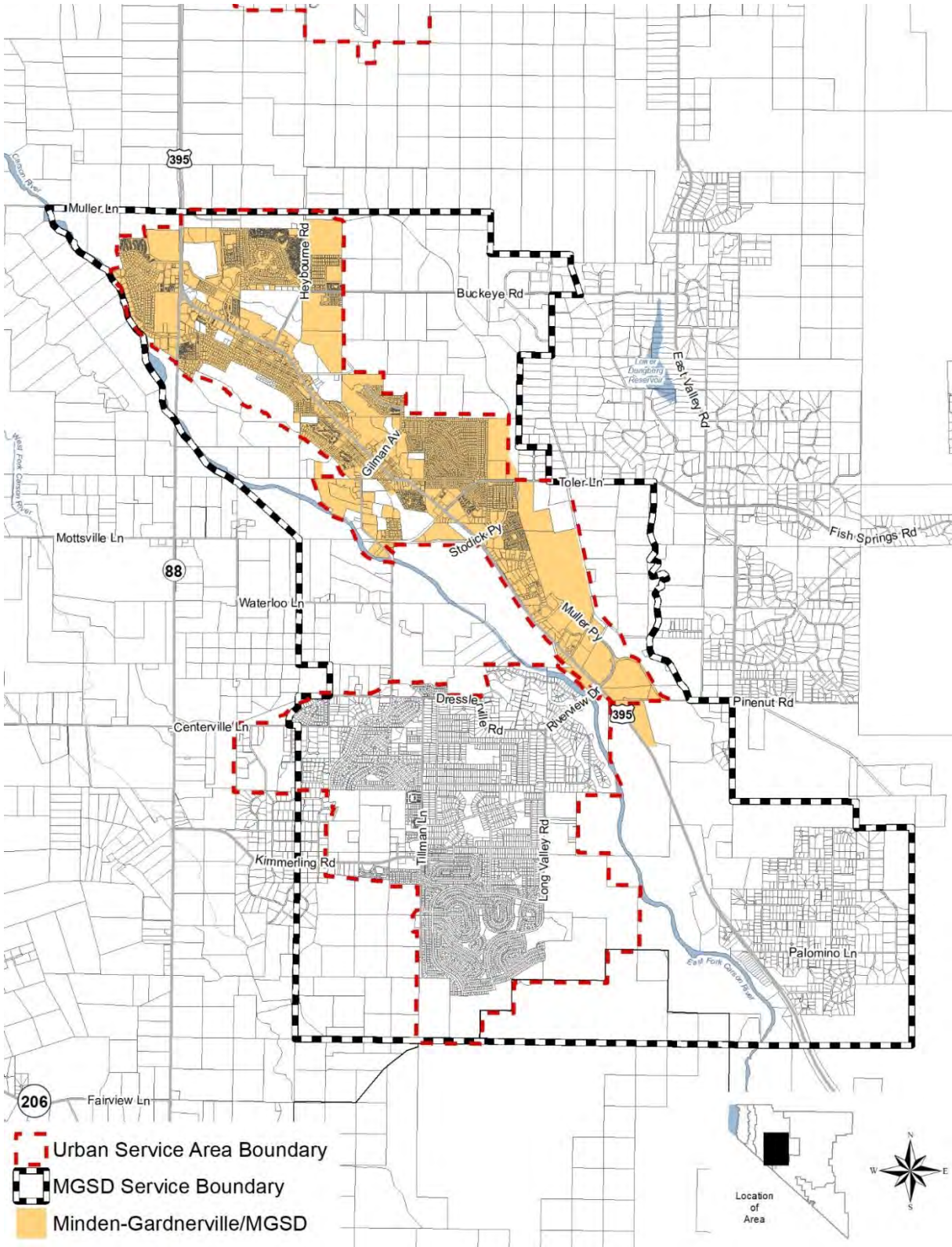
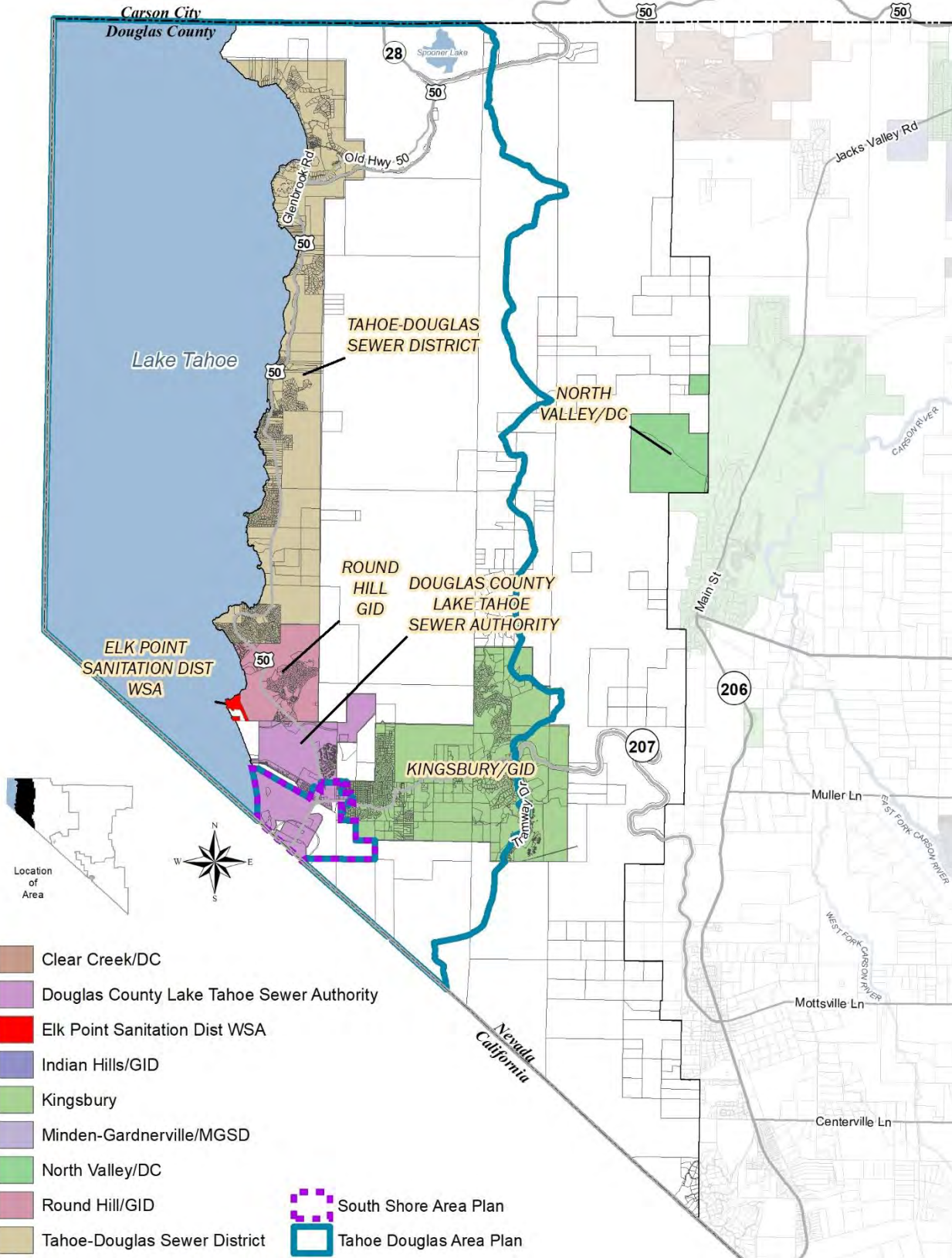


DIAGRAM PF11 - WASTEWATER SERVICE IN THE TAHOE BASIN REGION



INDIVIDUAL DISPOSAL SYSTEMS

There are approximately 5,960 parcels in Douglas County that contain septic systems, which are primarily concentrated in the Johnson Lane, Ruhestroth, and East Valley communities.

In recent technical memos on the North Valley Wastewater Treatment Plant, engineering consultants CH2M Hill stated there were 421 parcels located within 330 feet of sewer lines and another 1,048 parcels in the Johnson Lane community that are more than 330 feet from the nearest sewer line. County code requires those parcels within 330 feet to hook up to sewer services, thereby reducing septic tank concentrations while also increasing flows to the County’s wastewater treatment plant.

PUBLIC WASTEWATER SYSTEM DEFICIENCIES

The recent Douglas County’s North Valley Wastewater Treatment Plant expansion cost approximately \$12 million. Funding for this project was provided by Redevelopment Agency funding, State Revolving Funds (SRF), CIP funds, and CDBG funds.

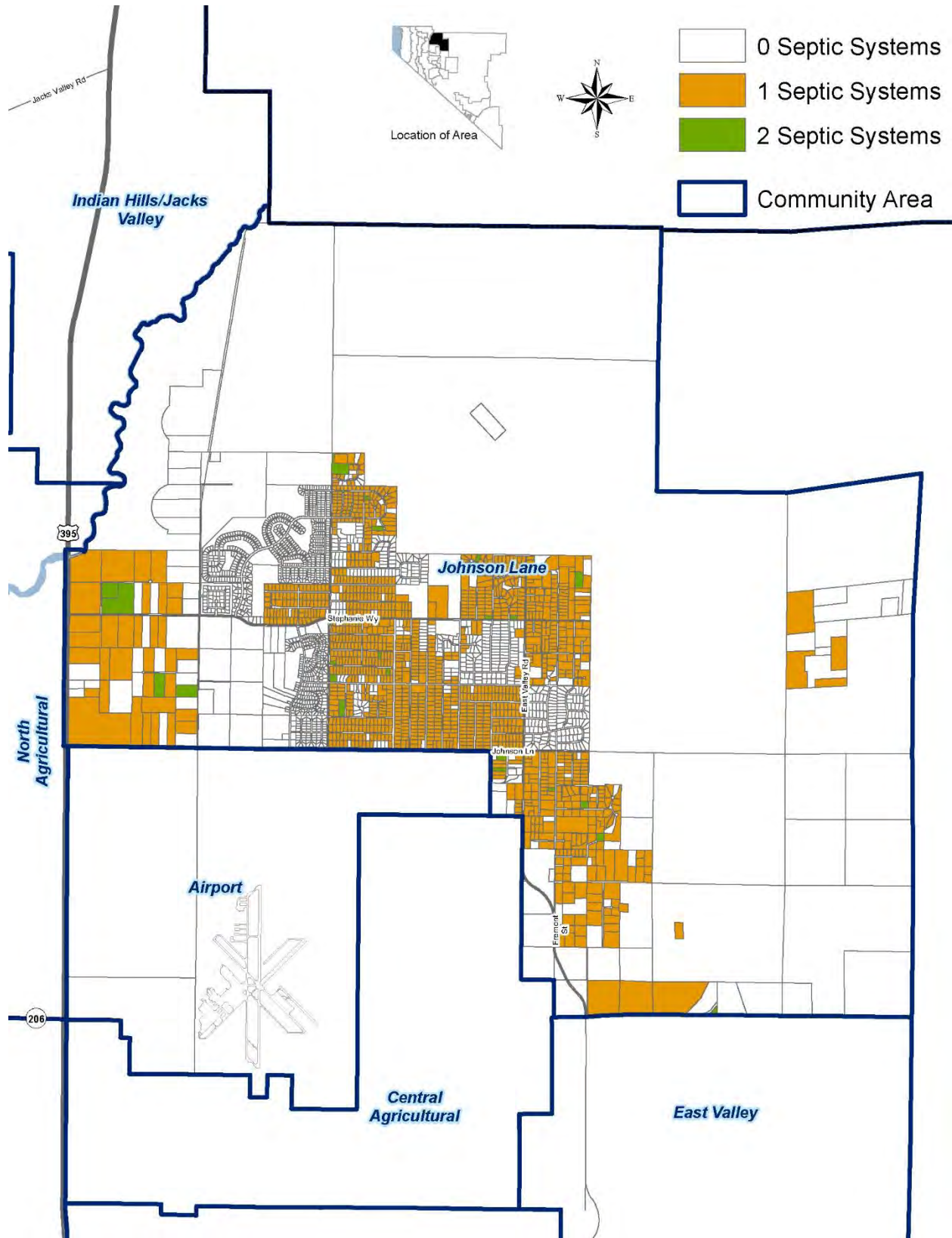
Wastewater system upgrades have been carried out for the Indian Hills GID, as shown in Table PF7 below. The USDA Rural Development Program provided a loan of \$1.5 million for sludge dewatering. The Pine View Estates south of Ruhestroth has also obtained assistance from the USDA Rural Development program to evaluate the septic problems within this subdivision.

Table PF7 - USDA Rural Development Community Program Loans and Grants for Wastewater

Recipient	Project	Project Description	Fiscal Year	Date Obligated	USDA Loan Amount	USDA Grant Amount
Indian Hills GID	Sludge Dewatering	Sludge Dewatering	FY11	8/1/11	\$1,512,000	
Pine View Estates H.O.A.	SEARCH Grant	PER/ER for wastewater	FY15	5/19/15		\$30,000
Total					\$1,512,000	\$30,000

Source: USDA RD Community Program

DIAGRAM PF12 - SEPTIC SYSTEMS IN THE JOHNSON LANE COMMUNITY PLAN



SOLID WASTE

Douglas County is required to submit a solid waste management plan to NDEP every five years, pursuant to NAC section 444.658. The current Solid Waste Management Plan for the County was approved by NDEP on April 9, 2014. A 2020 update to the plan is in process, pending NDEP review. A voter-initiated ballot measure that restricts mandatory garbage service for County residents was passed in the 1994 general election, but it allows residents to request garbage pick-up services on a voluntary subscription basis. The only mandatory trash service is in the Towns of Gardnerville and Minden. Douglas Disposal has the current franchise agreement with Douglas County. Solid waste is transported either to the Douglas County Transfer Station or the South Tahoe Refuse Transfer Station. Waste is consolidated at the Transfer Stations and then transported to the Lockwood Sanitary Landfill in Storey County or to the Carson City Landfill. Douglas County’s only landfill closed in 1993. The design capacity of the Douglas County Transfer Station is 112.5 tons per day. According to the 2014 Solid Waste Management Plan, the current usage at the Douglas County Transfer Station is 69.3 tons per day.

Recycling

Per NRS 444A, only six counties in Nevada are currently required to provide recycling and hazardous waste disposal programs. Counties with populations greater than 100,000 (Clark and Washoe Counties) are required to provide curbside recycling. Counties with populations between 45,000 and 100,000 are required to provide recycling and hazardous waste centers but are not required to provide curbside recycling. Carson City and the City of Elko do provide curbside recycling to their residents, even though both communities are below the 100,000-population threshold.



The only curbside recycling in Douglas County is in the Tahoe Basin with the Blue Bag single-stream recycling program. Douglas Disposal provides numerous recycling programs in the Carson Valley, ranging from direct drop-off at the Douglas County Transfer Station to community-based recycling centers at area elementary schools and other Town and GID locations, but there is no curbside recycling-program.

Table PF8 compares recycling rates for Nevada, Carson City, Douglas County, and Washoe County. The recycling rate is based on the ratio of municipal solid waste (MSW) that is recycled to the tons of total MSW generated (which includes recycled MSW). The State of Nevada’s recycling goal is 25 percent, and Douglas County has consistently

exceeded this rate, averaging 55.3 percent from 2013 through 2017. By comparison, the State of Nevada’s recycling rate averaged 23.1% for that same time period.

Table PF8 - Recycling Rates for Nevada, Douglas County, and Adjacent Counties

County	2014	2015	2016	2017
Douglas County	55.5%	62.3%	49.6%	51.6%
Carson City	29.2%	28.5%	29.0%	26.7%
Washoe County	33.5%	31.4%	29.5%	24.6%
State of Nevada	23.8%	20.8%	20.7%	21.0%

Source: 2019 Recycling and Waste Reduction Report, Nevada Division of Environmental Protection

The County’s high recycling rate is likely the result of two programs: (1) the Blue Bag program in the Tahoe Basin, and (2) the composting and biofuel programs operated by private businesses, such as Bently Ranch and Full Circle Compost. Douglas Disposal commenced a six-month pilot curbside recycling program in February 2017 for 140 customers in Gardnerville Ranchos. This was a single-stream pilot recycling program. The Town of Gardnerville also commenced a curbside pilot recycling program in 2017, which served 180 customers. Single-stream recycling, which allows residents to place all recyclables into one container, as opposed to sorting paper, glass, and cans into different containers, has been shown to increase the recycling rate.

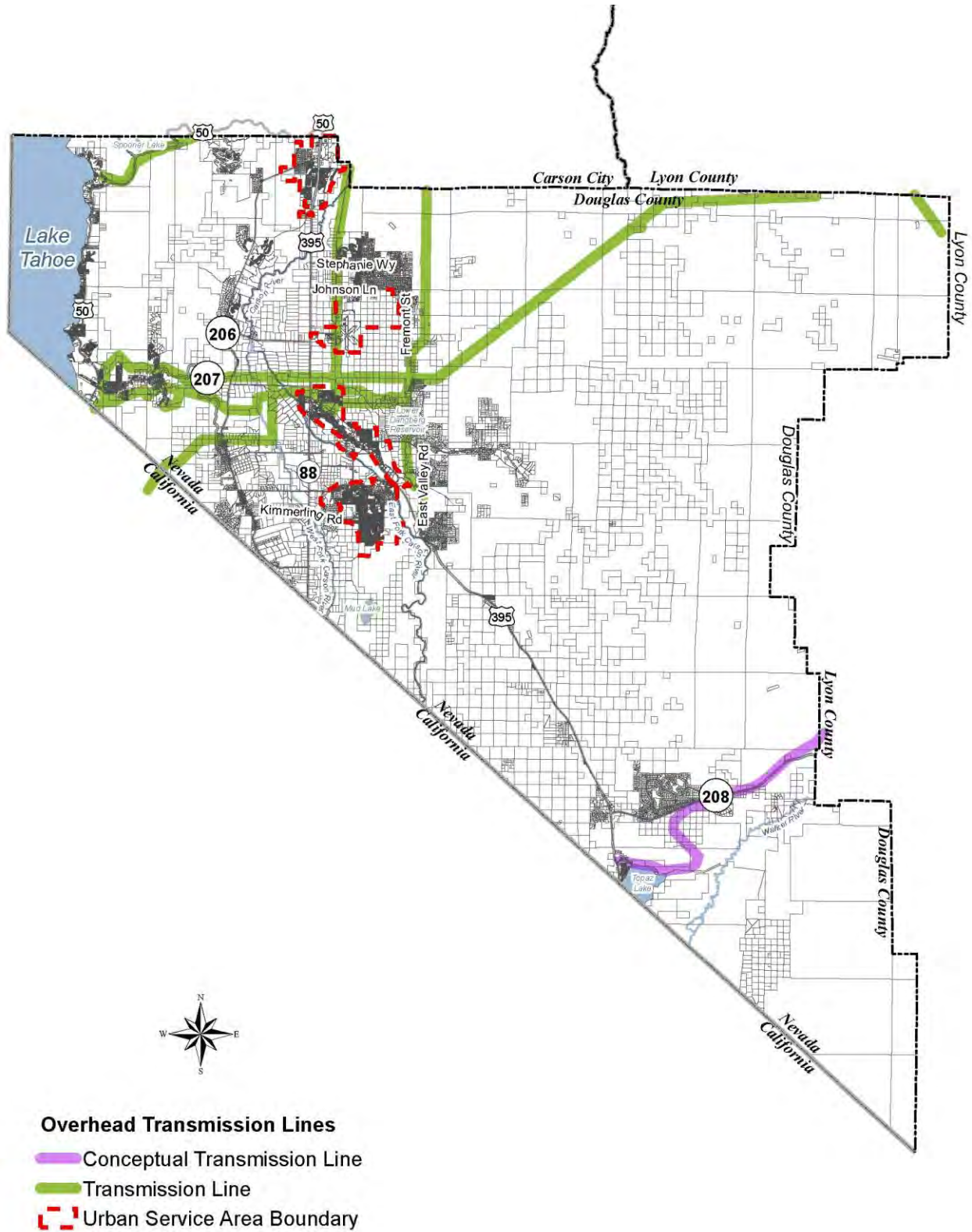
ABOVEGROUND UTILITY PLAN

In 2013, several sections of the planning enabling sections of the NRS were amended to require counties to add aboveground utility plans (NRS 278.165) to the Public Facilities, Services, and Recreation Element; this Element was amended in March 2015 to incorporate such a plan.

In compliance with the NRS, the County adopted, by reference, the BLM Utility Corridors identified in the Carson Field Office Consolidated Resource Management Plan (2001) and subsequent amendments. Additional corridors may be adopted through the County’s Master Plan Amendment process, as requested. Diagram PF13 depicts the location of utility corridors in the 2001 BLM Carson City District Resource Management Plan. One utility corridor is depicted in the Topaz Region near the Walker River, and a second corridor is located in the northeast corner of the County.



DIAGRAM PF13 - UTILITY CORRIDORS



GENERAL GOVERNMENT SERVICES

Douglas County owns and operates a number of facilities to provide government services to residents in and around the County. These facilities house over 20 departments, including several with multiple divisions. However, with a county-wide population approaching 50,000 residents, operations in many departments have exceeded capacity at multiple locations, requiring some divisions to be split between multiple buildings. Functions such as assessments, recording, records management, elections, planning, permitting, code enforcement, public works, courts, public safety, emergency communications, internal service departments (information technology, finance, and human resources), and similar activities all require additional space. The County has conducted two space needs assessments to determine the existing capacity, useful life, technology requirements, and accessibility of County facilities.

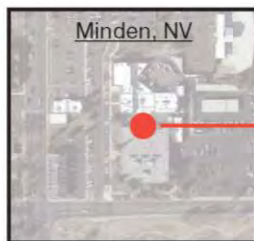
Douglas County Law Enforcement

Judicial Law Enforcement Center (JLEC)

EXISTING SITE PLAN

Existing Site Details

- Location: 1038 Buckeye Rd.
- Total Number of Buildings: 1
- Major Roads:
 - Buckeye Rd.
 - Water St.
 - U. S. Hwy 395
- Neighboring Land Use:
 - West: Hotel/Casino
 - South: Office/Retail
 - East: Distillery
 - North: Martin Slough



tsk

Source: Douglas County Justice & Law Enforcement Center 2020 Analysis for Renovation and Expansion, prepared by TSK Architects for Douglas County, June 2020.

The existing Douglas County JLEC was constructed in 1980 when the county population was approximately 19,400 residents. The building is two stories, with concrete masonry exterior and metal framed interior partitions. The original facility included a large open lobby area, three sizable waiting areas, a two-story sky lit atrium, and an exercise area. In response to expanding needs, all of these areas have been converted to security functions and department offices.

The first floor is dedicated to the Sheriff's operations and includes the County Jail, which was expanded in 2011 and solidified the building as the primary jail location. The second floor of the facility houses two district courtrooms and one East Fork justice courtroom, the District Attorney's office, Constable's office, court administration, court computer, Justice and District Court Clerks' offices, and juvenile probation. The law library and the Court Appointed Special Advocates (CASA) and Special Advocates for Elderly (SAFE) offices are also on this floor.

When it opened in 1982, the facility was planned to meet the justice and law enforcement needs of Douglas County for 20 years. Now, some 33 years later, with a county-wide population approaching 50,000 residents, building operations are showing signs of pressure. As the population has grown, so have the needs of the center. The facility has significant, immediate deficiencies in security, overcrowding, and accessibility. These issues, which reflect increased population and caseloads, prevent the current users and staff from operating in a safe and efficient manner.

The JLEC assessment examines the need for additional courtrooms, staff, and net square feet based on different population projections. The assessment reviewed programming and site concepts for additional expansion. The following represents the immediate deficiencies of all agencies in the JLEC building:

- The District Attorney's office has inadequate office space on site for its support and professional staff and inadequate conference areas for conferences, meetings, witness preparation, and victim support and preparation.
- There is no secure access to the facility for judicial officers.
- There is no separation for victims and perpetrators of criminal offenses. There are no private meeting spaces for attorneys and clients. The courtrooms, hallways, and clerk's offices are overcrowded.
- The Sheriff's office has inadequate space for the patrol, administration, records, and investigations divisions. The street enforcement team is off-site. The investigations division does not have adequate working space or interview facilities.

- The alternative sentencing department does not have a secure waiting area, adequate space, or adequate separation between offices and laboratory facilities.
- Building security has a design bottleneck at the entrance to the facility.
- The Constable's office has minimal, inadequate office space.
- An additional courtroom and space for associated support staff is needed. This facility would provide room for an additional Justice of the Peace or for support staffing by the Tahoe Justice of the Peace. It would also provide space for specialty courts, child support enforcement, and other quasi-judicial and administrative proceedings.
- Projected needs are included in the analysis for deliberate and efficient capital improvements planning.

The County has taken some steps to mitigate some of these concerns. The County leases a building across the street from the JLEC facility for the majority of the civil division of the District Attorney's office; this lease frees up space within existing offices for the District Attorney to expand into a bigger area. In addition, the County has contracted with TSK Architects to develop design options to renovate and expand the existing facility or to construct a new facility on a site to be determined. The 2017 preliminary cost estimate of the first design to renovate and expand the existing facility (the current option contemplated by the County) is in excess of \$30 million.

Douglas County Public Works

Douglas County Public Works (DCPW) offices and main facilities are located on the northern end of the shared Douglas County Service Yard adjacent to the Minden-Tahoe Airport. The DCPW main office is located in Minden at 1120 Airport Rd., Building F-2. DCPW also maintains satellite facilities throughout the county, including a separate facilities maintenance workshop, satellite facilities at utility pumping stations, and sewer treatment facilities.

The assessment for DCPW analyzed existing space needs and projected needs based on increases in population over time. A conceptual cost estimate for the proposed improvements is \$15.5 million.

Aerial View of Current Douglas County Public Works Facilities

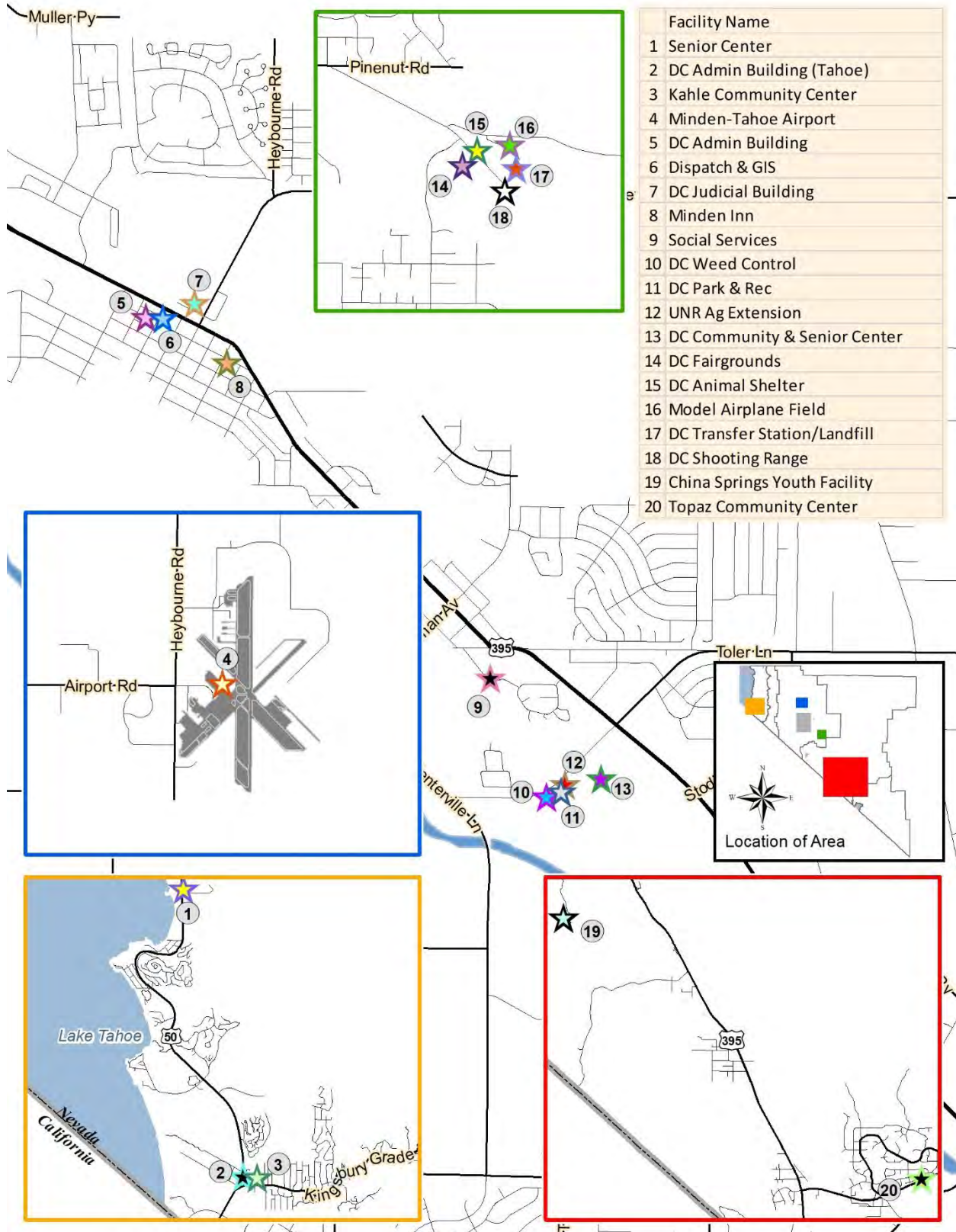


Source: Douglas County Public Works Facilities Master Plan, March 2019, prepared by TSK Architects.

DCPW divisions are assigned a range of facilities and assets on this site, including:

1. Administration/Engineering - Building F-2
2. Fleet Maintenance - Building H-2
3. Exterior and Conex Storage
4. Transportation Engineering Yard
5. Roads/Utility Services Shops

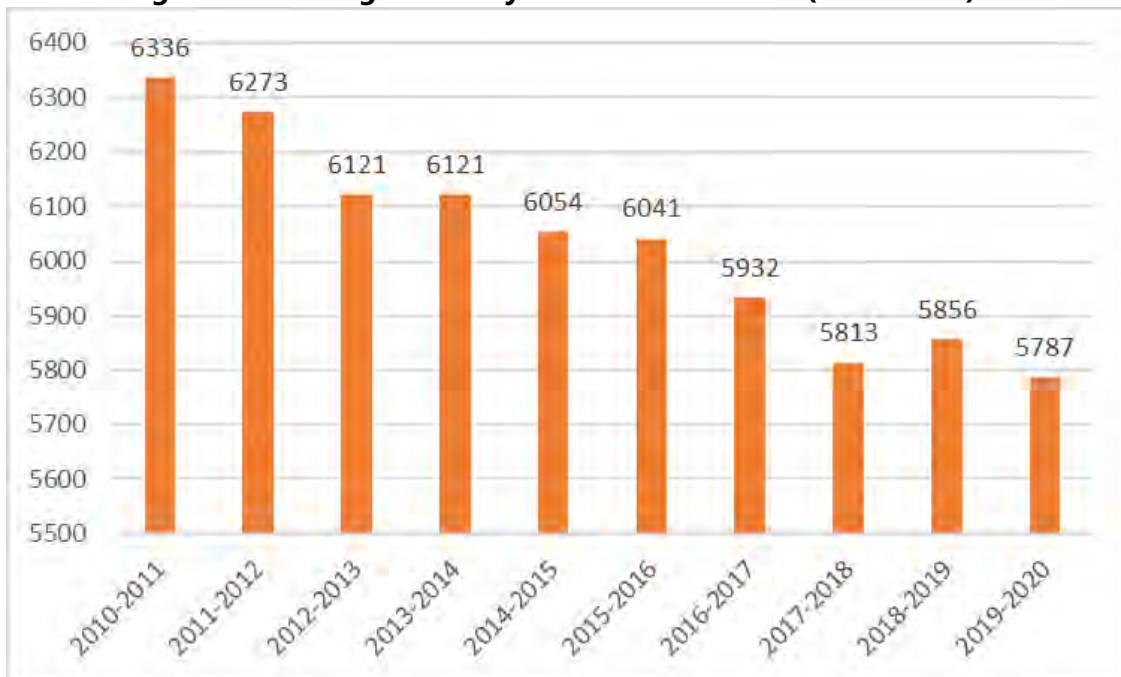
DIAGRAM PF14 - DOUGLAS COUNTY FACILITIES



DOUGLAS COUNTY SCHOOL DISTRICT

Enrollment for the 2019–2020 school year for Douglas County School District was just over 6,000 students. The District’s total student enrollment has continued to decline for several years. Figure PF1 displays the enrollment figures, starting with the 2010–2011 school year. Total enrollment was 6,336 in the 2010–2011 school year but decreased to 5,786 students in the 2019–2020 school year. Total enrollment was 7,035 in the 2005–2006 school year.

Figure PF2 - Douglas County Student Enrollment (2010–2020)



Source: State of Nevada Department of Education

According to a letter from the School District dated June 20, 2020, there is theoretical excess capacity in each elementary, middle, and high school in Douglas County. The ability to serve additional students resulting from growth would depend on the location of future development. The School District indicates it may need to rezone existing school boundaries to accommodate increased demand. A review of student capacity numbers provided by the School District Business Office indicates there is enough capacity to serve 1,733 additional students.

Table PF9 provides information on the estimated capacity for each school along with the actual student enrollment for the 2019–2020 school year.

Table PF9 - School Capacity vs. Actual Enrollment

School	Estimated Capacity	2019–2020 Enrollment	Excess Capacity	Utilization %
Elementary School				
CC Meneley Elementary	563	474	89	84%
Gardnerville Elementary	570	387	183	68%
Jacks Valley Elementary	563	441	122	78%
Minden Elementary	468	417	51	89%
Piñon Hills Elementary	689	290	399	42%
Scarselli Elementary	594	397	197	67%
Zephyr Cove Elementary	253	148	105	58%
Middle School				
Carson Valley Middle	802	717	85	89%
Pa Wa Lu Middle	782	561	221	72%
High School				
Aspire Academy	100	86	14	86%
Douglas High School	1920	1677	243	87%
George Whittell	354	144	210	41%
Total	7,658	5,739*	1,919	75%

Source: Nevada Report Card, October 2020

* Note: Nevada Report Card and State of Nevada Department of Education have slightly different numbers for enrollment.

Table PF10 contains an analysis of the number of students enrolled by residential unit in each school zone boundary. Monitoring enrollment by unit in each zone will help the County project anticipated enrollment numbers in certain areas that are anticipated to be impacted by growth in the coming years.

Table PF10 - School Enrollment by Residential Unit

School	Residential Units	2019–2020 Enrollment	Enrollment per unit
Elementary School			
CC Meneley Elementary	3,293	474	0.14
Gardnerville Elementary	3,033	387	0.13
Jacks Valley Elementary	3,318	441	0.13
Minden Elementary	3,282	417	0.13
Piñon Hills Elementary	2,811	290	0.10
Scarselli Elementary	3,282	397	0.12
Zephyr Cove Elementary	5,554	148	0.03
Middle School			
Carson Valley Middle	11,515	717	0.06
Pa Wa Lu Middle	8,096	561	0.07
High School			
Aspire Academy	0	86	N/A
Douglas High School	19,610	1677	0.09
George Whittell	5,554	144	0.03

DIAGRAM PF15 - RESIDENTIAL COUNT BY ELEMENTARY SCHOOL

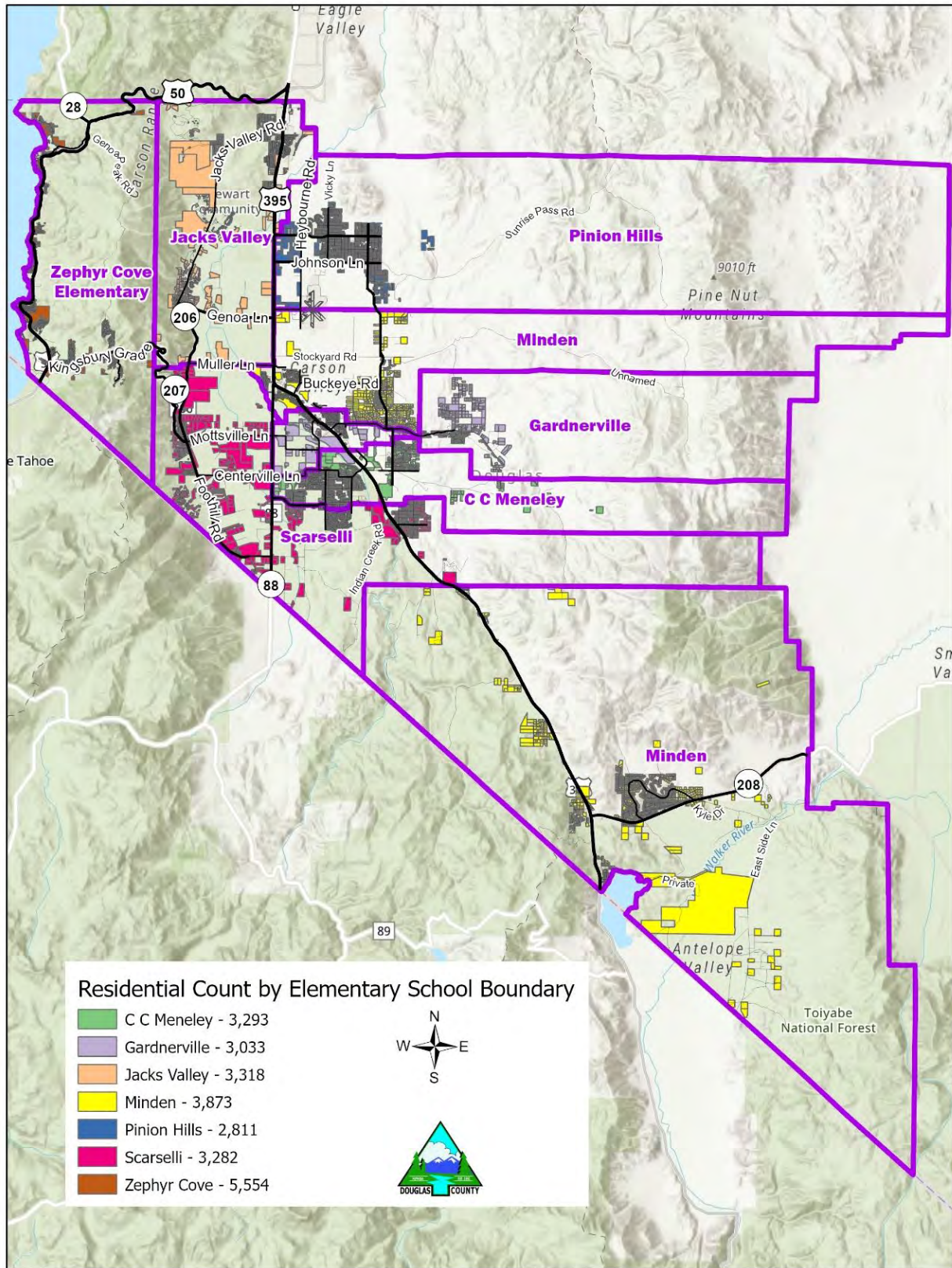


DIAGRAM PF16 - RESIDENTIAL COUNT BY MIDDLE SCHOOL

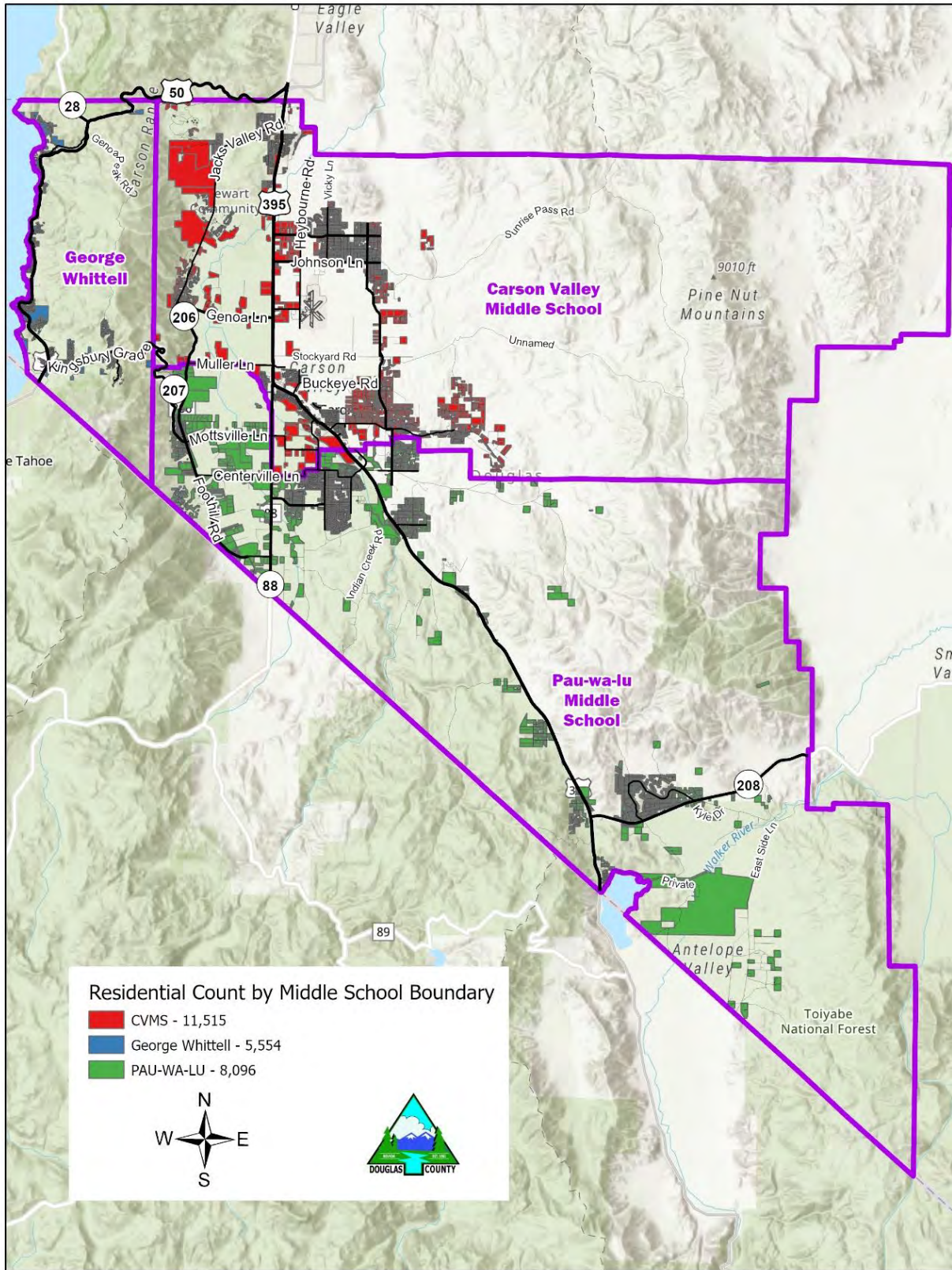
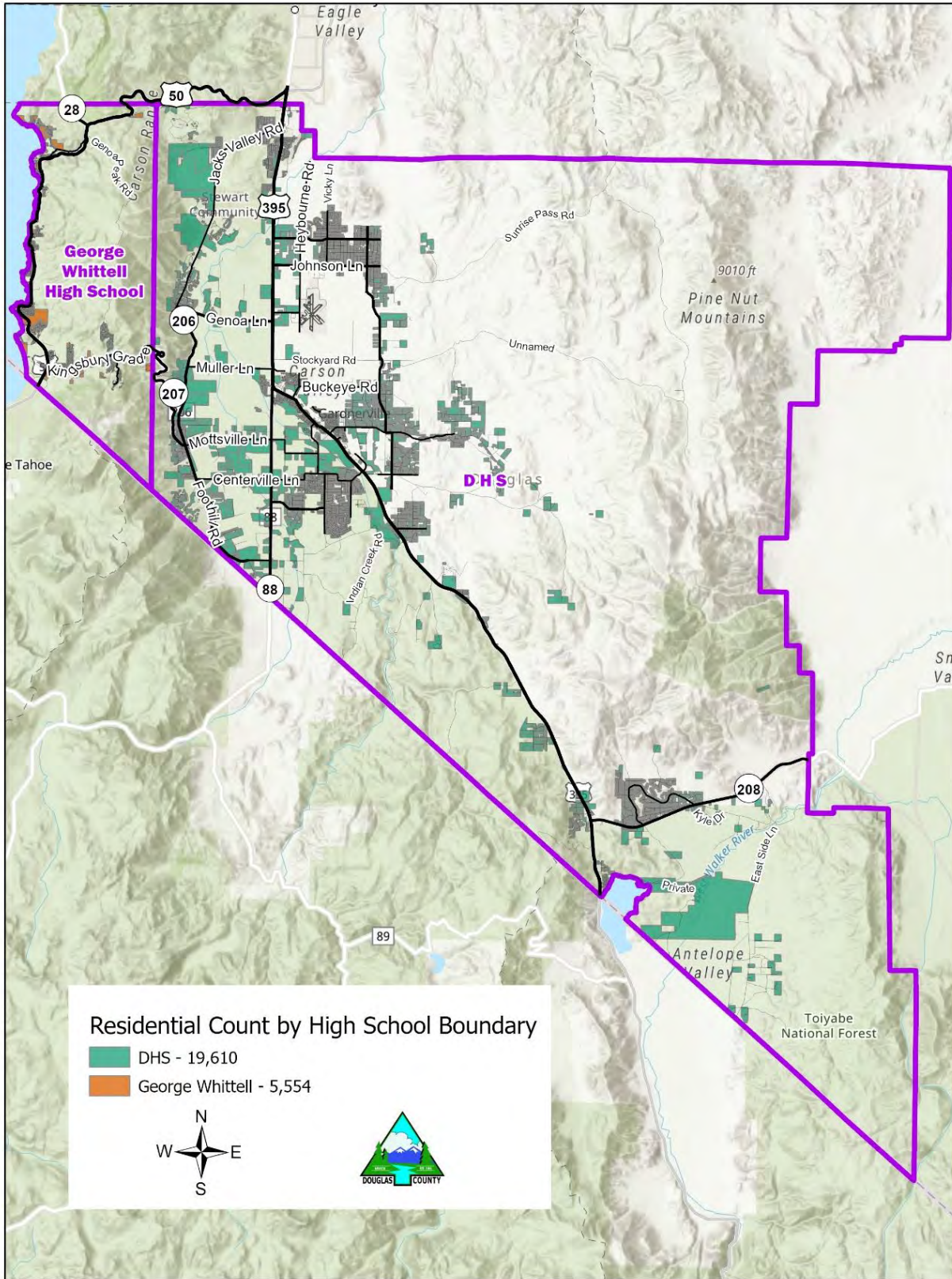


DIAGRAM PF17 - RESIDENTIAL COUNT BY HIGH SCHOOL



DOUGLAS COUNTY PUBLIC LIBRARY

The Douglas County Public Library system consists of the main library in Minden, the Lake Tahoe Branch Library in Zephyr Cove, a bookmobile (mobile library), a satellite library at China Spring Youth Camp and Aurora Pines Girls Facility, which includes dormitory and classroom collections, and a small reading library at the Lake Tahoe Juvenile Detention Facility.

The mission of the Douglas County Public Library is to provide a wide range of library materials, services, and programs to meet the informational, recreational, and cultural needs of the citizens of Douglas County.

The Library offers an extensive range of services, materials, programs, and technology at both public facilities, including reference and referral in person, by telephone, and by email to assist residents in accessing information. The Library offers programs for children, teens, families, and seniors; delivery of materials to homebound patrons; borrowing of materials not available locally; display space for community interests, art, and exhibits; and orientation sessions for students and other youth groups. It also offers a variety of electronic databases accessible from the library, school, home, or work; downloadable eBooks, eAudiobooks, magazines, music, and movies; public-use typewriters and computers; wireless internet connectivity and wireless printing; individual instruction in technology resources and mobile technology; free test proctoring for distance learners; and technology for patrons with visual disabilities.

The Douglas County Public Library developed a long-range plan to maintain quality services, value, and convenience for patrons, which will be implemented over the next 10 years. The long-range plan guides the Library in achieving objectives and action plans and is designed to identify achievable goals with a commitment to meeting the needs of the residents of Douglas County.

Table PF11 - Library Visits (FY 2013 to FY 2019)

Year	No. of Visits
2012–13	148,834
2013–14	153,699
2014–15	120,192
2015–16	117,677
2016–17	113,119
2017–18	110,749
2018–19	116,490

Table PF12 – Registered Library Users

Fiscal Year	12–13	13–14	14–15	15–16	16–17	17–18	18–19
Total Number	37,112	38,286	35,216	32,652	32,050	31,173	29,999
Percentage of County Population	77.3%	79.9%	72.5%	67.7%	66.4%	64.5%	62.1%

The Douglas County Public Library budget is approximately \$1,500,000 per year for operating expenses and \$500,000 for services and supplies. Funding for the Library comes from a percentage of sales tax set by resolution of the Commission and general fund revenue. The Library Board of Trustees prepares and submits the annual budget to the County for final consideration and approval.

Specific library facility needs are:

- An expansion for the Minden Library of approximately 2,500 square feet to be used primarily for collection shelving and a shipping and receiving area, as identified in the 5-year Capital Improvement Plan
- Seating capacity of 196 or 4.1 seats for every 1,000 people served
- Increased public computer access, utilizing both desktop and laptop technology, to provide 72 workstations or 1.5 computers for every 1,000 people served
- Enhanced public programming space, including a large meeting room dividable into two or three separate spaces with seating capacity for 300, adequate storage, and current Audio Visual (AV) projection technology
- A computer lab to offer hands-on technology training
- A Teen Zone to provide space specifically for teenagers
- Two enclosed group study rooms for students, tutoring and similar uses
- Shelving to accommodate an increase in the physical collection of books and AV media with a total collection size of 190,000, excluding digital collections
- Increased incorporation of self-service technologies for improved staff productivity
- Increased volunteer and staff workspace and storage space

DIAGRAM PF18 - SCHOOL & LIBRARY FACILITIES IN NORTH COUNTY

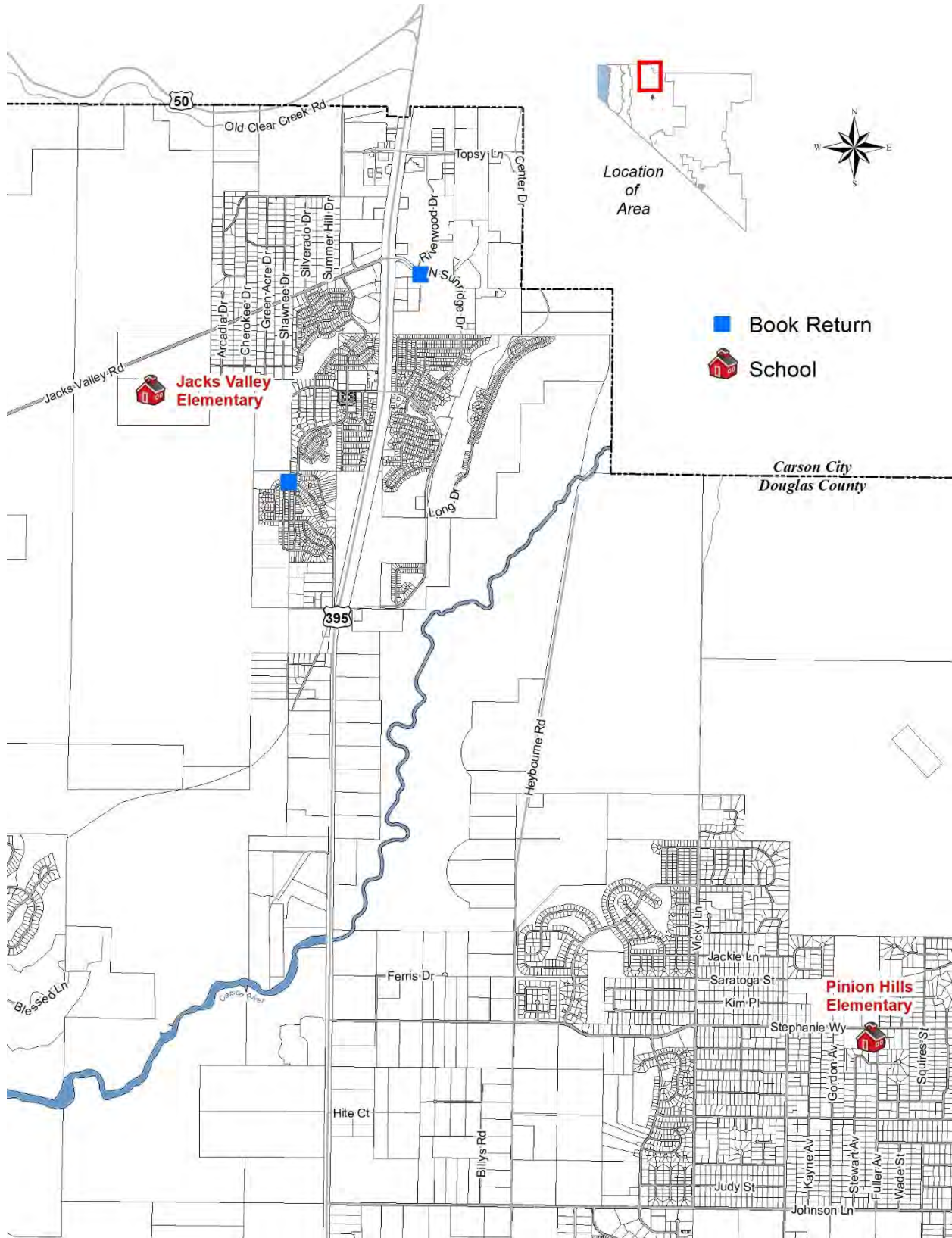


DIAGRAM PF19 - SCHOOL & LIBRARY FACILITIES IN THE CARSON VALLEY

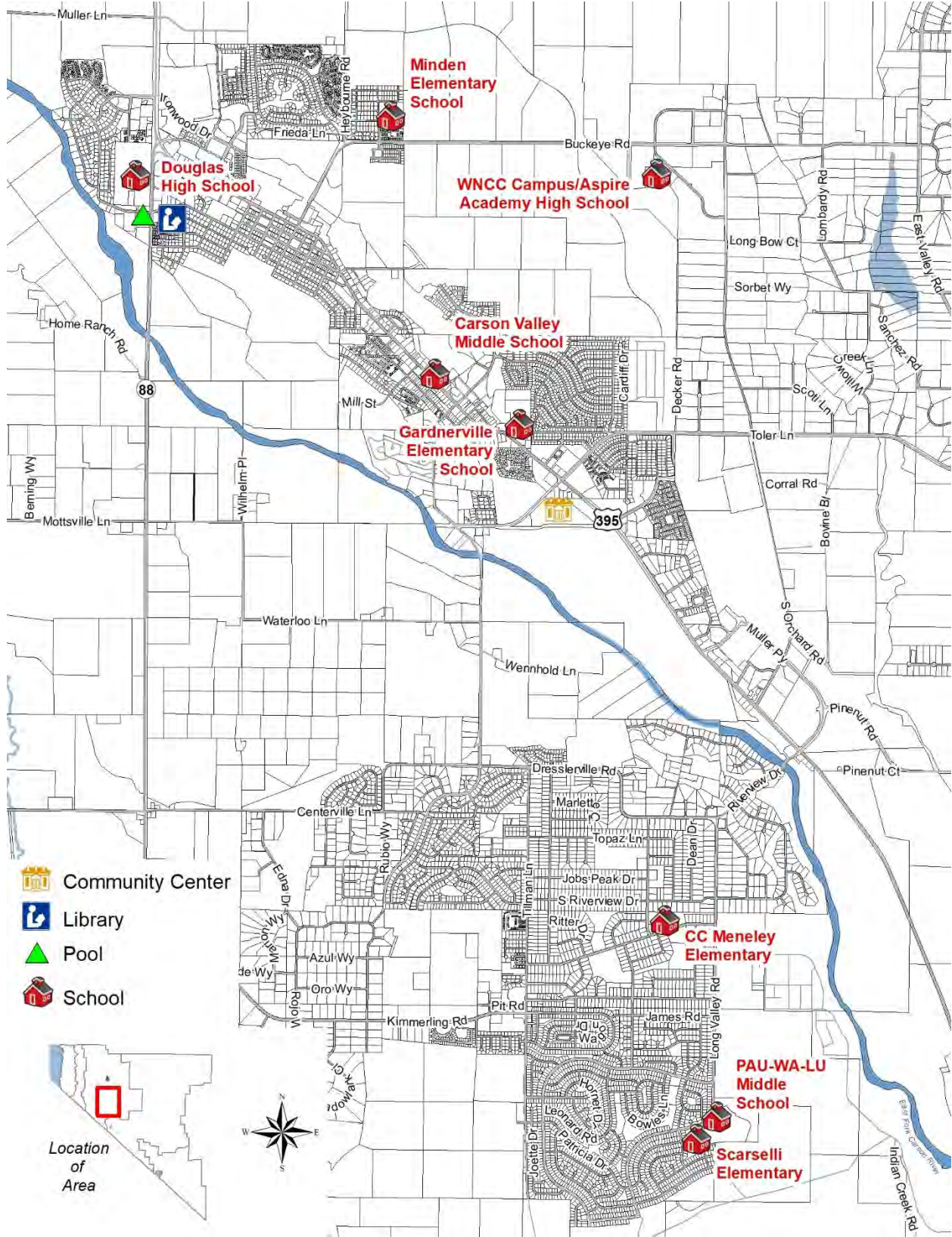


DIAGRAM PF20 - SCHOOL & LIBRARY FACILITIES IN THE PINENUT & TOPAZ REGIONS

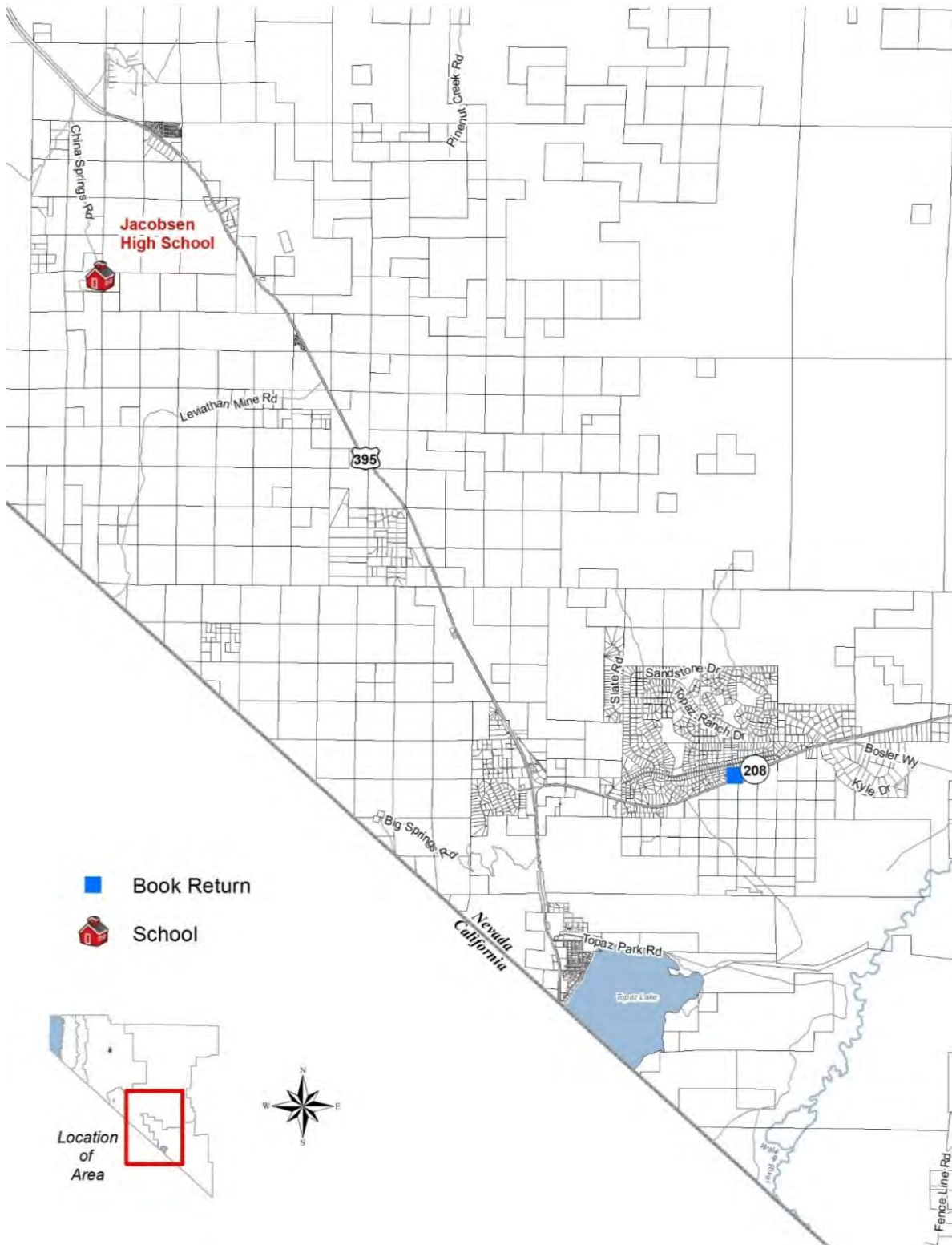


DIAGRAM PF21 - SCHOOL & LIBRARY FACILITIES IN THE TAHOE BASIN REGION



DOUGLAS COUNTY TRANSPORTATION MASTER PLAN

The Douglas County Transportation Master Plan (TMP) adopted in 2019 establishes a blueprint to address current and planned transportation challenges in the County through the year 2040. The TMP also identifies a range of policies and strategies to guide decision-making around eight transportation elements that make up the chapters of the TMP. The overarching goals of the TMP are:

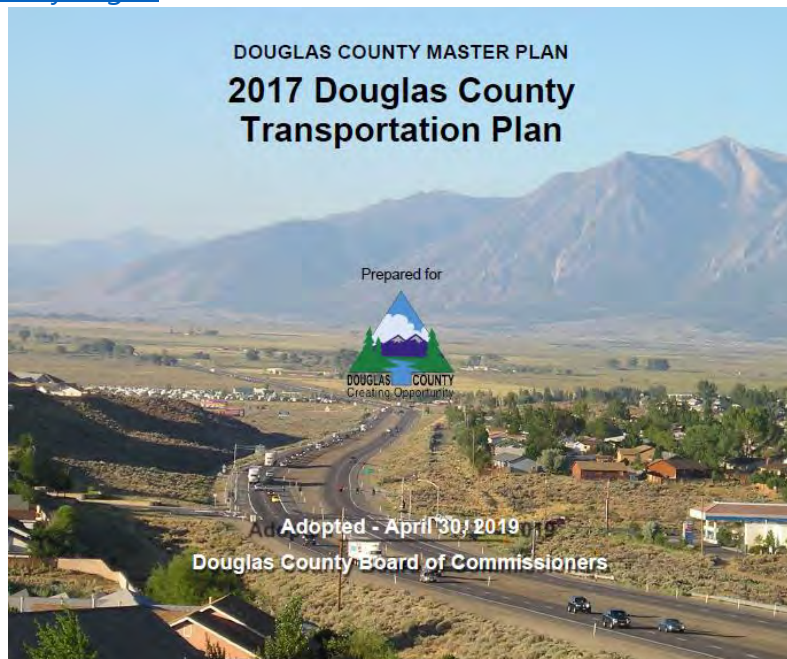
- Provide and maintain an integrated transportation system for the safe, efficient movement of people and goods throughout Douglas County.
- Provide appropriate transportation facilities to ensure a high quality of life for Douglas County residents.

TMP Elements:

- Historic and Projected Growth
- Travel Demand Modeling
- Streets and Highways
- Public Transportation
- Bicycle/Pedestrian/Trails
- Airport
- Financial
- Lake Tahoe

The Bicycle/Pedestrian/Trails Element of the TMP is comprised of two separate documents that are incorporated by reference: the Douglas County Comprehensive Trails Plan and the Douglas County Bicycle Plan. These documents identify bicycle and pedestrian facilities throughout the county, with the Douglas County Bicycle Plan supplementing the information contained in the Douglas County Comprehensive Trails Plan.

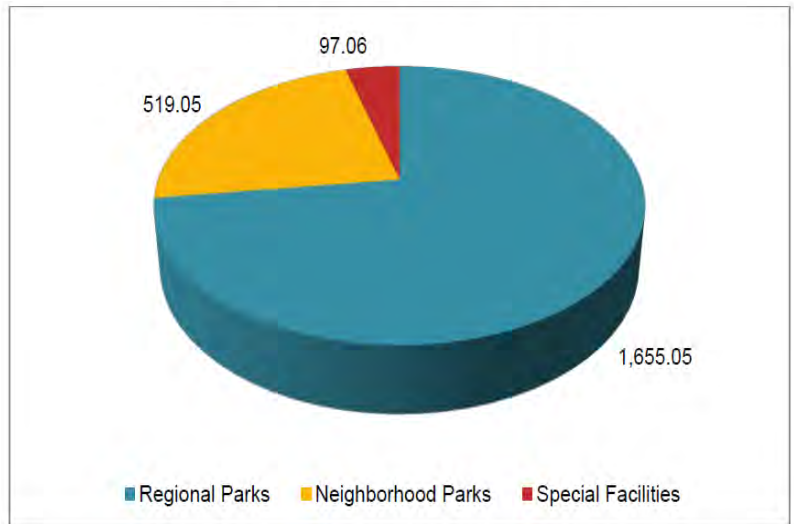
A copy of the Transportation Master Plan can be found on the County’s website at www.douglascountynv.gov.



PARKS AND RECREATION IN DOUGLAS COUNTY

Douglas County contains significant open space, parks, and recreation resources, including almost 250,000 acres of federal public lands managed by the U.S. Forest Service and the Bureau of Land Management. There are multiple social, environmental, and economic benefits associated with the development of parks and recreation as well as many challenges in meeting different and sometimes conflicting interests between recreation stakeholders (e.g., equestrians vs. bicyclists). The County is fortunate to have a voter-approved one-quarter cent sales tax and dedicated Lodgers License Tax to support the operation and maintenance of the County’s Park and Recreation Facilities. Because this funding is not tied to property tax, it does not increase proportionally with population increases.

Figure PF3: Park Acreage in Douglas County by Type



Parks and Recreation Inventory

The parks and recreation inventory in the County includes regional, neighborhood, and special facilities located in all areas. Tables PF13–PF15 show there are 1,655.05 acres of regional parks, 519.05 acres of neighborhood parks, and 97.06 acres of special facilities. Figure 3 does not include private recreation facilities, such as golf courses. Regional parks in Douglas County include Topaz Lake Regional Park, Van-Sickle Bi-State Park in Stateline, and Spooner Lake (Lake Tahoe State Park) in Glenbrook. River Fork Ranch in Genoa, which is owned by The Nature Conservancy, can also be considered a regional park. River Fork Ranch contains 805 acres and



Regional parks in Douglas County include Topaz Lake Regional Park, Van-Sickle Bi-State Park in Stateline, and Spooner Lake (Lake Tahoe State Park) in Glenbrook. River Fork Ranch in Genoa, which is owned by The Nature Conservancy, can also be considered a regional park. River Fork Ranch contains 805 acres and

includes public trails adjacent to the west fork of the Carson River.

Table PF13 - Regional Parks in Douglas County

Name of Facility	Acreege	Owner	Status
Cave Rock	3.21	State of Nevada	Developed
Nevada Beach	57.45	U.S. Forest Service	Developed
Round Hill Pines Resort	124.88	U.S. Forest Service	Developed
River Fork Ranch	805.00	The Nature Conservancy	Developed
Spooner Lake	478.51	State of Nevada	Developed
Topaz Lake Regional Park	164.60	Douglas County	Partially Developed
Zephyr Cove Beach/Resort	16.78	U.S. Forest Service	Developed
Van-Sickle Bi-State Park	4.62	State of Nevada	Developed
Total	1,655.05		

Table PF14 - Neighborhood/Community Parks in Douglas County

Name of Facility	Acreege	Owner	Status
Arbor Gardens Park	1.11	Town of Gardnerville	Developed
Blue Rock Park	1.56	Gardnerville Ranchos	Developed
Brautovich Park	4.60	Douglas County	Developed
Circle Park	1.08	Town of Gardnerville	Developed
Community Park	1.04	Town of Minden	Developed
Dresslerville Park	3.00	HOA	Developed
Genoa Town Park	1.04	Town of Genoa	Developed
Genoa Lane River Park (Willow Bend Park)	5.79	Douglas County	Undeveloped/Received Q1 Funds
Herbig Park	20.06	Douglas County	Developed
Heritage Park	3.95	Town of Gardnerville	Developed
James Lee Park	74.40	Indian Hills GID	Developed
Johnson Lane Park	74.24	Douglas County	Partially Developed
Kahle Park	17.53	Douglas County	Developed
Lampe Park	37.99	Douglas County	Developed
Minden Town Park	1.29	Town of Minden	Developed
Robert Spellberg Recreation Complex	20.76	Gardnerville Ranchos GID	Developed
Multi-Use Park	14.00	Douglas County	Developed
Rocky Bend Park	7.33	Douglas County	Undeveloped
Ranchos Aspen Park	20.03	Douglas County	Developed
Ranchos Birch Park	17.39	Gardnerville Ranchos GID	Undeveloped
Ranchos Conifer Park	11.55	Douglas County	Undeveloped
River Bend Park	3.68	Douglas County	Undeveloped/Received Q1 Funds
Saratoga Springs Park	13.10	HOA	Partially Developed
School Site Park	2.39	Douglas County	Developed
Seeman Ranch	31.21	Douglas County	Undeveloped
Stodick Park	15.00	Douglas County	Developed
Sunridge North Park	2.35	Indian Hills GID	Developed
Sunridge South Park	2.62	Indian Hills GID	Developed
Jake's Wetland Park	7.45	Town of Minden	Developed
Topaz Ranch Estates Park	9.25	Douglas County	Developed
Westwood Village	2.30	Town of Minden	Developed
Wildhorse Park	3.04	HOA	Developed

Table PF14 - Neighborhood/Community Parks in Douglas County

Name of Facility	Acreage	Owner	Status
Valley Vista Park	3.76	Indian Hills GID	Developed
Zephyr Cove Park	83.16	Douglas County	Developed
TOTAL	519.05		

There are currently 519.05 acres of neighborhood and community parks in Douglas County. Almost all of the parks listed in Table PF14 are fully developed. As shown in Table PF15, there are 97.06 acres of several special use facilities in Douglas County, including the Carson Valley Swim Center, Dangberg Home Ranch Historic Park, and Mormon Station.

Table PF15 - Special Use Facilities in Douglas County

Name of Facility	Acreage	Owner	Status
Bently Science Park	2.22	Bently Family	Developed
Carson Valley Swim Center	3.23	East Fork Swim District	Developed
Dangberg Home Ranch Historic Park	5.50	Douglas County	Developed
High School Tennis	2.00	Douglas County	Developed
Fairgrounds	35.40	Douglas County	Developed
Model Airplane Park	3.98	Douglas County	Developed
Mormon Station	2.38	State of Nevada	Developed
Shooting Range	39.35	Douglas County	Developed
Skate Park	3.00	Douglas County	Developed
Total	97.06		

The new Douglas County Community and Senior Center opened in December 2014. This 83,000-square foot facility has almost 1,000 visitors per day (as of September 2015), 1,854 total memberships, and 1,251 active annual memberships. The new senior center offers meals and activities and an adult day club to provide respite for caregivers. Diagrams PF22–PF26 depict the locations of regional parks, neighborhood parks, and special facilities in Douglas County.

Table PF16 - Community Centers

Name of Facility	Size (Square Feet)	Owner	Activities
Kahle Community Center	22,423	Douglas County	Gymnasium Kids Club Recreation Classes Sports Leagues
Community Center and Senior Center	83,000	Douglas County	Gymnasium Recreation Classes Sport Leagues Adult Day Club
Tahoe Senior Center	2,178	Douglas County	Volunteer Activities
Topaz Ranch Estates	3,603	Douglas County	Congregate Meals Neighborhood Activities
Total	111,204		



Douglas County Community & Senior Center

DIAGRAM PF22 - PARKS IN NORTH DOUGLAS COUNTY

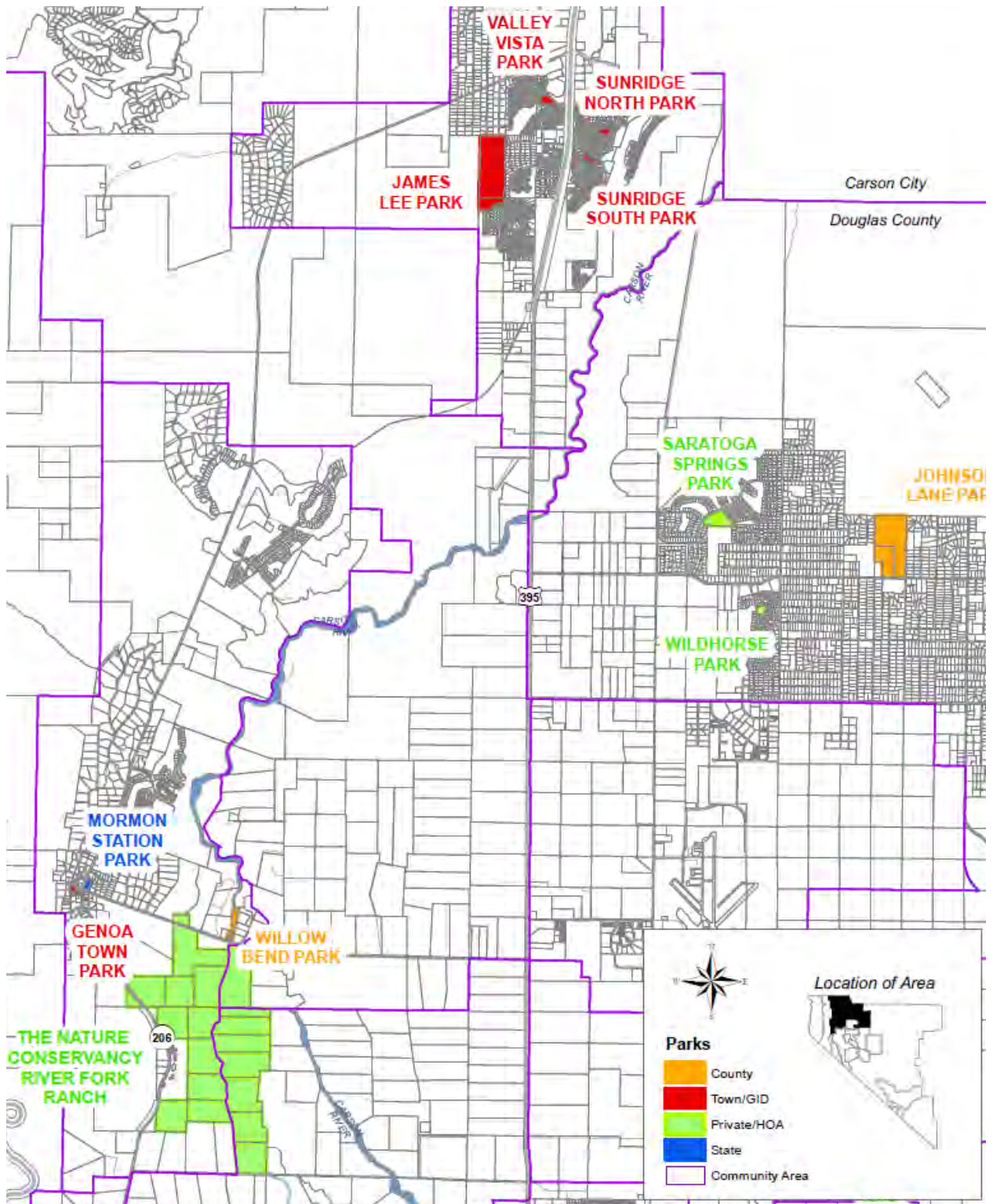


DIAGRAM PF23 - PARKS IN CENTRAL DOUGLAS COUNTY

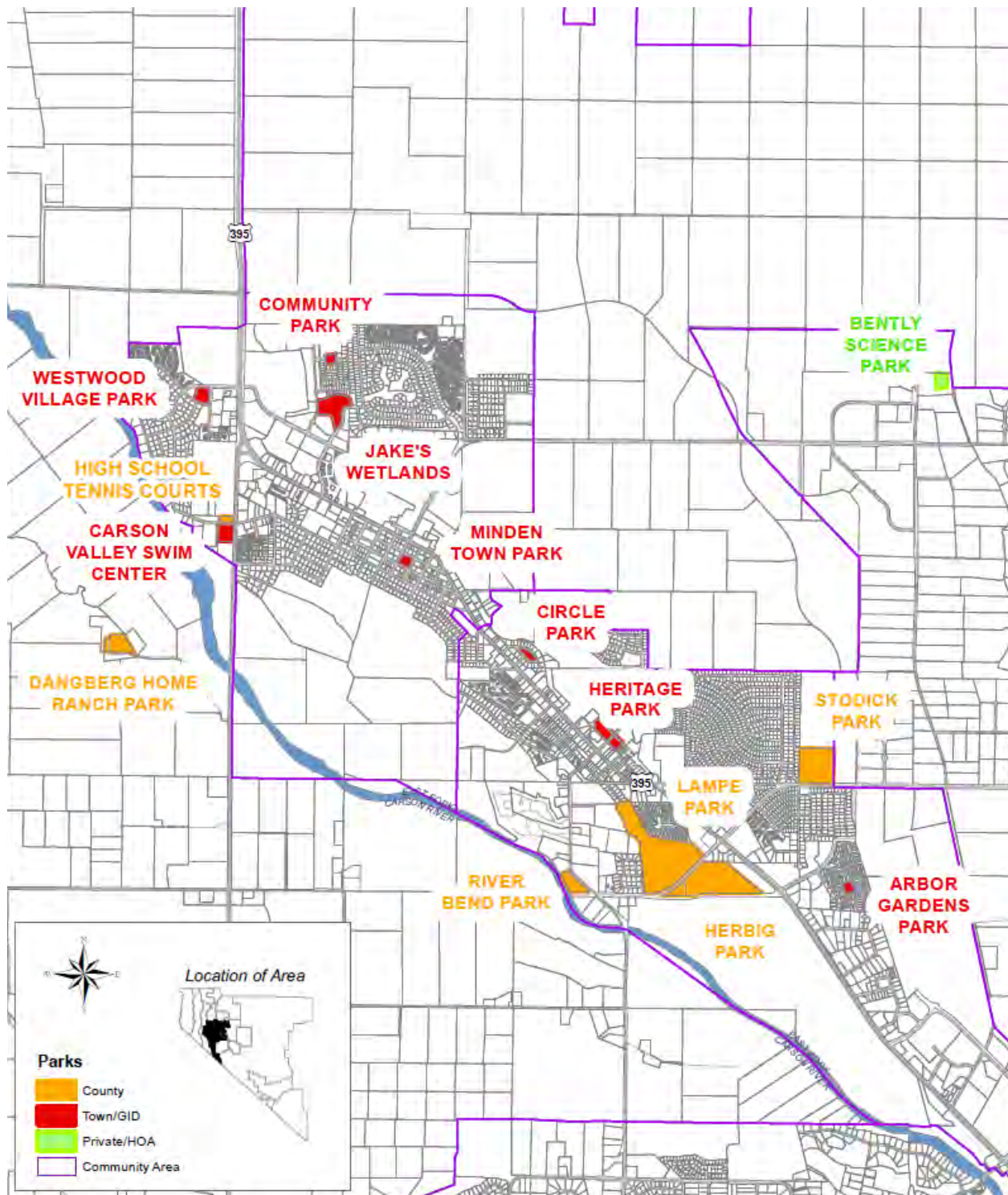


DIAGRAM PF24 - PARKS IN SOUTH DOUGLAS COUNTY

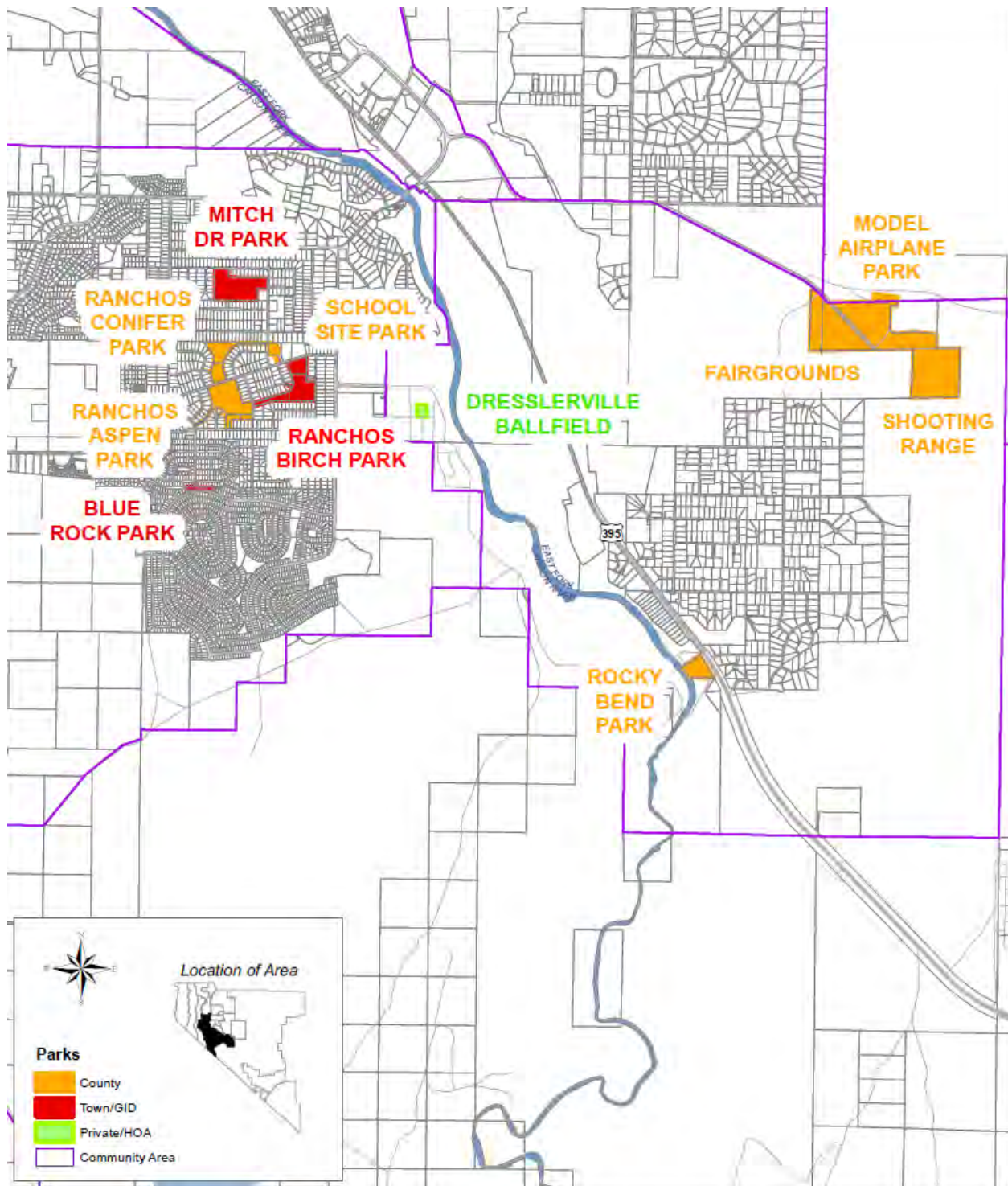


DIAGRAM PF25 - PARKS IN TOPAZ RANCH ESTATES/TOPAZ LAKE

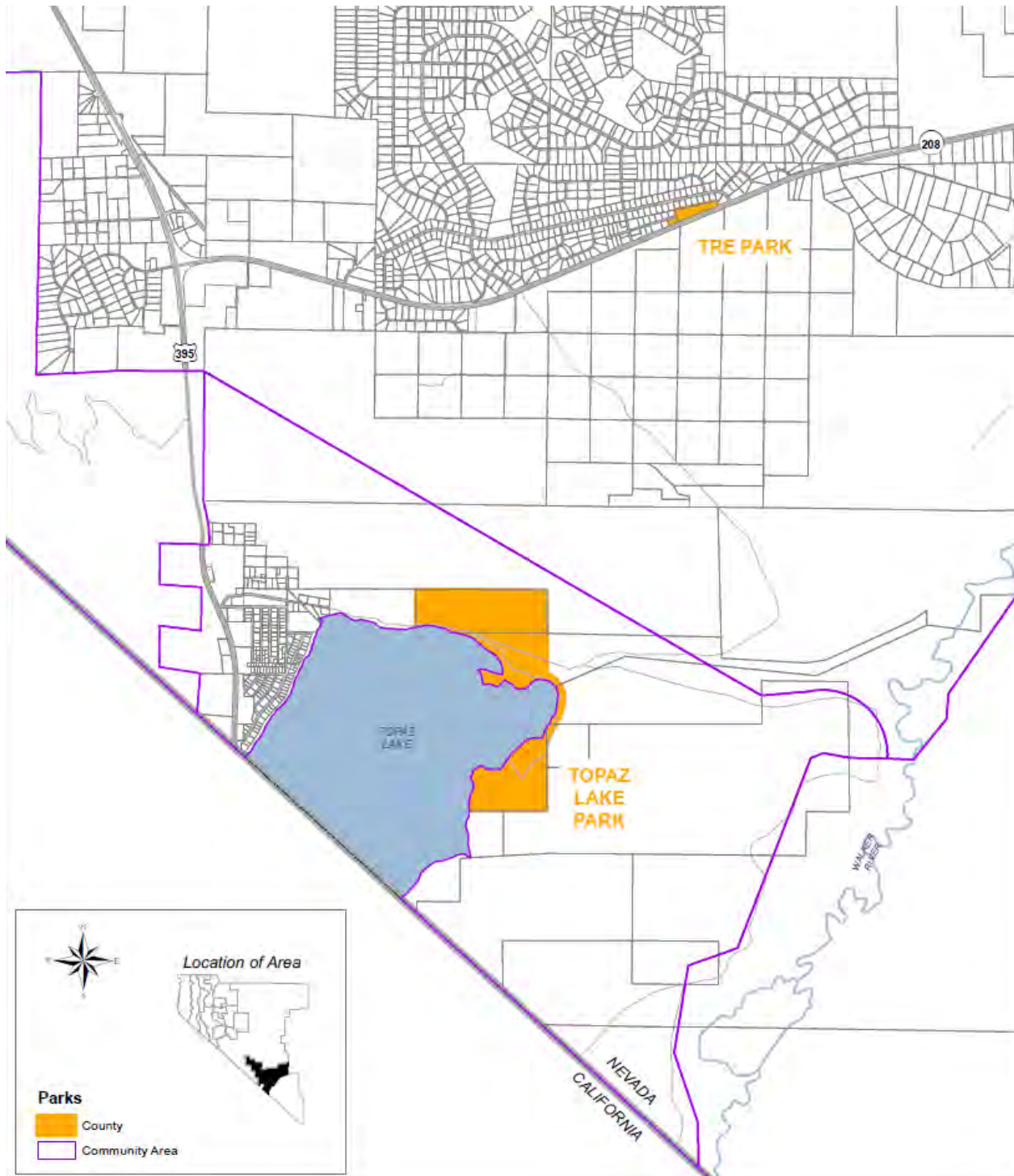
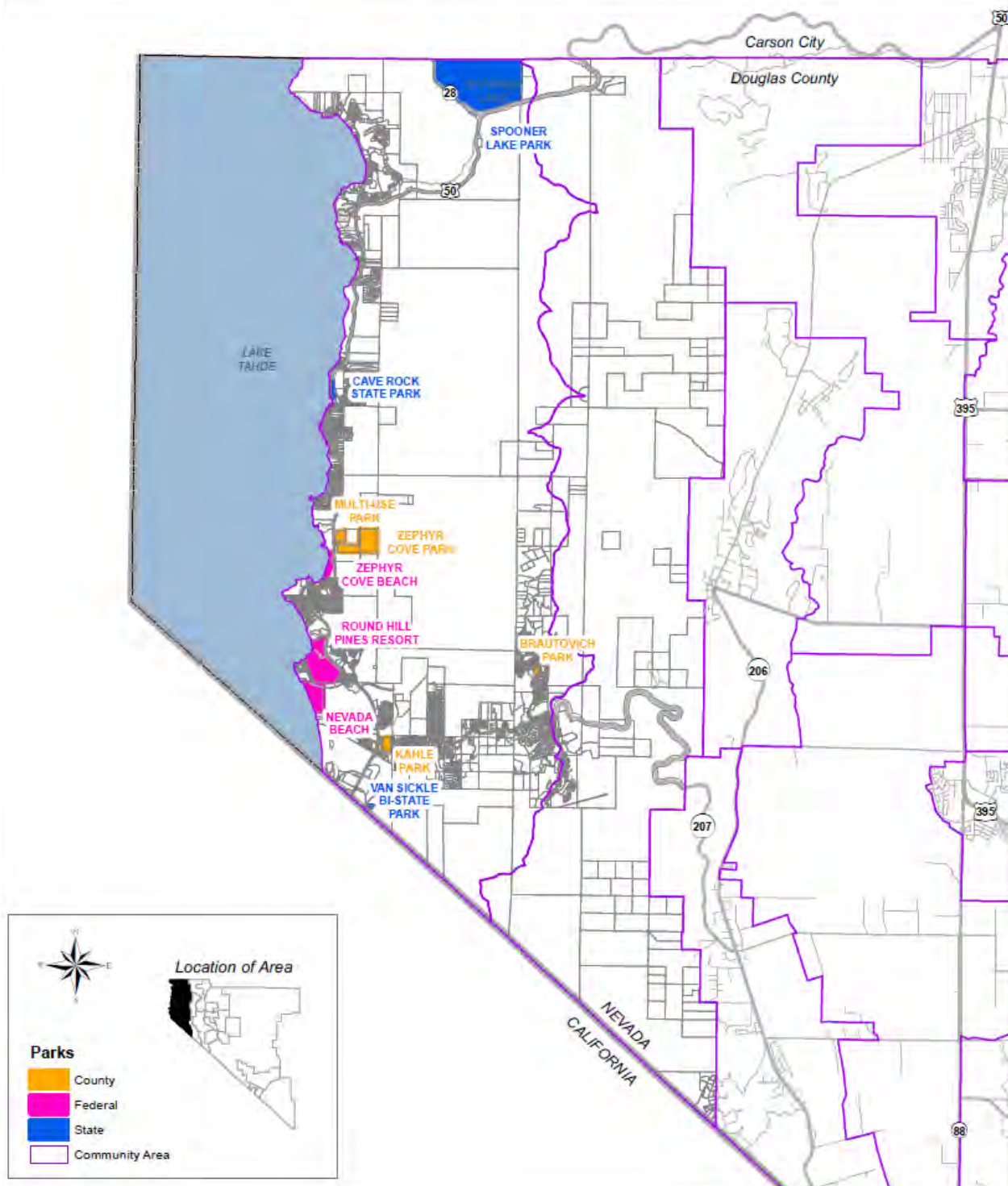


DIAGRAM PF26 - PARKS IN THE TAHOE BASIN



LOOKING TO THE FUTURE

Public Facility Service Areas Vs. Urban Service Boundary

As shown on the water and wastewater maps included in this Element, the location of the Master Plan Urban Service Boundary does not always coincide with the service area for different water and wastewater providers. The North Valley Wastewater Treatment Area, for example, covers the Clear Creek development and subdivisions north of the Town of Genoa, which are not included within the Urban Service Boundary.

There is an urban service boundary for the Airport Community Plan, which is within the North Valley Wastewater Treatment Area, but none of Johnson Lane is included within the urban service area, despite dense residential development and the need to encourage property owners to hook up to the North Valley Treatment Plant.

Septic Systems and Groundwater Contamination

In the past, the County has established assessment districts to convert septic systems to community wastewater systems. It may be time to explore setting up new assessment districts for areas with septic tank concentrations that can be served by either Douglas County or MGSD. The overconcentration of septic systems in Johnson Lane and Ruhstroth contribute to nitrate concentration that can harm groundwater.

Water Service and Conservation

In 2019, the Nevada State Legislature adopted Senate Bill 150 (NRS Chapter 278.0228) requiring “the governing body of a county or city to develop and maintain a water resource plan.” This plan must include the identification of all known sources of water, groundwater, and effluent for use within the community, an analysis of water demand and projected demand caused by anticipated growth, and an analysis of whether the sources of water in the community are “of sufficient quality and quantity to satisfy the existing and expected demands.” If the analysis determines there is not sufficient water of quality or quantity, then the County is required to come up with a plan for obtaining it. The plan is required to be completed by 2029; once complete, it must be updated every 10 years. To meet this requirement, the County will need to continue to coordinate with water purveyors in the community to evaluate water quantity and quality issues and develop regional planning approaches to water resources and conservation.

Each of the water purveyors in the County have developed separate water conservation plans. In 2008, Douglas County adopted a Douglas County Utilities Water Conservation Plan, pursuant to NRS Chapter 540, Planning and Development of Water Resources. This

plan was drafted “based on the living and service area” for Douglas County Utilities in accordance with the provisions of NRS 540.141. The Plan is required to be updated every five years. Water conservation for the region will be an important element of the water resource plan and should also be addressed in coordination with each of the purveyors in the County.

Financing for Public Facilities

Although the Douglas County Development Code includes provisions regarding impact fees, the County has not established any impact fees to provide for public facilities. Under NRS 278B, these fees may only be used for certain types of capital improvements, such as parks, fire and police stations, wastewater, drainage, and streets. Under Nevada law, impact fees cannot be used for school facilities.

The impact fee section of the Douglas County Development Code was adopted as part of the 1996 Consolidated Development Code and set forth that the Planning Commission would act as the capital improvements advisory committee for impact fees. The Planning Commission considered potential impact fees to pay for transportation improvements several years ago but decided against recommending this funding mechanism to the Board of Commissioners.

In 2018, Douglas County contracted House Moran Consulting, Inc. to conduct a feasibility study to evaluate the viability of an impact fee program for the County. The study involved evaluating regulatory requirements contained in NRS 278B, collecting available land use and capital improvement information, and determining the practicality and efficacy of an Impact Fee Program.

Analysis of Impact Fees by House Moran Consulting²

Several factors contribute to making an impact fee program for Douglas County infeasible. These factors include low growth rates, low density, and existing fee collection programs. These factors are not insurmountable but would need to be addressed if the County decides to implement an impact fee program:

- **Growth Rates:** The County has implemented a growth management plan to control growth throughout the County. Impact fees are generated by new development. Higher growth rates result in a favorable distribution of cost on a per unit basis; low growth rates result in distributing cost of infrastructure among

² Source: Impact Fee Feasibility Study, Douglas County, Nevada, prepared by Douglas County and House Moran Consulting, Inc., May 1, 2018.

a relatively small number of units and higher impact fee on a unit basis. If unit fees are too high, new development will likely not occur.

- **Density:** High-density developments are very favorable to an impact fee program. The close proximity and connectivity of infrastructure keeps unit rates relatively low. When developments are spread apart, the cost of infrastructure increases dramatically, thereby increasing the unit fees. Douglas County has pockets of high-density development with large areas of low-density development in between. A non-contiguous service area may be required to capture a sufficient number of high-density areas into an impact fee program.
- **Existing fee collection programs:** Douglas County has ordinances for fee collection programs. These ordinances include collecting fees for schools, transportation, parks, sanitary connections, and growth management. If the County wanted to implement an impact fee program and include any of the above-referenced infrastructure types, the ordinances would need to be discontinued.

The primary advantages of implementing an impact fee program for the County are:

- The program would be in alignment with the goals, policies, and actions in Element 4, Growth Management & Housing.
- The fee collection process would be consolidated, allowing for a single accounting system for all fees.
- All capital improvements would be included and managed under a single program.
- The cost for capital improvements associated with new construction would directly proportional to the impact fees collected.
- Existing residents wouldn't bear the cost of new development through increased taxes.
- Revenue generated would be earmarked exclusively for infrastructure for new development.
- The land use plan and capital improvement plan would be properly synchronized.
- The program would be incrementally implemented with the most critical and/or most costly infrastructure.

Disadvantages of adopting an impact fee program for the County are:

- Several actions would be required to establish an impact fee program, which would require time and resources.

- New development occurring outside the defined Service Areas would not be included in an impact fee program, thus not generating funds for infrastructure in those outlying areas.

Instead of impact fees, Douglas County has utilized development agreements, bonds, grants, and loans to pay for public facilities. The County adopted residential construction taxes to help fund facility needs for roads, parks, and schools, per County Code, but revenues from these taxes have not been sufficient.

Major repairs and improvements are forecast and timed through the Douglas County CIP, which identifies priorities and funding for each capital improvements project. The cycle of needs identification, needs analysis, and project programming should be reviewed to ensure that adequate services and facilities are prioritized and funded to meet the goals of the community.

School District Facility Needs

The School District is currently facing \$38.8 million in capital needs. The School District was not successful in securing a quarter-cent sales tax from Douglas County voters in 2016 and will need to carry out capital improvements on a “pay as you go” basis. In addition to property tax revenues for operations and debt service, the School District receives funding from the Residential Construction Tax (RCT) based on \$1,600 per residential building permit and funds from the Motor Vehicle Privilege Tax. The RCT currently provides approximately \$200,000 per year but was as high as \$1,039,104 in FY 2004–2005. The School District currently faces a challenge with bonding capacity and will not qualify to go out to bond for eight more years without identifying an additional source of tax revenue.

Open Space and Recreation Zoning

Douglas County does not have a specific zoning district for public open space, parks, and recreation parcels. There are three possible Master Plan land use designations for parks and open space: Recreation, Community Facility, and Forest and Range. Each land use designation permits specific zoning districts.

Under the Recreation land use designation, Private Recreation (PR) is the only compatible zoning district, and it is intended to provide commercially oriented recreational land uses, such as tennis clubs and golf clubs, on privately owned parcels.

The second land use designation used for parks is Community Facility, which includes the PF (Public Facility) and AP (Airport) zoning districts. The PF zoning district includes a

variety of public facility uses, including schools, fire stations, wastewater treatment facilities, wells, and government buildings.

The third land use designation, Forest and Range, includes the zoning districts FR-19 (Forest and Range-19 acre) and FR-40 (Forest and Range-40 acre). Most of the federal lands managed by the Bureau of Land Management and the U.S. Forest Service are zoned as FR-40. Many private parcels, including inholdings, are zoned FR-19, however. It may be appropriate to create a new zoning district for Open space and parks (OSP) to protect existing areas and to facilitate development of new open space and park areas.

Table PF17 – Existing Open Space and Park Land Uses and Zoning Districts

Current Land Use Designation	Compatible Zoning Districts
Recreation	PR - Private Recreation
Community Facility	PF - Public Facility AP - Airport
Forest and Range	FR-40 FR-19

Carson River and Walker River Open Space and Recreation Corridors

There are several opportunities to expand and develop open space and recreation activities along the Carson and Walker Rivers. It would be appropriate for the County to pursue the development of a River Corridor Open Space Plan for the different branches of the Carson and Walker Rivers.

The River Fork Ranch, which is owned and managed by The Nature Conservancy, is an example of a project that provides access to the Carson River, protects the floodplain from development, and restores the health of the Carson River. The Bently-Kirman Trail, which is located north of Heybourne Road, is another example of such a project.

During 2017, the Nevada Legislature approved funding for the creation of the new Walker River State Recreation Area along 29 miles of the East Walker River in Lyon and Mineral Counties. This new recreation area was facilitated by the Walker Basin Conservancy and will eventually provide public access to the river corridor as well as camping facilities. There may be an opportunity to look at a similar recreation corridor along the West Walker River in Douglas County. In 2013 and 2014, The Nature Conservancy acquired conservation easements for the Fairfield Ranch (3,843 acres) and Wade Fernley (605 acres) properties along the West Walker River in Douglas County.

Under NRS 376A, counties are permitted to go to the voters to request a one-quarter of one percent sales tax increase to fund open space programs, provided that an open space plan has been adopted by the governing body prior to the vote. Under the NRS, open space includes preservation of land to conserve and enhance natural or scenic resources as well as the development of recreational sites. Douglas County prepared the necessary Open Space Plan prior to a 2001 vote on the proposed open space sales tax, but the 2001 vote was not successful. In 2007, the County prepared an updated Open Space and Agricultural Lands Preservation Implementation Plan for the purpose of returning to the voters for approval of an open space sales tax. The open space sales tax initiative will go before voters during the November 2020 election. Should the initiative gain approval, the County will need to implement the tax and update the 2007 Plan.

It should be noted that the NRS statute allowing the voter-approved quarter-cent sales tax for open space acquisition appears to remove counties with a population of less than 100,000 after September 29, 2029. Beginning on October 1, 2029, only counties with a population of more than 100,000 but less than 700,000 will be permitted to propose a quarter-cent sales tax for open space acquisition. Douglas County's population is projected at around 60,000 people by 2040.

Update of the Douglas County Trails Plan

The County continues to work with the Carson Valley Trails Association, the Tahoe Rim Trail Association, and the United States Forest Service and Bureau of Land Management to expand trails and improve trailheads throughout Douglas County. The Douglas County Trails Plan was adopted in June 2003. Although there has been some success in expanding the trail network in Douglas County by approximately 50 miles since 2011, the absence of an updated Trails Plan makes it more and more difficult for the County to obtain land for trails during future development and does not allow the County to carry out an updated analysis of trail priorities and funding needs.



EAST TOWN FIRE AND PARAMEDIC DISTRICTS
FIRE STATION #12

12



6. PUBLIC SAFETY





PURPOSE

The purpose of the Public Safety Element is to review the public safety services and capacity in Douglas County. This section provides an update on fire protection, emergency medical, emergency management, law enforcement, and emergency services. Consistent with NRS 278.160.1(g), this Element also identifies potential types of natural and manmade hazards, including floods, landslides, fires, hazardous materials, and earthquakes.

GOALS

The following goals, policies, and actions for the Douglas County Public Safety Element set forth future priorities for the county.

Goal 1  **Provide the community with increased safety from natural hazards through compatible design and development practices that protect ecosystem values and minimize damage to life, property, and fiscal resources.**

Goal 2  **Protect public health, safety, and welfare with professional law enforcement, fire protection, and emergency medical services.**

POLICIES



Policy PS1

Consider dedicating flood-prone areas, including wetlands, sloughs, arroyos, alluvial fans, detention facilities, and other flood risk areas for public usage as parkways, sports facilities, neighborhood parks, recreational areas, and wildlife habitat. Obtain adequate rights-of-way for the conveyance of storm water to the Carson River.



Policy PS2

Use non-structural flood control measures such as zoning limitations, open space acquisition, and watershed management within the Carson River floodplain and tributary watersheds as alternatives to structural measures.



Policy PS3

Encourage maintenance of historic stormwater discharge rates and volumes into surface water systems via the promotion of state-of-the-art stormwater management techniques.



Policy PS4

Assist the agricultural community in maintenance of irrigation systems used for drainage and/or flood control.



Policy PS5

Require sufficient easement widths for improvements and maintenance along all conveyance ditches that will be used for stormwater flood flows.



Policy PS6

Review encroachments and structure setbacks and require easement placements on future maps to eliminate conflicts and to ensure that maintenance of the conveyance ditch and/or storm drain system can be achieved.



Policy PS7

Continue to work with the Carson Water Subconservancy District, the BLM, and the USFS to address the upstream source area of flooding.



Policy PS8

Give top priority to areas where flooding of structures occurs for both structural and non-structural improvements.



Policy PS9

Support updates and refinements to the East Fork Fire and Tahoe Douglas Fire Protection Districts' Standard of Cover.



Work with the Nevada Division of Forestry, Nevada State Lands, the BLM, and the USFS to implement fuels reduction projects on state and federal lands in and around communities.



Continue to encourage and require development to mitigate safety hazards and economic costs from natural- and human-caused events that may affect natural resources and watersheds.



Promote sustainable best management practices in hazard areas (i.e., flood, wildfire, geologic) that protect ecosystem values while minimizing catastrophic damage to life and property.



Develop emergency management and hazard mitigation programs and regulations, standards, and guidelines to be relevant at the individual, household, community, county, and regional levels.



Prohibit development on steep slopes and poor soils.



Require strict adherence to building code recommendations for potential seismic events to protect individuals, buildings, and infrastructure, given that the community is located in a seismically active area.



Implement and regularly update the Hazard Mitigation Plan.



Ensure that all local roads meet the current design standard of conveying the 25-year storm.



Enhance the quality of life and security of all by providing fair, consistent, effective, and professional law enforcement services.



Work with UNR Cooperative Extension, East Fork Fire Protection District, and Tahoe Douglas Fire Protection District to encourage and support efforts to reduce hazardous fuels on private property.



Support efforts to identify hazards to the Minden-Tahoe Airport to protect the safety of the public and aircraft operators.



Policy PS21

Reduce exposure to pollutants and promptly mitigate spills and releases of toxic chemicals.



Policy PS22

Coordinate a shared approach with community agencies toward reducing criminal activity through educational efforts that focus on crime prevention. Include coordination with major institutional, commercial, and corporate stakeholders.



Policy PS23

Require development in designated high fire hazard areas to provide appropriate emergency access.



Policy PS24

Consider the adoption of the Wildland Urban Interface Code and consider the adoption and updating of a Community Wildfire Protection Plan (CWPP).



Policy PS25

Encourage the use of social networks to communicate matters of public safety.

CURRENT TRENDS

The health and safety of residents of and visitors to the community remains the highest priority for Douglas County and its partner agencies. The County is committed to ensuring that citizens and visitors are protected when threatened by criminal activity or natural disasters such as fire, earthquakes, and floods.

Public safety services in Douglas County include all-risk fire, emergency medical services protection, law enforcement, and emergency management. The agencies that provide public safety services are:

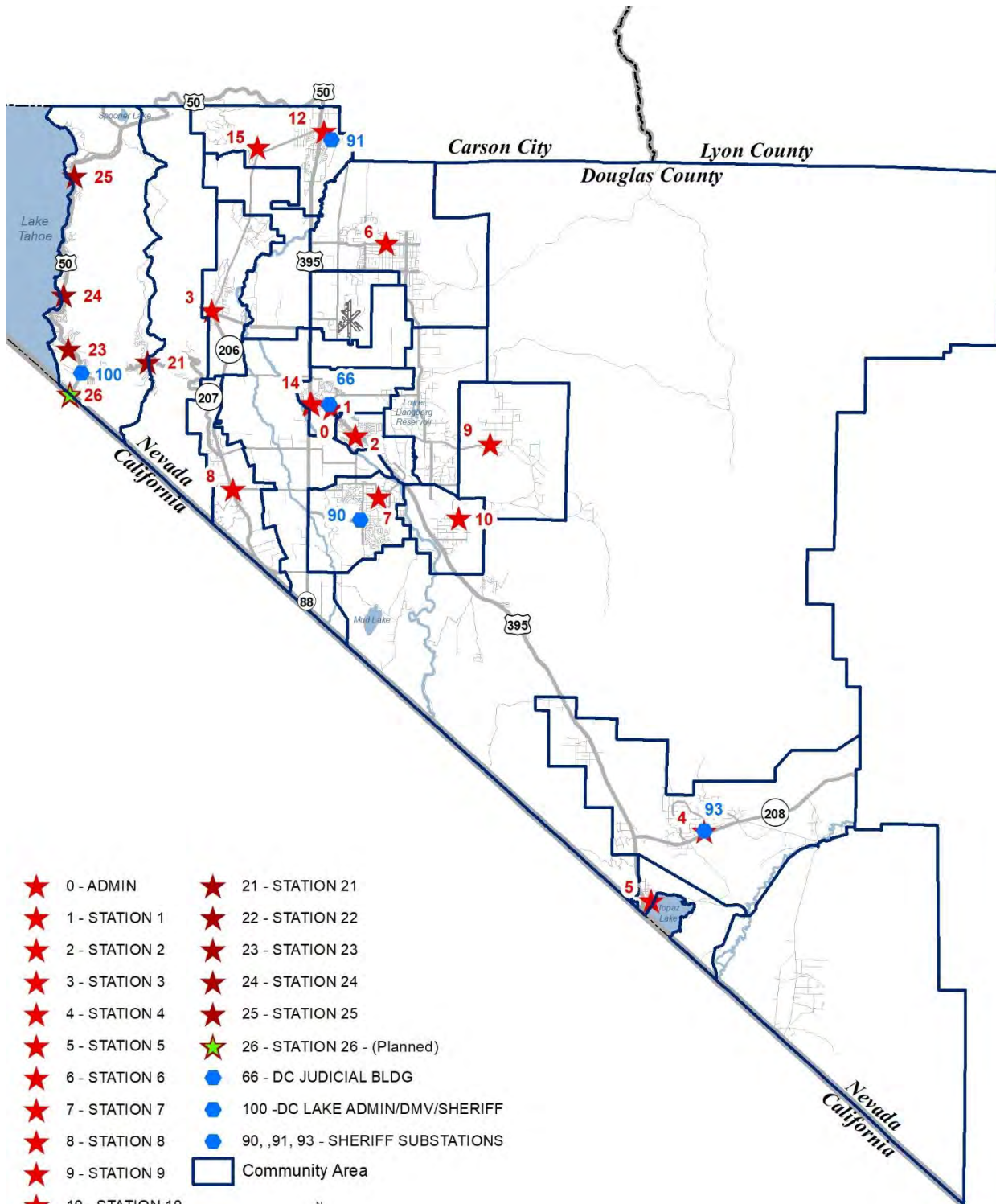
- East Fork Fire Protection District (East Fork)
- Douglas County Emergency Management (contract with East Fork)
- Tahoe Douglas Fire Protection District (Tahoe Douglas)
- Emergency Medical Services (EMS) provided by both Fire Protection Districts
- Douglas County Sheriff's Office (DCSO)
- Douglas County 911 Emergency Services (911ES)

PUBLIC SAFETY FACILITIES

There are 13 fire stations operated by East Fork and four fire stations and one crew quarters operated by Tahoe Douglas. The DCSO has two main offices and three substations (see Diagram PS1 for the locations). Douglas County 911 Emergency Services is located in the County Call Center and operates a mobile incident command center.



DIAGRAM PS1 - LOCATIONS OF PUBLIC SAFETY FACILITIES IN DOUGLAS COUNTY



- ★ 0 - ADMIN
- ★ 1 - STATION 1
- ★ 2 - STATION 2
- ★ 3 - STATION 3
- ★ 4 - STATION 4
- ★ 5 - STATION 5
- ★ 6 - STATION 6
- ★ 7 - STATION 7
- ★ 8 - STATION 8
- ★ 9 - STATION 9
- ★ 10 - STATION 10
- ★ 12 - STATION 12
- ★ 14 - STATION 14
- ★ 15 - STATION 15
- ★ 21 - STATION 21
- ★ 22 - STATION 22
- ★ 23 - STATION 23
- ★ 24 - STATION 24
- ★ 25 - STATION 25
- ★ 26 - STATION 26 - (Planned)
- 66 - DC JUDICIAL BLDG
- 100 -DC LAKE ADMIN/DMV/SHERIFF
- 90, 91, 93 - SHERIFF SUBSTATIONS
- Community Area

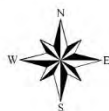
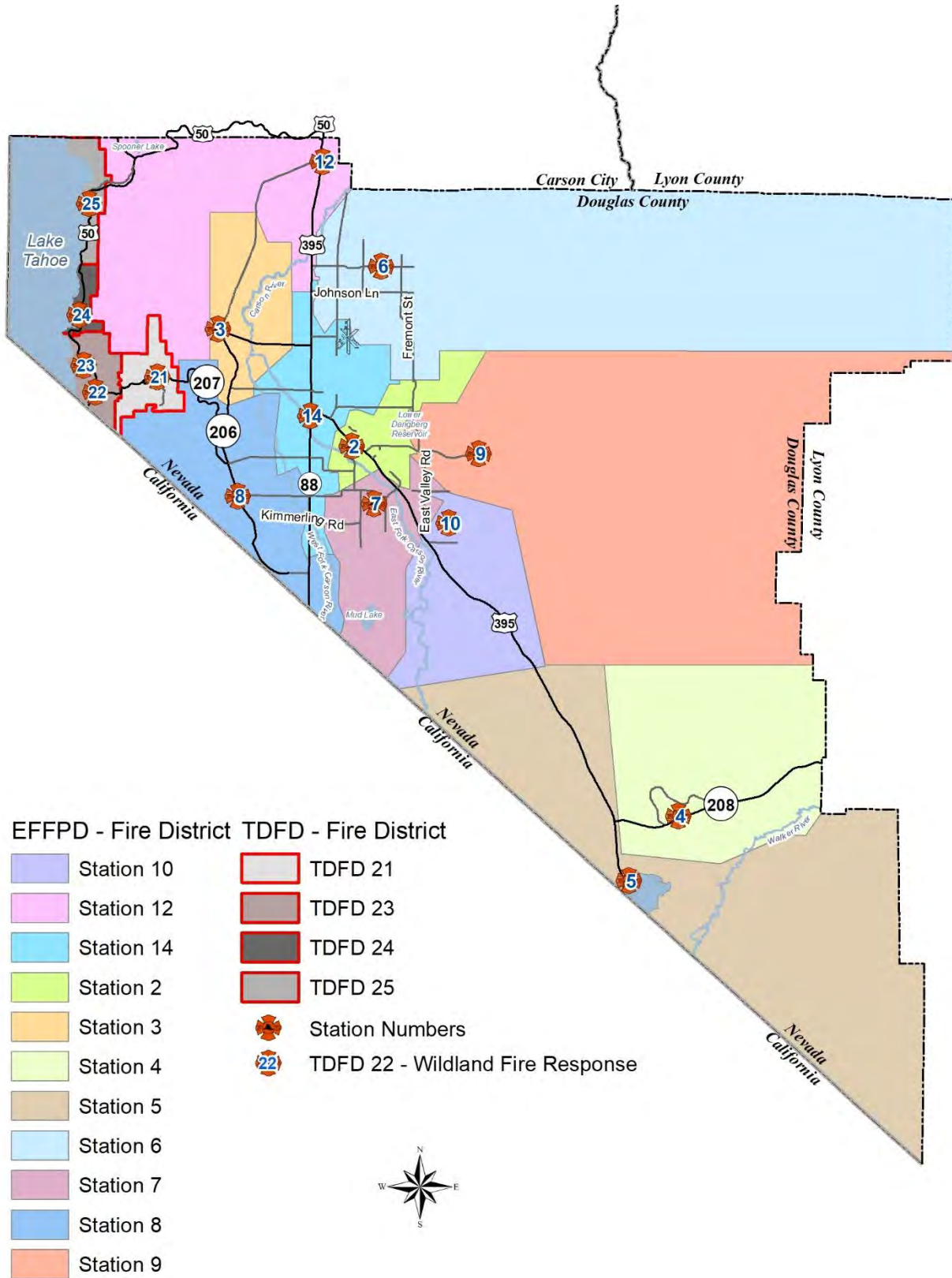


DIAGRAM PS2 - TAHOE FIRE AND EAST FORK FIRE RESPONSE DISTRICTS



- | | |
|------------|----------------------------------|
| Station 10 | TDFD 21 |
| Station 12 | TDFD 23 |
| Station 14 | TDFD 24 |
| Station 2 | TDFD 25 |
| Station 3 | Station Numbers |
| Station 4 | TDFD 22 - Wildland Fire Response |
| Station 5 | |
| Station 6 | |
| Station 7 | |
| Station 8 | |
| Station 9 | |



FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

In Douglas County, fire protection and emergency medical services are provided by East Fork and Tahoe Douglas. East Fork serves the entire Carson Valley and Topaz Regions as well as a portion of the Tahoe Basin Region. Tahoe Douglas covers the following communities in the Tahoe Basin: Upper Kingsbury, Stateline, Round Hill, Marla Bay, Zephyr Heights, Zephyr Cove, Uppaway, and Glenbrook.

East Fork Fire Protection District (EFFPD)

East Fork is an NRS 474 Fire District identified in Douglas County Code 18.10. The district was created by ordinance by the Douglas County Board of Commissioners in 1981, and the Commissioners served as the Board of Fire Commissioners for the first 35 years of East Fork's existence. In 2016, the Board of County Commissioners passed an ordinance to recognize and reconstitute the district under the provisions of NRS 474.010–474.450, thus treating the district as if it were created by election and allowing for an independent Board of Directors. The first Board was interviewed and appointed by the Douglas County Board of Commissioners on January 4, 2017. It is now an independent and publicly elected body.



East Fork covers 694 square miles of the County's 737.7 square-mile area. The Pinenut Region is mostly under the jurisdiction of the BLM and BIA, but there are some privately owned properties in the region. The boundaries of the district extend into the Lake Tahoe Basin. While the majority of lands in the Tahoe Basin are under the jurisdiction of the USFS, some private property does exist. The initial response resources from local government are provided to those areas under a Memorandum of Understanding between the EFFPD and Tahoe Douglas Fire. Jurisdiction is maintained by the East Fork



Fire Protection District.

East Fork is an all-risk fire and EMS agency that provides services primarily through career personnel. Volunteer personnel provide logistical support in several areas. The district answers approximately 6,500 calls for service annually and serves a population of approximately 43,000 residents (15.11 calls per 1,000 residents), which increases seasonally to approximately 60,000. Many aid agreements have been approved with various Nevada, California, and federal (USFS and BLM) fire service agencies to provide seamless responses to citizens of Douglas County and bordering areas, including Boundary Drop Agreements with the Carson City Fire Department and Tahoe Douglas. The District also provides all-risk services to tribal lands of the Washoe Tribe within its boundary and paramedic services to Alpine County. Furthermore, East Fork serves as the Emergency Management Department for Douglas County under an inter-local agreement contract with Douglas County. Table PS1 provides information on calls for service between 2012 and 2019.

Table PS1 - EFFPD Calls for Service

Calendar Year	Calls
2012	5,510
2013	5,452
2014	5,887
2015	6,033
2016	6,292
2017	6,540
2018	6,507
2019	6,753

East Fork provides a variety of services, including structural firefighting; wildland firefighting; aircraft rescue and firefighting; technician-level rope rescue; hazardous materials mitigation and response; technician-level vehicle extrication rescue; operations-level water rescue; basic, intermediate and advanced life support EMS and transport; internal training; regionalized external training; community risk reduction, community paramedicine, and fire safety inspections; code enforcement; plans review; and public education.

Standards of Cover and Insurance Service Office (ISO) Rating

The East Fork Fire Protection District Board of Directors adopted the [Standards of Cover](#) in July 2017. The Standards of Cover describes the East Fork service district areas and includes a community risk analysis and analysis of capabilities. East Fork has identified a need for an additional manned fire facility on the east side of the Martin Slough, west of the proposed Muller Parkway.

The Standards of Cover places a strong emphasis on rapid, adequate service delivery for both fire and EMS response and reflects the District's commitment toward firefighter safety. The goal is to provide adequate life safety and/or fire attack resources in the pre-

flashover stage of the fire, allowing victims of fire the greatest possible chance of survival.

East Fork has improved its Public Protection Classification with the Insurance Service Office (ISO)/Commercial Risk Services, Inc. The Public Protection Classification Number is used by the insurance industry to determine premiums for residential and commercial property. East Fork’s current ISO Fire Suppression Rating Schedule is a Class 3 for 85 percent of the district. Double Spring Flat within the Topaz Ranch Estates/Holbrook junction community area is a Class 10.

East Fork Response Districts and Staffing

The district is divided into smaller response districts, providing for the closest unit to respond to requests for assistance. Each of these districts represents a different level of hazard and response needs. Of the 13 fire stations, seven are staffed with volunteers, five are staffed with career personnel, and one is leased to the USFS for seasonal staffing and is used as a reserve station. There are currently 23 career staff employees at Stations 1, 4, 7, 12, and 14 who are supported logistically by 70 volunteers at Stations 2, 3, 5, 6, 8, 9, and 10. The 70 volunteers include 8 attack volunteers and 62 logistics volunteers; 42 of the volunteers are also wildland trained. Table PS2 provides the ratio of career firefighters for every 1,000 residents.

Table PS2 - Staffing Ratios for Career On-Duty Firefighters

	Ratio
East Fork Fire District	0.51/1,000 residents
Tahoe Douglas Fire District	2.6/1,000 residents
Western States	0.85/1,000 residents
U.S.	1.34/1,000 residents

Tahoe Douglas Fire Protection District

The Tahoe Douglas Fire Protection District (Tahoe Douglas) serves the Tahoe Basin portion of Douglas County; it was established and organized in 1946 under NRS 318. Tahoe Douglas provides fire protection, EMS, water rescue, bomb response, hazardous materials, marine firefighting, advanced life support ambulance, and rescue services to its community (referred to in County documents as the Tahoe Township). Tahoe Douglas also provides service to adjacent agencies in



accordance with mutual and automatic aid agreements.

Policy direction for Tahoe Douglas is provided by an elected five-member Board of Trustees. The Board provides the necessary power and authority to govern the provisions of fire protection and emergency services. The Board appoints the fire chief, who is responsible for implementing Board policy and overseeing the operation of the fire district. The Tahoe Township is located in the Tahoe Basin within an area of the Carson Range and is identified as a spur of the Sierra Nevada Range. This area includes Stateline and smaller communities along U.S. Highway 50 from the California border to the Douglas/Carson County line and easterly up Nevada State Route 207, Kingsbury Grade.



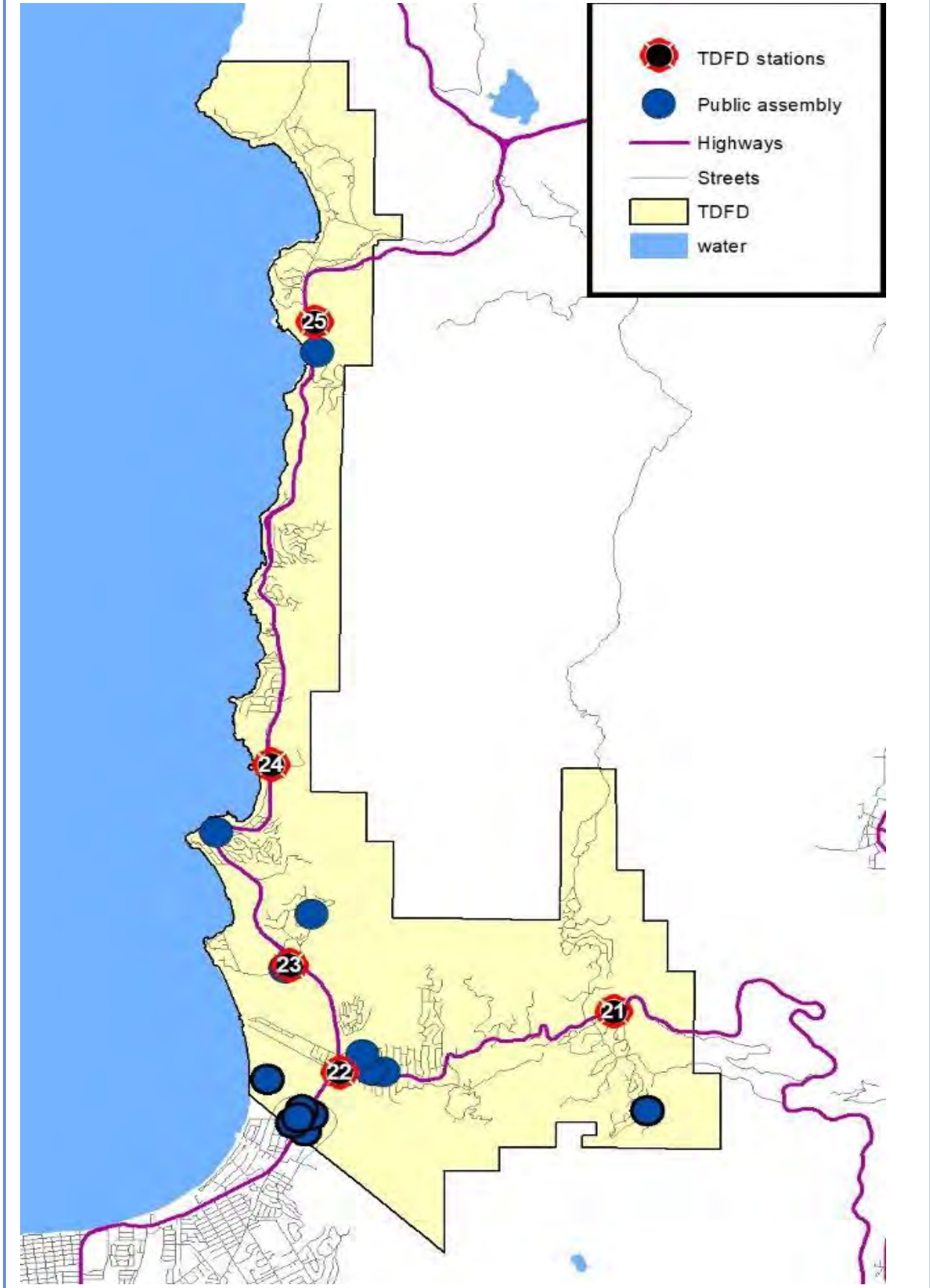
Standards of Cover and ISO Rating

The Tahoe Douglas Fire Protection District is composed of five response districts. The Stateline area, the most urbanized of them, hosts several large hotel resort casinos, residences, condominiums, apartments, and a wide variety of businesses. The tourist population in this area could increase the size of the population base more than 100,000 during peak seasonal and holiday periods. The [2018 Standards of Cover and Deployment Plan](#) describes the Tahoe Fire service district area (see Diagram PS3) and includes a community risk analysis, development and population growth, critical tasking and alarm assignments, review of historical system performance, performance objectives, and measures with conclusions and recommendations. Tahoe Douglas plans for an additional fire station to service the Stateline core redevelopment area as identified in the Standards of Cover Assessment. The district is working with property owners to obtain land in the northeast area of the Hard Rock parking garage on loop road. The district fleet maintenance facility is also in need of replacement and expansion. As of the latest survey (2014), ISO gave Tahoe Douglas a rating of Class 3/3Y. Tahoe Douglas employs 47 emergency response personnel for EMS, rescue, and fire



suppression activities (not including the seasonal wildland and fuels reduction crews), serving a full-time resident population and protecting an area of approximately 17 square miles. No less than 15 personnel are on duty at all times. The full-time resident population of the fire district service area is 5,000. Tahoe Douglas provides its community with 9.4 career firefighters per 1,000 residents, with 2.4 firefighters per 1,000 population on duty at all times.

Diagram PS3 -Tahoe Douglas Fire District



The fire district operates four fire stations and one fleet maintenance facility, a wildland crew facility, and 24 response apparatuses, including reserve apparatus and a year-round fire boat docked at Zephyr Cove Marina. A future public safety pier is planned to house the fire boat. The district also provides wildland hand crew response within and outside of the district, as well as a seasonal hazardous fuels mitigation team. Emergency (911) calls are answered by the Douglas County Emergency Services, the primary public safety answering point for the area.

Table PS3 - Tahoe Douglas Calls for Service

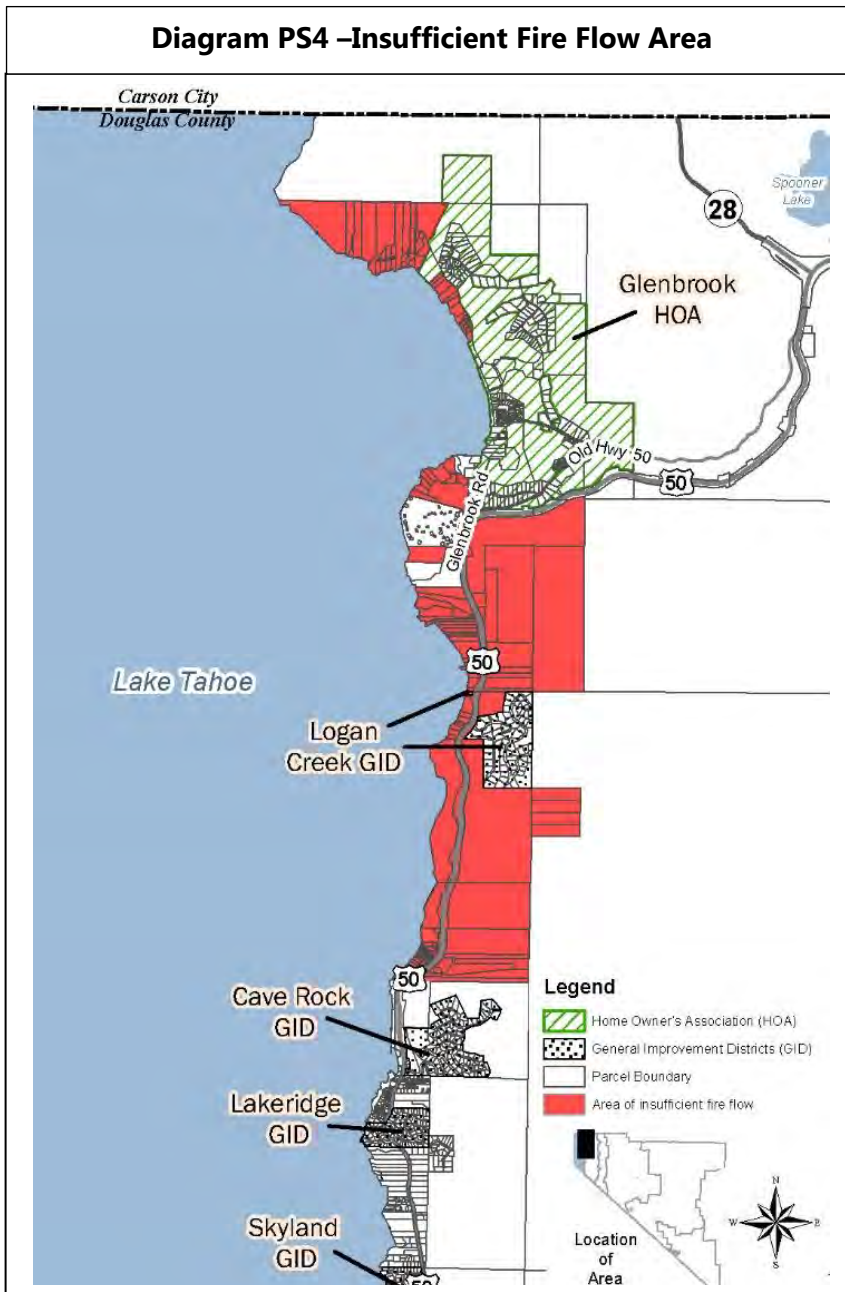
Calendar Year	Calls
2012	1,796
2013	1,982
2014	1,967
2015	1,982
2016	2,132
2017	2,221
2018	2,182
2019	1,972



Since the inception of the Fire Flow Initiative (FFI) program in April of 2017, there have been four participating paid member areas and a new fire boat. Tahoe Douglas will continue to address several fire protection needs, including the fact that 128 homes lack sufficient fire flow (a minimum of 1,500 gallons per minute is required); see Diagram PS4. Tahoe Douglas has plans to participate with partnership agencies in a Public Safety Pier project.

The Wildland Fire and Fuels Division began in 2006 with a chipper, truck, and three personnel. Since then, the division has grown to a 32-person division with its own fleet, station, and equipment ready to respond seven days per week during the wildland fire season. Thanks to a resident-voted tax override in 2010, the division can now fund and sustain the Zephyr Fire Crew (type II IA) and continue to reduce hazardous fuels within the district, suppress wildland fires, and assist the district in emergencies requiring excess work force. The Wildland Fire and Fuels Division is an important player in local agencies and organizations, such as the Tahoe Fire and Fuels Team, Nevada Prescribed Fire Alliance, and the Tahoe Network of Fire Adapted Communities.

Diagram PS4 –Insufficient Fire Flow Area



The Tahoe Douglas Fire Protection District's Fire Prevention Bureau is committed to protecting the community from the impacts of fires and other emergencies. The Fire Prevention Bureau achieves this goal by implementing strategies in accordance with the National Fire Protection Association (NFPA) Fire Safety Concepts Tree. The Bureau educates the community about how to prepare for, prevent, and react to fires, medical emergencies, and other life- or property-threatening situations. The bureau is also responsible for the fire and life safety plan review and inspection program, which serves as both an educational tool and a means to ensure that fire hazards are abated and engineered fire resistance and protection systems are maintained. The Tahoe Douglas Fire Protection District has a long-standing

Fire and Life Safety Inspection Program. All occupancies are inspected annually with the exception of R-2s with less than five units and R-3s. Occupancies are inspected in accordance with the currently adopted editions of the International Fire and Building Codes. The Tahoe Douglas Fire Prevention Bureau inspects all permitted VHRs. One of every four homes (currently around 600 units) within the district is a VHR. The average occupancy in each unit is 10 persons; the highest occupancy is 26 persons. The average size is 2,131 square feet; the largest unit is 10,000 square feet, and many are multi-story. These residential group R3 occupancies are primarily permanent in nature; a change of

use is permitted through Douglas County. VHRs are primarily transient in nature and present a higher hazard, based on life and fire risk.

The 2012 International Wildland Urban Interface (WUI) code has been adopted by the Nevada Fire Marshal. Tahoe Douglas has adopted the 2018 International Wildland Urban Interface Code, Class 1, Ignition Resistant Building Standards for all new construction (Douglas County Ordinance 2019-1546, effective July 2019). Tahoe Douglas strives to provide educational materials and defensible space evaluations to every member of the community. Every residence in the district is on a four-year rotating cycling to be evaluated for code compliance with necessary follow-up and enforcement. Fire Prevention will also assist the community by issuing TRPA tree removal permits for trees that create a fire threat to surrounding structures. Diagram PS2 shows the boundary lines and response districts for East Fork and Tahoe Fire.

LAW ENFORCEMENT

The DCSO serves as the County’s only local law enforcement agency within both the Tahoe and East Fork Townships. The main base of operations is located in the Town of Minden at the Judicial and Law Enforcement Building on Buckeye Road, which houses the main jail. Substations are located in Lake Tahoe, Indian Hills, Gardnerville Ranchos, and Holbrook Junction. The DCSO currently employs 130 staff members, including 110 sworn officers. Table PS4 provides the staffing ratios for law enforcement officers per 1,000 residents, as of July 2020.



Table PS4 - Staffing Ratios for Law Enforcement (July 2020)

	Ratio
DCSO	2.22 officers/1,000 residents
Nevada	2.95 officers/1,000 residents
National	2.80 officers/1,000 residents

DCSO provides a wide range of specialized services, such as special weapons and tactics (SWAT), crisis negotiation, bomb squad, K-9, motorboat patrol, search and rescue, School safety intervention, and youth education programs. Douglas County participates in regional support roles to other partnering agencies. The DCSO operates four divisions: administration, investigations, jail, and patrol.

Administration

The administration division is comprised of command staff and is largely responsible for internal governance. Administration also includes youth services and records management functions.

Investigations

The investigations division has six investigators assigned to general investigations and four assigned to narcotics enforcement. The division is assigned about 1,500 felony crime investigations per year. The narcotics unit initiates about 100 cases per year.

Jail

The JLEC contains the Douglas County District Court, the District Attorney's office, the Sheriff's office, and the county jail, which has 130 bed spaces (or 3.24 beds per 1,000 residents). The building is comprised of 9,723 square feet of administrative space, court rooms, and jail facilities. See Element 5, Public Facilities, Services, and Recreation for more information on the JLEC. The Lake Tahoe Substation is the only full-service substation and includes 22 bed spaces for inmates.

Patrol

The patrol division includes six sergeants, 38 patrol deputies, and six traffic enforcement positions for a total of 50 personnel, approximately 0.95 officers per 1,000 residents. The national average is 2.5 officers per 1,000 residents. The average response time for all calls of service is approximately 11 minutes. The Patrol Division issues about 5,200 citations per year, responds to approximately 40,100 calls for service, and investigates about 400 to 500 traffic accidents annually. The patrol division also serves as Deputy Coroner under Nevada law and investigates approximately 264 death investigations per year. Table PS5 provides the data on calls for service, arrests, citations, and jail bookings between 2010 and 2019.



Table PS5 - Statistics for Douglas County Sheriff's Office

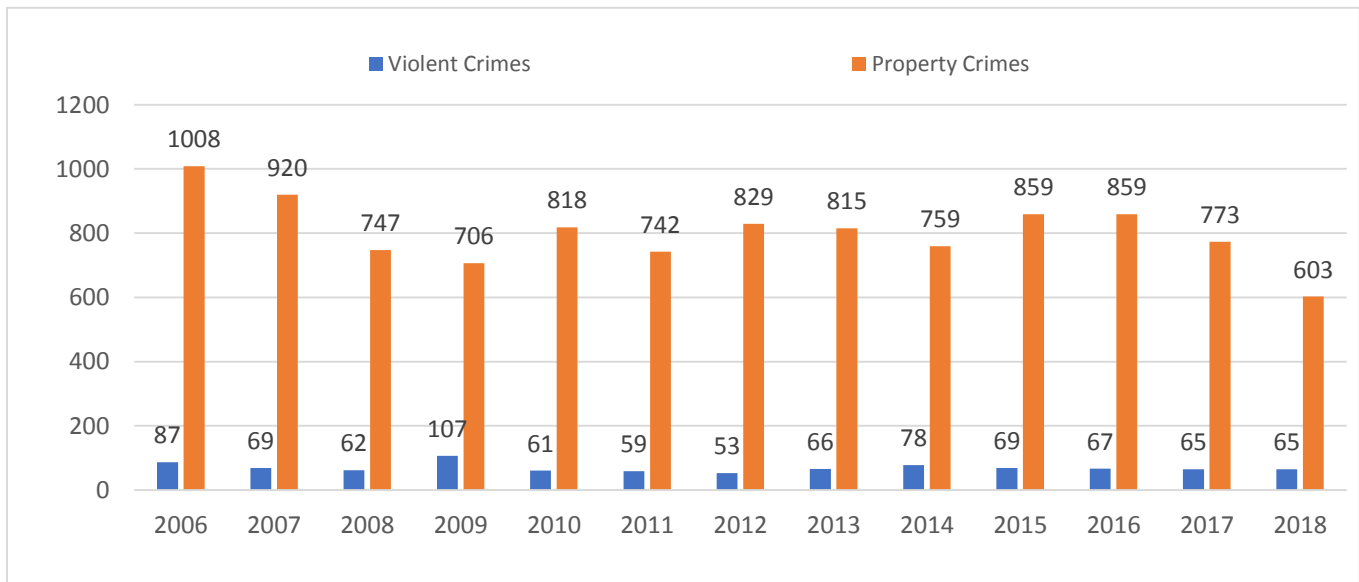
Year	Calls for Service	Arrests	Citations	Total Bookings in Jail	Total Releases from Jail	Average Daily Jail Population
2010	40,374	2,426	5,036	2,578	2,602	81
2011	42,557	2,462	5,944	2,491	2,482	60
2012	42,155	2,663	5,966	2,675	2,711	63
2013	36,164	2,495	5,717	2,848	2,557	63
2014	35,753	3,007	5,577	3,030	2,583	76
2015	36,825	2,090	5,879	2,776	2,586	62
2016	42,536	2,031	9,819	2,767	2,417	59
2017	39,806	1,902	5,818	2,451	2,161	47
2018	40,780	2,104	5,211	2,836	2,438	59
2019	38,655	1,748	4,295	2,654	2,302	71

Crime Rate

Crime data shown in Figure PS1 includes violent crimes such as criminal homicide, rape, robbery, and aggravated assault, and property crimes such as burglary, larceny-theft, motor vehicle theft, and arson. For calendar year 2018, the crime rate for Douglas County was 13.47 crimes per 1,000 residents.

Figure PS1 - Crimes in Douglas County (2006–2018)

(Note: State did not report Douglas County data in 2019 annual report)



Source: *Uniform Crime Reporting, Nevada Department of Public Safety, 2019.*

DOUGLAS COUNTY 911 EMERGENCY SERVICES



911 communication services are provided by the Douglas County 911 Emergency Services Department. 911ES is a consolidated multi-agency regional communications center serving Douglas County, Nevada, and Alpine County, California.

The 911ES Department is an accredited center of excellence for Fire Communications and Medical Communications through the International Academy of Emergency Dispatch. The department is currently working toward accreditation for its Law Enforcement Communications program. The center provides full-time communications services to the East Fork Fire Protection District, the Tahoe Douglas Fire Protection District, the Douglas County Sheriff’s office, the Washoe Tribe Police Department, and Alpine County Emergency Services (Sheriff, Fire, and EMS). The Douglas County Technology Services

Department, Infrastructure and Operations Division provides emergency and non-emergency radio and telephone maintenance services for East Fork, Tahoe Douglas, the Sherriff's office, and other Douglas County users. Table PS6 compares the 911ES call statistics from 2010 to 2019. The Other Agencies category includes calls for citizens or other user agencies, such as the GIDs and utility companies.

Table PS6 - 911 Emergency Services Calls (2010–2019)

Agency	2010	2013	2016	2019	% Change (2016)
East Fork Fire Protection District	4,805	5,452	6,292	6,753	6.83%
Douglas County Sherriff's Office	41,008	36,673	43,011	40,160	-7.10%
Tahoe Douglas Fire	1,730	1,982	2,132	1,972	-8.11%
Washoe Tribe Police Department	1,895	2,100	2,787	2,352	-18.49%
Other Agencies	16,828	29,561	27,722	21,509	-28.89%
TOTAL	66,266	75,768	81,944	72,746	-12.64%

Agency	2010	2013	2016	2019	Percent Change (2016)
East Fork Fire Protection District	4,805	5,452	6,292	6,753	6.83%
Douglas County Sheriff's Office	41,008	36,673	43,011	40,160	-7.10%
Tahoe Douglas Fire	1,730	1,982	2,132	1,972	-8.11%
Washoe Tribe Police Department	1,895	2,100	2,787	2,352	-18.49%
Other Agencies	16,828	29,561	27,722	21,509	-28.89%
TOTAL	66,266	75,768	81,944	72,746	-12.64%

NATURAL HAZARDS

The top five natural hazards identified in the 2019 Douglas County Hazard Mitigation Plan are flooding, earthquakes, wildland fires, drought, and severe events. The Public Safety Element focuses on flooding, earthquakes, and wildfires due to the frequency of these events during the last 20 years.

Flooding

Floodplain management remains a significant issue for residents and property owners in Douglas County. The County has 31,582 acres of riverine and alluvial fan floodplains. The primary cause of riverine flooding is winter rainstorms saturating and melting the Sierra snowpack at elevations between 4,500 and 8,000 feet or higher. Though most winter storms bring snow to elevations above 6,000 feet, a pattern of warm storms (known as Atmospheric Rivers or Pineapple Express because they come from the warm Pacific Islands) occasionally dumps rain at higher elevations. Winter floods can occur at any time between November and April in successive years or may not occur at all for many years.

Riverine floodplains allow floodwaters to disperse over normally flat areas adjacent to rivers and streams and reduce the energy of the water flow, thus protecting downstream properties. Riverine floodplains provide areas of groundwater recharge as well as wildlife habitat areas, and their locations are relatively predictable.

Alluvial fan floodplains, on the other hand, are not predictable and carry high velocity flows with large amounts of sediment. The small creeks and typically dry washes that flow into the Carson Valley from the surrounding mountain ranges are susceptible to occasional flash floods during thunderstorm events, creating walls of water that rush through canyons and ravines onto the valley floor in just minutes or hours. These



alluvial fan floods are normally associated with intense summer thunderstorms. Localized flooding occurs during these larger storm events that are common in the northern Nevada high-desert environment, and Douglas County recognizes that flash flooding is an issue that our residents face each year. The county annually provides flood awareness literature to residents in an effort to bring awareness to the causes of flash flooding and to make recommendations for preparing for a flood.



To address these concerns, the County has begun developing drainage Master Plans by region. Information regarding these drainage Master Plans can be found on the County's [Flood Protection web page](#).

[Nevada Flood Chronology records](#) retained by the United States Geologic Survey note that flooding in the Carson River Watershed also occurs as part of the natural cycle of snowpack

melt, rain on snow events, extended high-water flow events (succession of multiple storm events), alluvial fan flooding, flash flooding, and debris flows. The Carson River has limited storage capacity and no flood control structures. Open floodplains along the river help "store and slow" runoff and overflow from the river, protecting houses and structures in developed areas of the County. Additional information on protection of floodplains is addressed in Element 2, Agricultural and Conservation.

In 2018, the Carson Water Subconservancy District worked with Michael Baker International to prepare a [Carson River Watershed Floodplain Management Plan](#). The purpose of this Regional Floodplain Management Plan (RFMP) is to create a long-term vision and develop strategies that utilize a Living River Approach for meeting floodplain management objectives to reduce flood damage impacts in the Carson River Watershed. The RFMP revision process reviews regional flood risks and suggests watershed-wide strategies and actions to mitigate and reduce these hazards and risks while maintaining objectives. It also documents regional and local progress on meeting plan objectives. The RFMP builds on the plan that was first adopted in 2008 by the five County boards impacted by the Carson River and updated in 2013. To increase flood safety related to

the Carson River, the CWSD’s Carson River Watershed Floodplain Management Plan recommended a number of flood risk reduction and floodplain strategies for the region, which are categorized as follows:

- Protect natural floodplain function and values
- Set higher regulatory standards
- Collect flood data information and maintenance
- Balance channel migration and bank erosion monitoring
- Increase floodplain and flood hazard outreach and education
- Reduce infrastructure impact
- Map/study alluvial fans
- Minimize stormwater mitigation

National Flood Insurance Program and Community Rating System

Douglas County participates in the National Flood Insurance Program (NFIP) Community Rating System (CRS) so that property owners can acquire discounted flood insurance. This program is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Through participation in this program, residents' flood insurance premium rates are discounted to reflect the reduced flood risk resulting from community actions for reducing flood damage to insurable properties, strengthening and supporting the insurance aspects of the NFIP, and encouraging a comprehensive approach to floodplain management.

Currently, Douglas County is rated a 6, which gives property owners that are required to obtain flood insurance a 20 percent discount. CRS classes are based on 18 creditable activities organized under four categories: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.

Constructing in the Special Flood Hazard Areas or Floodplain

Douglas County has had floodplain regulations since 1974. Floodplain development permits, floodplains, and special requirements for land division in the Special Flood Hazard Area (SFHA) are all covered in Title 20 of the Douglas County Consolidated Development Code. SFHAs are defined as areas that will be inundated by the flood event having a one percent chance of being equaled or exceeded in any given year. The one percent annual chance flood is also referred to as the base flood or 100-year flood. These Federal Emergency Management Agency (FEMA) flood zones are typically A, AO (with depth associated), AH, and AE. X-shaded is defined as the 500-year flood, with a 0.2 percent annual chance of flooding in a given year. Flood events in Douglas County

can cause extensive damage to private and public property (roads, utilities, etc.). In extreme flooding events, loss of life is possible. The County entered the National Flood Insurance Program in 1975 under the Emergency Program and entered the regular program on March 28, 1980. According to the 2019 Hazard Mitigation Plan, there are 1,077 flood insurance policies in Douglas County, and there have been 117 losses totaling \$2,943,995 (this is 2012 data; new data is scheduled to be updated in 2020). Diagrams PS5—PS7 display the location of special flood hazards areas throughout Douglas County.

High Risk Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
AE	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
A1-30	These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a BFE (old format).
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.

Moderate to Low Risk Areas

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION
B and X (shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. B Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.
C and X (unshaded)	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level. Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base floodplain. Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.

DIAGRAM PS5 - SPECIAL FLOOD HAZARD ZONES IN CARSON VALLEY REGION

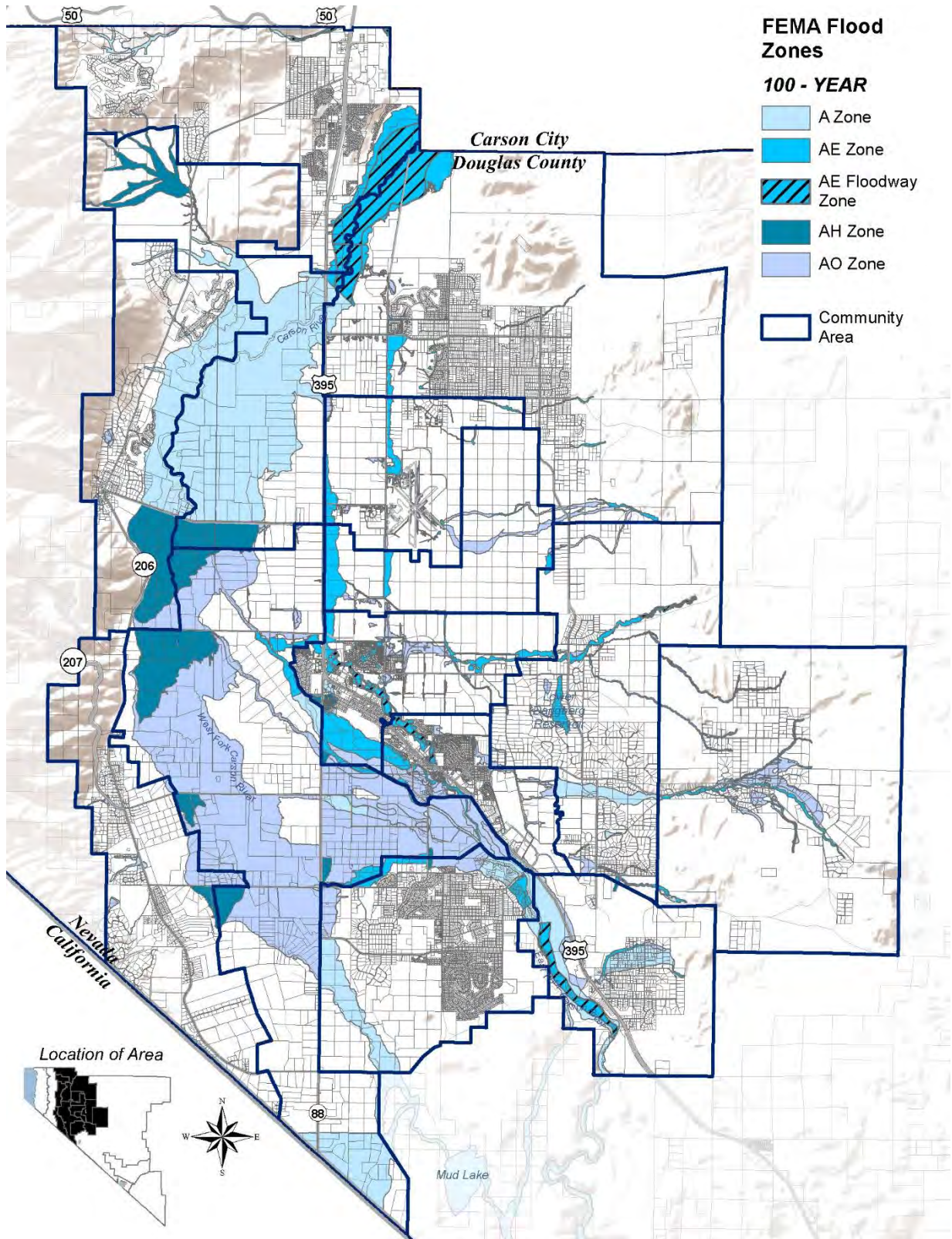


DIAGRAM PS6 - SPECIAL FLOOD HAZARD ZONES IN TOPAZ RANCH

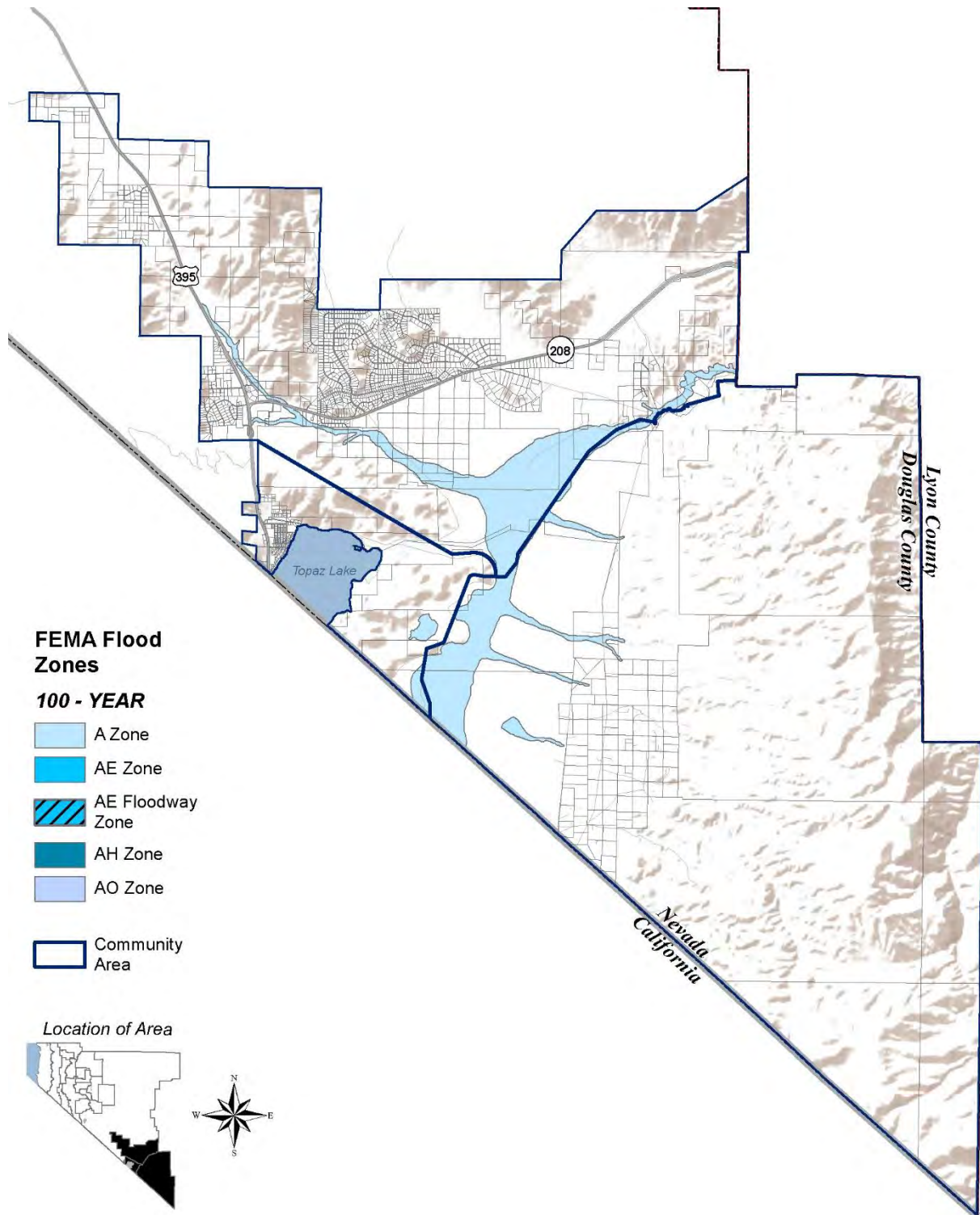
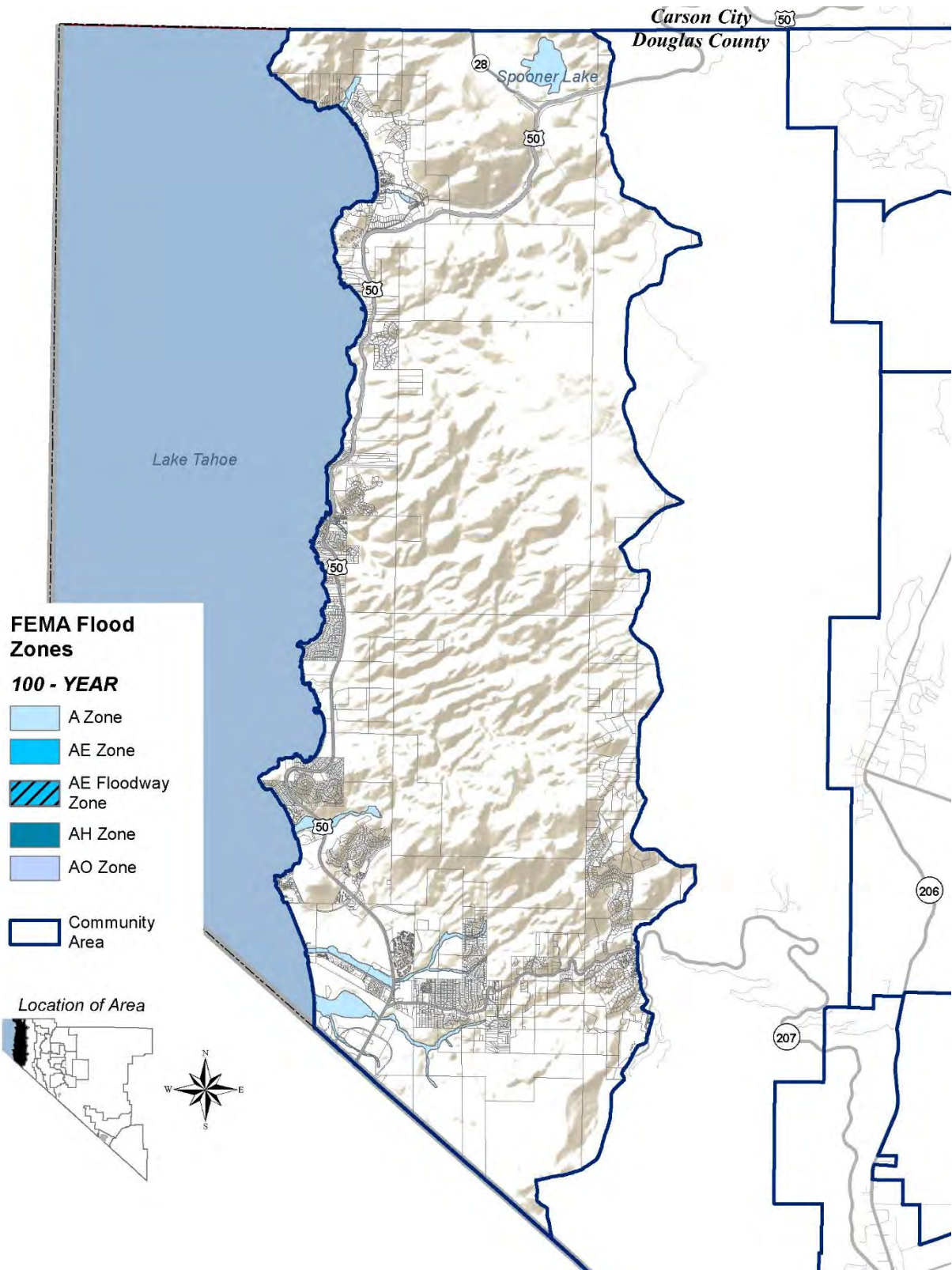


DIAGRAM PS7 - SPECIAL FLOOD HAZARD ZONES IN TAHOE BASIN REGION

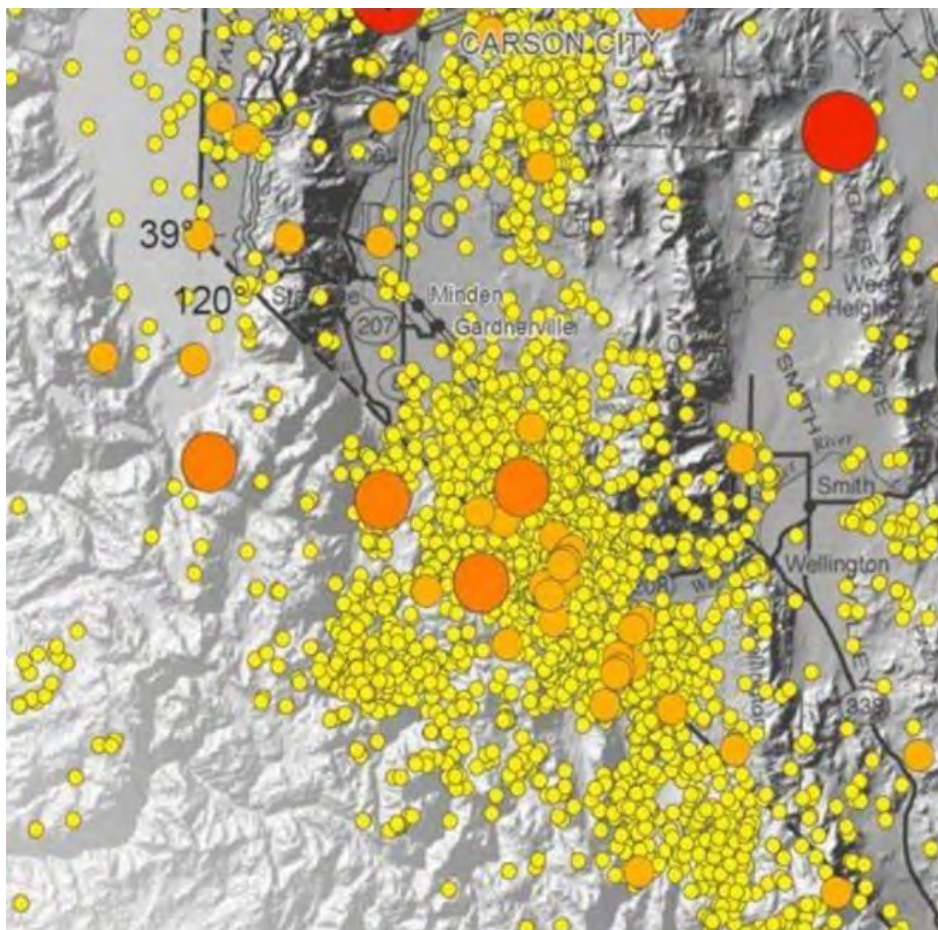


Earthquakes

Nevada is ranked third highest in the United States for the number of large earthquakes. Douglas County has been shaken by earthquakes in 1887, 1932, 1933, and 1994. Over 3,700 earthquakes were recorded in the county between 1970 and 2010 (see Figure PS2). In Figure PS2, small yellow dots are earthquake magnitudes of four or less, smaller orange dots are magnitude of 4 to 4.9, larger darker orange dots are magnitude 5 to 5.9, and large red dots are magnitude 6 and higher.

Date	Magnitude	Nearest Community	Effects
June 3, 1887	6.5	Carson City	Building damage, liquefaction
Dec. 20, 1932	7.1	Gabbs	Gabbs Surface rupture, chimney damage
June 25, 1933	6	Wabuska	Building and chimney damage
Sept. 12, 1994	5.8	Gardnerville	Chimney damage, foundation cracking

Figure PS2 - 1840's to 2010 Earthquakes in Douglas County (dePolo



The largest faults located in Douglas County:

- 1) Genoa Fault
- 2) Eastern Carson Valley Fault Zone
- 3) Smith Valley Fault
- 4) Antelope Valley Fault
- 5) Eastern Antelope Valley Fault
- 6) Double Spring Flat Fault Zone
- 7) Mud Lake Fault Zone

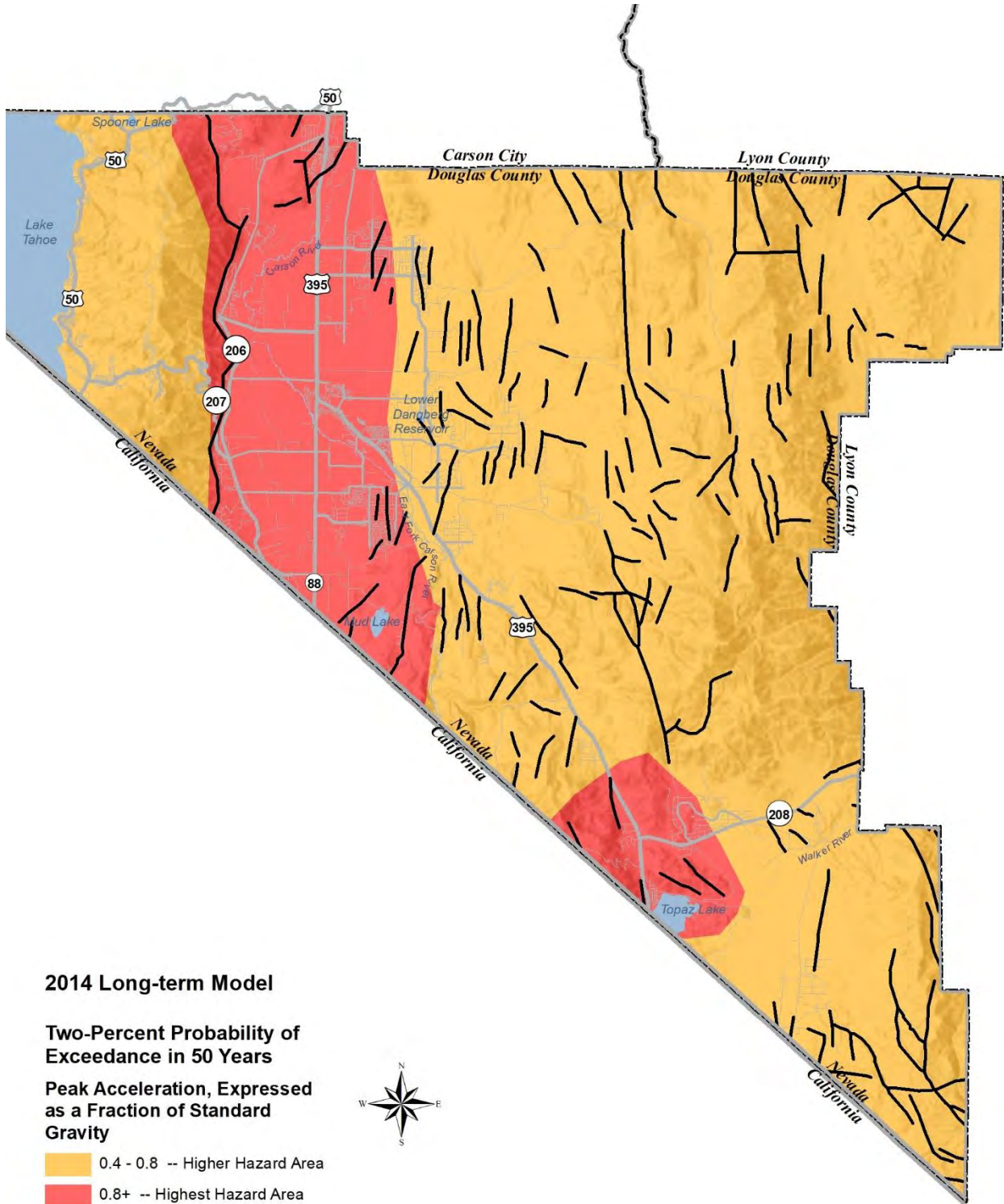
and dePolo (2012)

The estimated maximum magnitude of earthquakes for the major faults in Douglas County range from 6.5 to 7.2. These major earthquakes usually occur every few thousand to tens of thousands of years along any individual fault. The high earthquake hazard in the County is the result of these larger faults and hundreds of other smaller faults. For earthquake preparedness, risk mitigation, and emergency and recovery planning purposes, having a better understanding of the largest earthquakes that can occur in the county is paramount.

With seismic events, liquefaction hazards exist in the Carson Valley, along the shores of South Lake Tahoe, in northern Antelope Valley, and in several small basins. Liquefaction occurs in places where groundwater is shallow and sediments—classically fine sands—are young and unconsolidated. When these types of saturated sediments are shaken strongly for a period of time, they can consolidate and expel the water from pore spaces. When pore pressure increases rapidly and cannot be dissipated, the phenomenon of liquefaction occurs, during which the soil column can behave as a liquid. When this happens, a sand/water mixture can discharge water out of the ground, the land surface can flow downhill or sideways, and the ground may no longer be able to support the weight of buildings. Buildings on liquefied ground can sink and break up; other effects of liquefaction are the violent oscillations that are potentially damaging to buildings and infrastructure.

Diagram PS8 displays the County's faults lines and hazard area. Diagrams PS9–PS11 display the geologic hazards with fault lines, liquefaction susceptible areas, alluvial deposit areas, and subsurface material types throughout Douglas County.

DIAGRAM PS8 - DOUGLAS COUNTY LONG-TERM HAZARD AREA



2014 Long-term Model

Two-Percent Probability of Exceedance in 50 Years
Peak Acceleration, Expressed as a Fraction of Standard Gravity

- 0.4 - 0.8 -- Higher Hazard Area
- 0.8+ -- Highest Hazard Area
- Geologic Faults



Data Source: U.S. Geologic Survey

DIAGRAM PS9 - CARSON VALLEY REGION - GEOLOGIC FEATURES / FAULTS

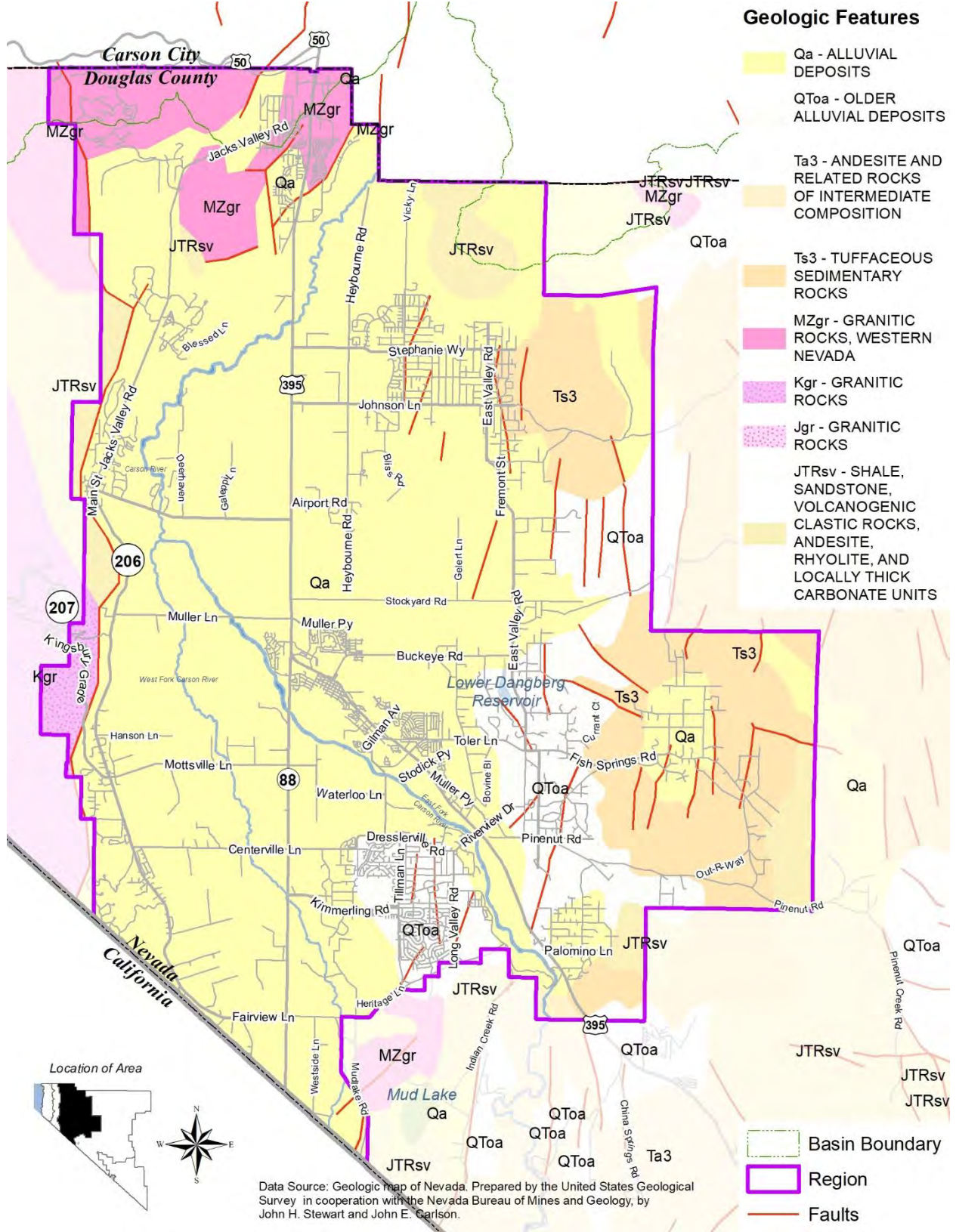


DIAGRAM PS10 - PINENUT REGION - GEOLOGIC FEATURES / FAULTS

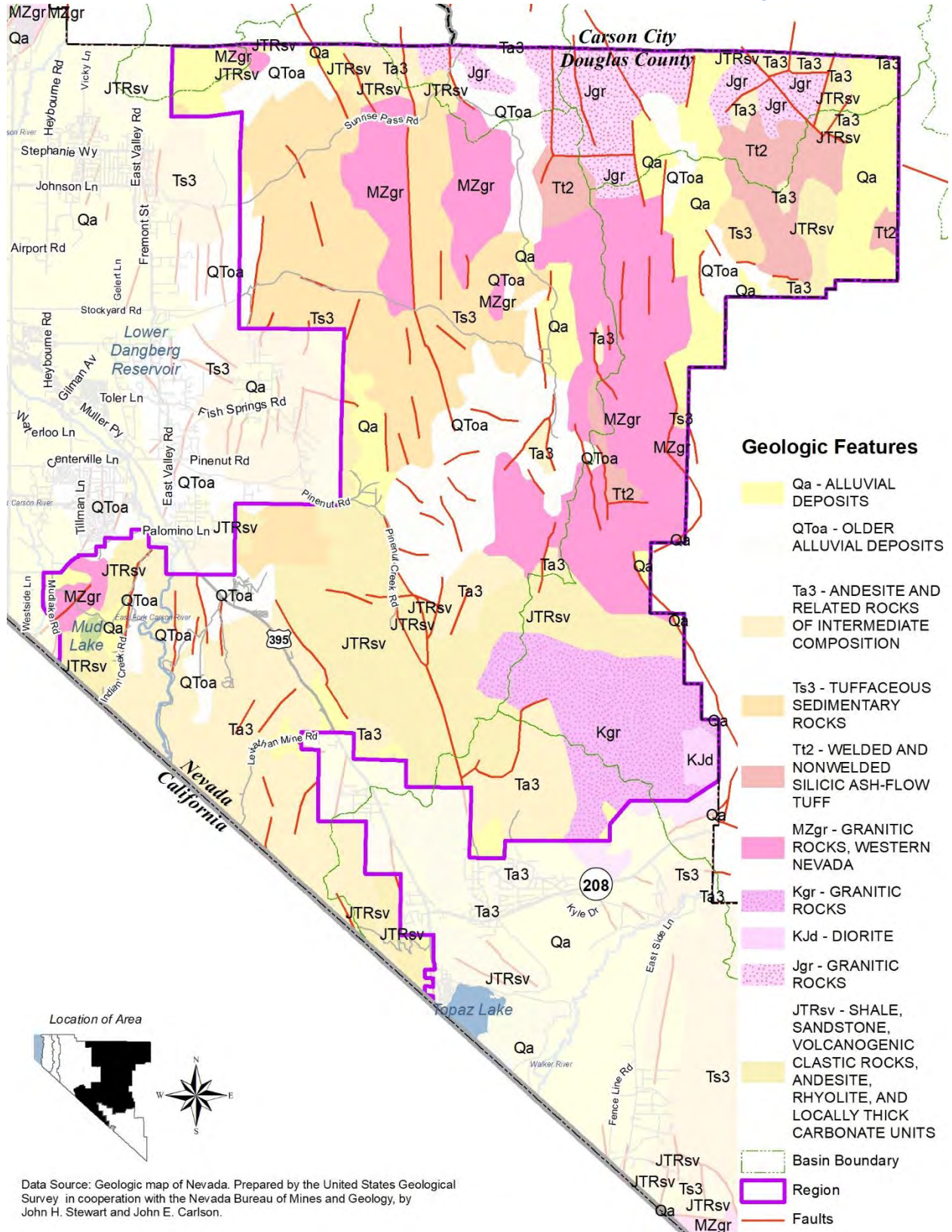
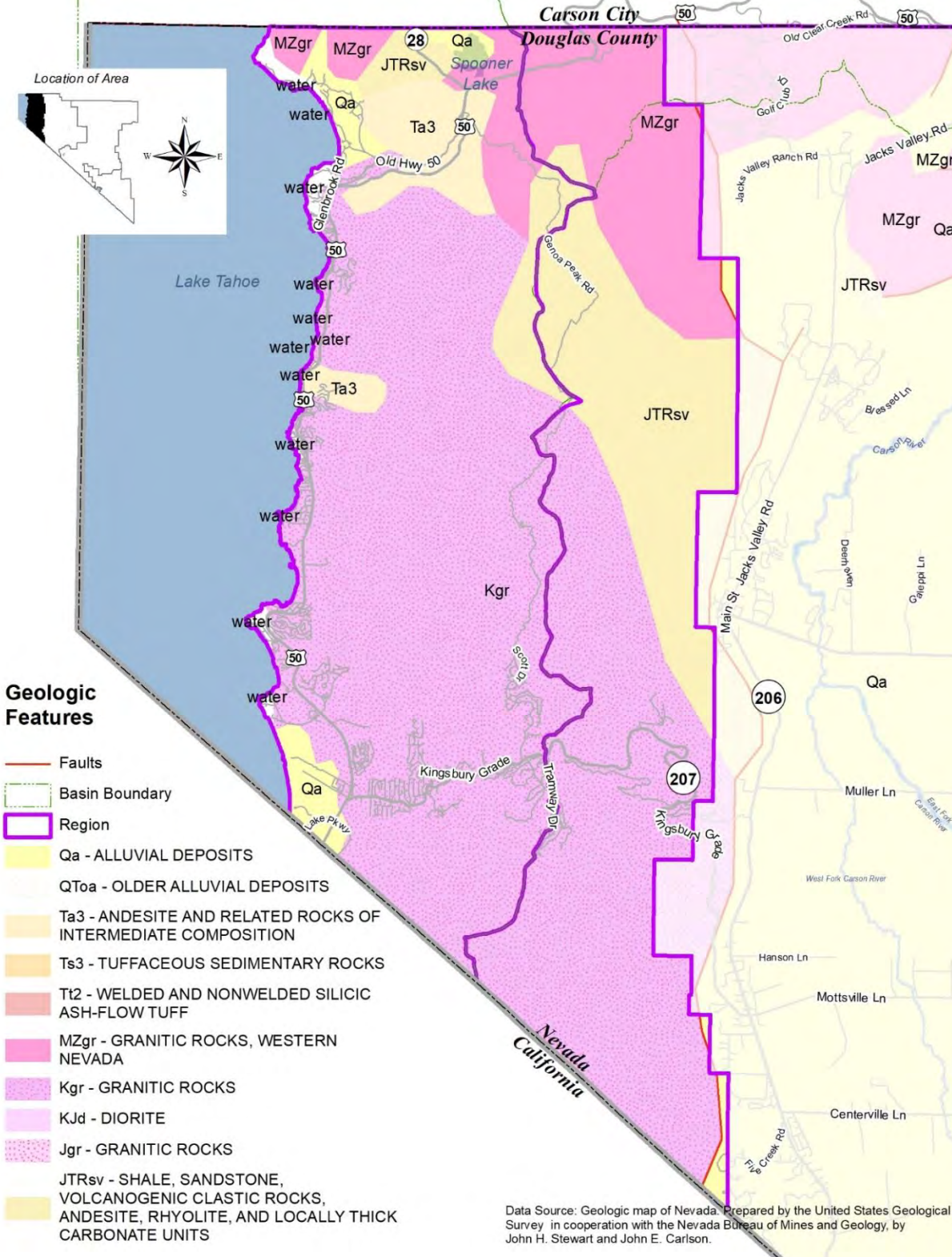


DIAGRAM PS11 - TAHOE BASIN & SIERRA REGION - GEOLOGIC FEATURES / FAULTS



Wildland Fires

As shown in Table PS7, since 2011, almost 73,000 acres in Douglas County have burned, taking 28 structures and resulting in a total cost of more than \$29 million. The Bison Fire, which started on July 4, 2013, was started by lightning and burned 24,000 acres, at a cost of \$8.6 million.

Table PS7 - Larger Wildland Fire Loss History (2011–2020)

Fire Name	Date Started	Acres Burned	Structures Lost	Cause	Cost
Ray May	August 16, 2011	3,815	2	Human	\$1,231,574
Holbrook	September 10, 2011	133	0	Undetermined	\$226,896
Burbank	September 30, 2011	1,113	0	Lightning	\$1,515,000
TRE	May 22, 2012	7,153	17	Human (Illegal burning)	\$3,411,412
Preacher	June 1, 2012	1,076	0	Lightning	\$835,000
Springs	June 22, 2012	1,191	0	Lightning	\$688,000
Bison	July 4, 2013	24,000	0	Lightning	\$8,600,000
Carter Springs	September 21, 2013	3,400	0	Undetermined	\$1,310,000
Frontage	October 9, 2016	100	2	Undetermined	\$3,000,000
Cutter	October 3, 2017	650	0	Lightning	\$1,300,000
James Loop	July 9, 2018	250	0	Human (Construction)	\$800,000
Slinkard	August 28, 2020	9,000	0	Unknown	Unknown
Monarch	June 24, 2020	2,330	-	Lightning	-
Numbers	July 6, 2020	18,342	7	Human (roadside exhaust debris)	\$6,500,000
Totals for Douglas County:		72,553	28		\$29,417,882.00

Source: East Fork Fire Protection District

To date, the County has not adopted the 2018 International Wildland Urban Interface Code for the East Fork Township, but the code is applied to construction within the Tahoe Douglas Fire District. The State of Nevada adopted the entire code in 2012 as modified in NAC 477.

Diagrams PS12–PS14 display the locations of wildland fires between 2000 and 2019.

DIAGRAM PS12 - WILDLAND FIRES IN THE CARSON VALLEY REGION

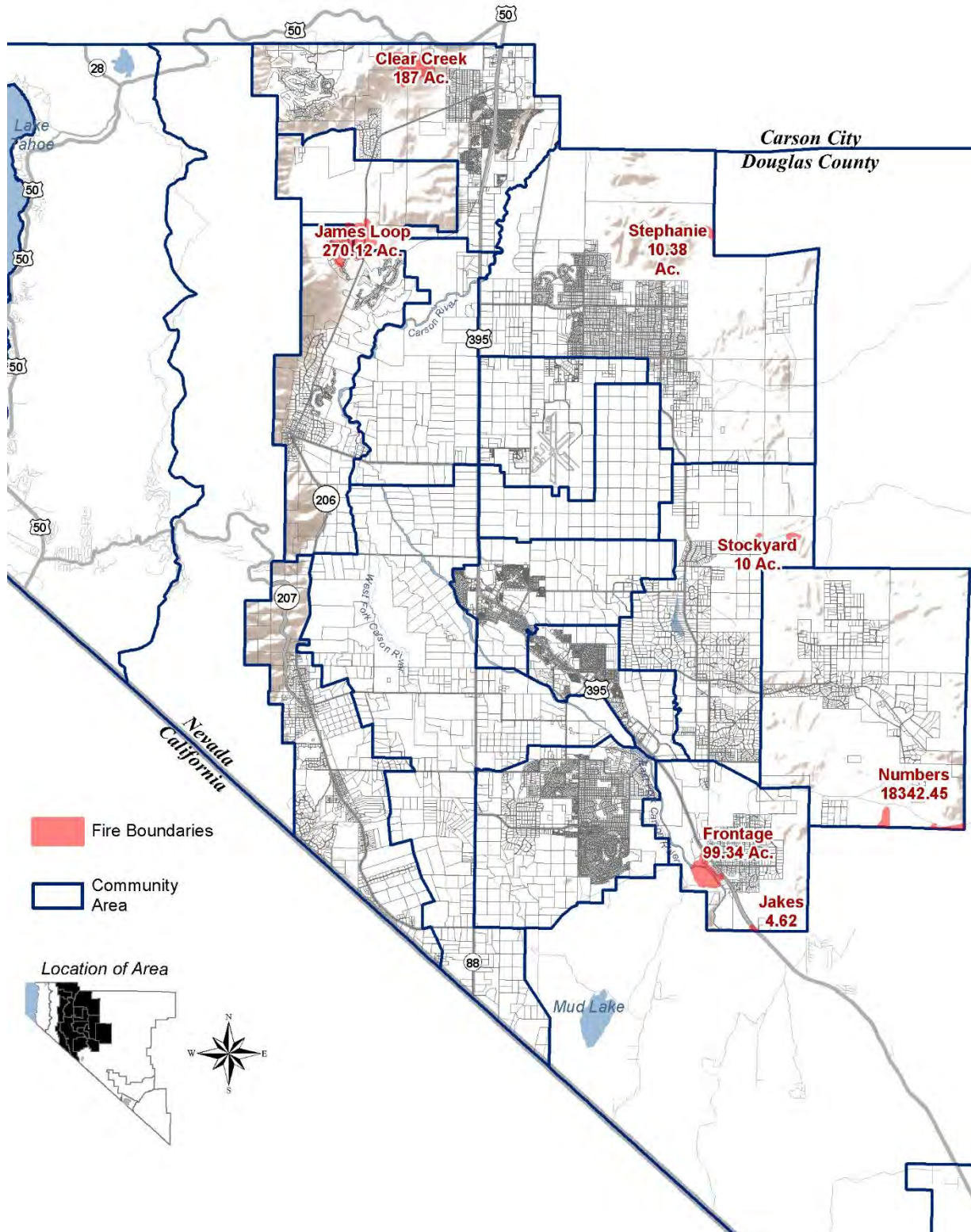


DIAGRAM PS13 - WILDLAND FIRES IN THE PINENUT REGION

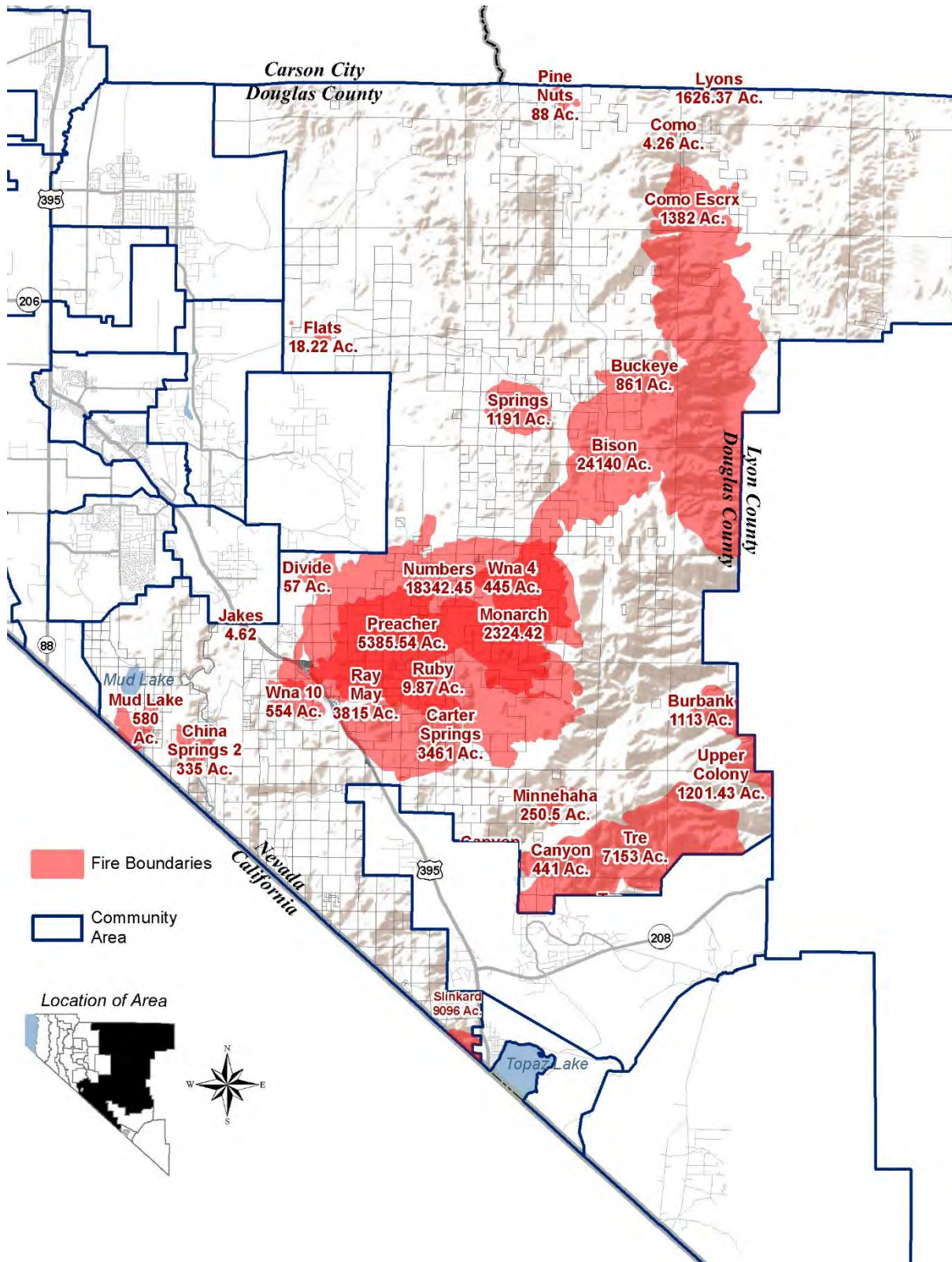
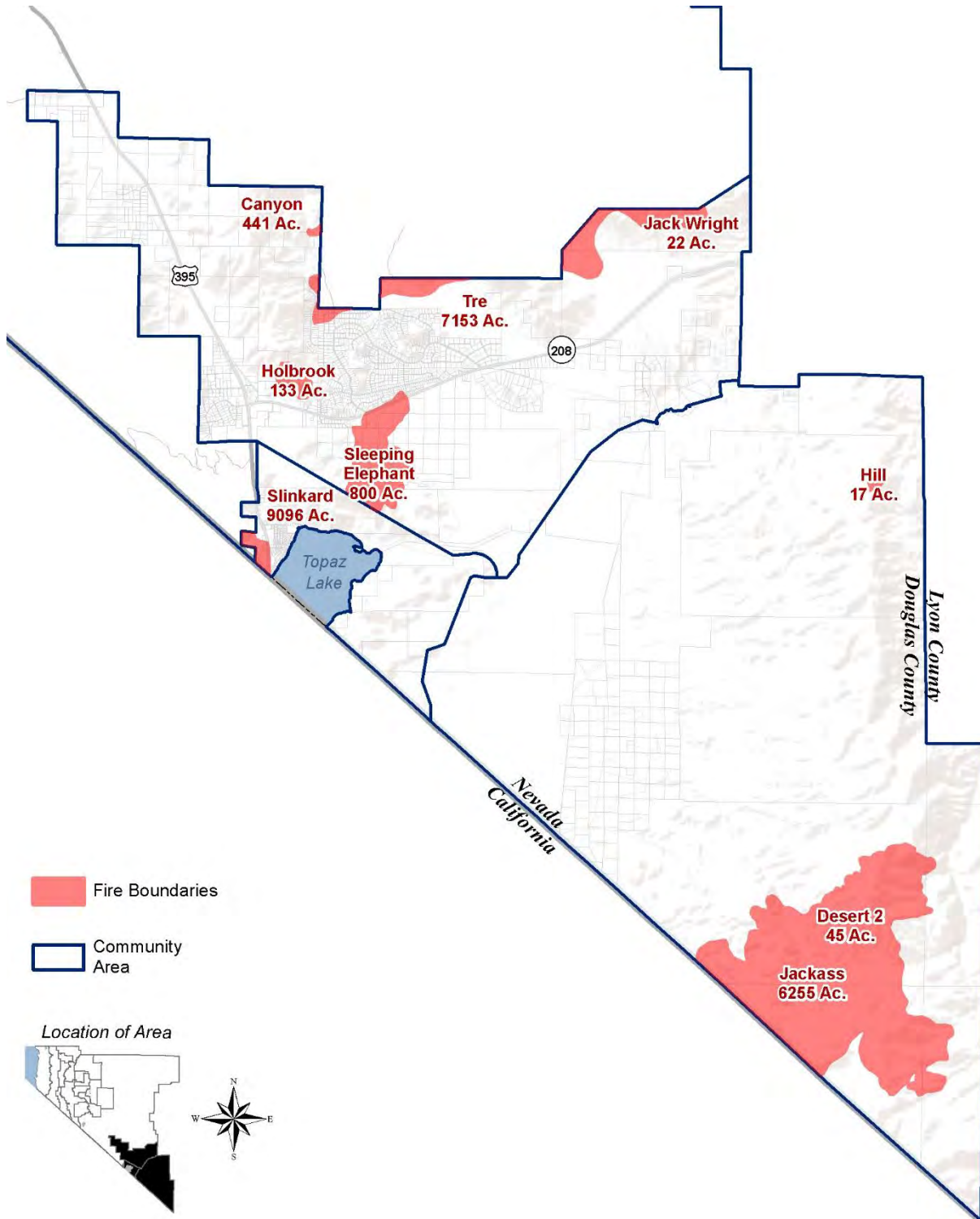


DIAGRAM PS14 - WILDLAND FIRES IN THE TOPAZ REGION



Evacuation Routes

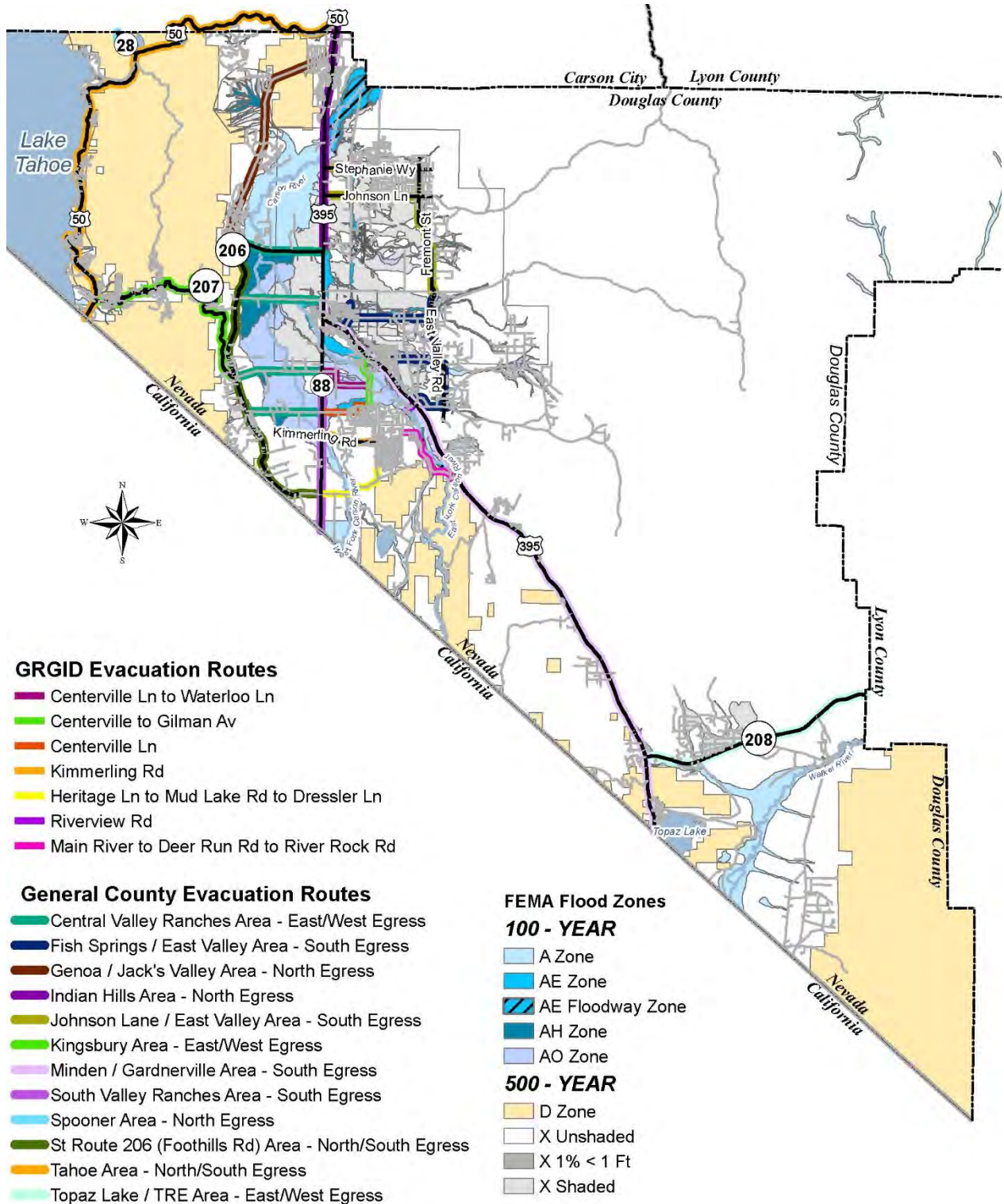
In the event of any disaster, such as flooding or wildfires, residents in threatened areas must be able to safely evacuate to temporary locations. The Carson River Watershed's Regional Floodplain Management Plan and the 2019 Hazard Mitigation Plan show that the Carson River is able to handle a flood stage of 13.5 feet before transportation is affected and first responders are needed. The evacuation routes for Douglas County are depicted in Diagram PS15. It should be noted that during flood events, many of the east-west arterials between Foothill/Jacks Valley Road and U.S. Highway 395 are overtopped with floodwaters and impassable. A portion of Highway 395 at Cradlebaugh Bridge was overtopped during flooding in early 2017.

Some of the designated evacuation routes, such as East Valley Road, are not improved transportation corridors. There is a proposal for the realignment for East Valley Road east of the airport, to connect East Valley Road to the East Valley Road located south of Johnson Lane.

Tahoe Douglas Fire annually provides training to residents for the three primary evacuation routes: Spooner Summit/Highway 50 to the east, Kingsbury Grade/State Route 207, and Highway 50 to the west. The evacuation route is dependent on the source of the emergency.



DIAGRAM PS15 - GENERAL COUNTY EVACUATION ROUTES



LOOKING TO THE FUTURE

Increasing Public Safety with Business Registration

Douglas County does not require a business registration to do business in the County. A business registration would identify materials as well as occupancy loads. The County also does not require a review to check compliance with building, zoning, and fire codes before a new business starts to operate. East Fork has a voluntary incident response registration form that is used for fictitious name registration. Requiring a business to submit for a registration would:

- Increase public safety if the County were able to review all existing and new businesses to determine if hazardous materials are involved, where the hazards are located on the site, and if there are other conflicting uses adjacent to that hazard
- Assist the DCSO with nuisance bars for noncompliance of code
- Assist Code Enforcement with code violations
- Provide the opportunity for the county to track and monitor sales data

Wildland Urban Interface Code

Douglas County has not adopted the Wildland Urban Interface Code for the East Fork Fire Protection District. This code covers sprinklers, building materials, and defensible space and would allow the County to potentially obtain additional reimbursement from the federal government after a fire event and lower insurance rates for the county residents. Adopting the WUI Code would ensure that new construction would be resistant to fire ignition, providing additional safety to the residents of the County who live adjacent to forested lands. Tahoe Douglas Fire has adopted the WUI Code and is utilizing an enforcement program.

Recruitment and Retention of Public Safety Personnel

According to the Douglas County Sheriff's Office, East Fork Fire Protection District, and Tahoe Douglas Fire, the Douglas County School District and Douglas County have a big challenge in recruiting new officers, volunteers, and employees. The cost of housing in Douglas County is a primary concern, and it is noted that employees are not able to obtain housing on the salaries offered by the agencies.

- East Fork Fire needs an additional fire station east of Martin Slough and west of East Valley.
- Tahoe Douglas Fire needs an additional fire station in the Casino Core in South Lake Tahoe.

- Tahoe Douglas Fire needs to reconstruct and expand their fleet maintenance facility.

Evacuation Routes

The existing evacuation routes map needs to be updated to reflect actual road conditions and may need to distinguish between existing routes and planned improvements to the routes. The Hazard Mitigation Plan requires improvements to routes in emergencies. Some of these improvements include:

- Buckeye Road from Heybourne Road to Highway 395 over the Martin Slough needs to be raised to allow passage in a flood event.
- The realignment for East Valley Road from Fremont Street to East Valley Road should be a priority, in addition to obtaining the right-of-way for East Valley Road from Stockyard Road to East Valley Road, connecting to Johnson Lane.
- The County should consider an additional route for evacuation purposes from Fish Springs and the Topaz and Holbrook Junction areas.

Minden-Tahoe Airport

It would be beneficial to conduct a Part 77 study to determine how to protect the airspace surfaces around the Minden-Tahoe Airport to prevent structures that would interfere with aircraft landings and departures. For example, in 1967 neighboring Carson City adopted an Airport Clearance Zone (Chapter 16.02 of the Municipal Code). This ordinance restricts heights and prohibits public assembly land uses such as schools and hospitals.

Douglas County should also consider creating an Airport Zoning Overlay District to protect airplane operations and to protect the public from potential airplane accidents during departures or landings.

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7. WASHOE TRIBE

PURPOSE

Reserved for future Washoe Tribe Element

GOALS

Reserved for future Washoe Tribe Element

Goal 1
 TBD

Goal 2
 TBD

POLICIES

Policy 1
 TBD

Policy 2
 TBD

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8. IMPLEMENTATION













PURPOSE


The purpose of the Implementation Element is to set forth the Master Plan work program to provide direction to staff from the Board on priorities for future accomplishments.

MASTER PLAN ACTION MATRIX









The Action Matrix for the 2020 update of the Douglas County Master Plan lists the actions for each Master Plan Element along with the priority for each action item. These priorities are subject to staffing resources and budget constraints identified by the Board. Priority is categorized by a time frame based on four levels: (1) one to three years, (2) three to five years, (3) five to ten years or longer, and (4) ongoing items that may be addressed each year. These actions identify amendments that may need to be added to the Douglas County Development Code and define actions that should be included in the County's five-year Capital Improvement Program. The Matrix will be updated as part of the annual Master Plan reporting process.

Priority Explanation in Years | 1–3 (High), 3–5 (Medium), 5–10 (Low)



		Priority
L LAND USE & HISTORIC PRESERVATION		
 Action 1	Amend Title 20 to incorporate the Master Plan land use designations and compatible zoning districts.	1–3
 Action 2	Amend the Master Plan Land Use Designation Table to allow multi-family residential zoning in the Commercial land use category.	1–3
 Action 3	Ensure that Douglas County Community Development works with Douglas County GIS, the Recorder’s Office, and affected property owners to eliminate parcels with split land uses, split zoning, and other mapping inconsistencies.	3–5
 Action 4	Ensure that Douglas County Community Development periodically amends the Master Plan Future Land Use Map to change the future land use designation for built-out receiving areas.	1–3
 Action 5	Support the Towns of Gardnerville and Minden in submitting Historic District nomination packages to the State of Nevada.	3–5
 Action 6	Apply for Certified Local Government status with the State of Nevada Historic Preservation Office.	5–10
 Action 7	Support efforts to secure state, federal, or other funding directed toward revitalizing historic areas or maintaining historic buildings and sites.	1–3
 Action 8	Continue to support proposed Main Street legislation in the Nevada Legislature to provide financial and technical resources.	Ongoing
 Action 9	Evaluate the creation of a county-wide Historic Preservation Board and program.	1–3
 Action 10	Examine changes to Title 20 to establish a 10-acre Rural Agriculture zoning district in keeping with the preservation of our rural nature.	1–3

		Priority
L LAND USE & HISTORIC PRESERVATION		
 Action 11	Examine changes to Title 20 to clarify the use of TDRs.	1–3

Priority Explanation in Years | 1–3 (High), 3–5 (Medium), 5–10 (Low)

		Priority
A AGRICULTURE & CONSERVATION		
 Action 1	Investigate creating an Open Space Land Trust to facilitate planning and implementation of an Open Space Acquisition Program.	1–3
 Action 2	Update the 2007 Open Space and Agricultural Lands Preservation plan prior to September 29, 2029, and incorporate the development of a River Corridor Open Space plan addressing the branches of the Carson and Walker Rivers.	3–5
 Action 3	Evaluate and update the definition of publicly valuable open space to include the provision of active recreation opportunities in less critical habitat to relieve recreation pressure in areas of more critical habitat and to manage public lands access.	5–10
 Action 4	Establish an open space acquisition program.	1–3
 Action 5	Prepare recommendations for establishment of a TDR bank to encourage conservation of open space areas in the County.	1–3
 Action 6	Prepare a Low-Impact Development Ordinance for all new residential, commercial, and industrial development to reduce pollutants from entering surface waters in Douglas County.	1–3
 Action 7	Work with NDEP and the Carson Water Subconservancy District to remove one or more river segments from the EPA list of 303 (d) impaired waters.	3–5
 Action 8	Develop comprehensive storm drainage design criteria for developed areas in conjunction with the Towns and GIDs.	3–5







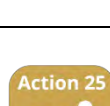

		Priority
A AGRICULTURE & CONSERVATION		
 Action 9	Develop and implement a stormwater management plan.	5–10
 Action 10	Implement the Clear Creek and Johnson Lane Stormwater Management Plans as required by the EPA’s MS4 National Pollutant Discharge Elimination System (NDPES) Permit.	1–3
 Action 11	Amend the Development Code to include noise standards for noise-generating activities, including limitations on hours of operation during the day.	3–5
 Action 12	Evaluate and update agricultural exemptions and incentives to encourage agricultural conservation of open space and the continuation of agricultural activities.	3–5
 Action 13	Evaluate agricultural zoning districts and property tax structure to support perpetual farming and agricultural uses in specific areas.	5–10
 Action 14	Minimize conversion of agricultural land to non-agricultural uses and ensure that recognized needs for growth are met by infill and contiguous development.	Ongoing
 Action 15	Provide procedures for the acquisition, dedication, or purchase of agricultural preservation easements, by public or nonprofit entities, as a means to retain land in agriculture.	1–3
 Action 16	Expand and improve drainage facilities on U.S. Highway 395 at Smelter Creek south of Gardnerville and from Minden north to Cradlebaugh Bridge.	1–3
 Action 17	Protect wetlands to provide for groundwater recharge, flood protection, sediment and pollution control, wildlife habitat, and open space.	1–3
 Action 18	Service development occurring at urban densities with a sanitary sewer utility.	3–5
 Action 19	Implement the Agrihood Strategy Framework accepted by the Board of County Commissioners on September 3, 2020.	1–3

		Priority
A AGRICULTURE & CONSERVATION		
 Action 20	Include provisions in the Development Code for the mandatory use of TDRs to increase density associated with a zoning map amendment.	1–3
 Action 21	Create alternatives to the urban development of existing agricultural lands to preserve those agricultural areas.	1–3

Priority Explanation in Years | 1–3 (High), 3–5 (Medium), 5–10 (Low)










		Priority
E ECONOMIC DEVELOPMENT		
 Action 1	Consider amendments to the Development Code to allow permanent sidewalk merchandise displays in the downtowns.	1–3
 Action 2	Complete infrastructure projects, such as the Martin-Slough Trail, Muller Parkway, and utilization of Complete Streets vision and plan for U.S. Highway 395.	1–3
 Action 3	Implement the South Shore Area Plan for Stateline.	1–3
 Action 4	Complete the Tahoe Douglas Area Plan.	1–3
 Action 5	Implement the Expanded Kahle Drive Vision Plan.	3–5
 Action 6	Explore the creation of an Improvement District under NRS Chapter 271 for the Stateline area.	3–5
 Action 7	Develop a communication and marketing plan for the Minden-Tahoe Airport.	3–5
 Action 8	Update the Airport Economic Impact Study.	5–10



		Priority
E ECONOMIC DEVELOPMENT		
 Action 9	Plan and develop the east side of the Minden-Tahoe airport to facilitate business development, retention, and expansion.	5–10
 Action 10	Seek funding to improve bicycle, pedestrian, and equestrian infrastructure that supports economic development.	3–5
 Action 11	Continue to work with our network of partners to promote and advocate for outdoor recreation experiences.	Ongoing
 Action 12	Advocate for trails as part of infrastructure and development opportunities.	Ongoing
 Action 13	Develop a GIS layer for the public viewer that shows existing trails in Douglas County.	3–5
 Action 14	Explore tools to promote economic development that do not require the investment of local funds.	3–5
 Action 15	Evaluate and update land use regulations to foster a positive atmosphere and attract appropriate types of business to the community. Promote the types of uses that provide middle-income jobs and promote entrepreneurship.	1–3
 Action 16	Explore tools to connect local consumers to local suppliers.	3–5
 Action 17	Support local employees through efforts to make housing, daycare, and other needs more accessible and affordable.	3–5
 Action 18	Maintain locations for light industry and evaluate and update regulations relating to live/work light industry opportunities.	1–3
 Action 19	Develop a strategy to attract and retain independent, contract, and remote workers.	3–5

		Priority
E ECONOMIC DEVELOPMENT		
 Action 20	Support development of business incubators, innovation centers, and co-working spaces.	1–3
 Action 21	Conduct a market analysis and develop a marketing strategy for the downtown areas of Minden and Gardnerville.	5–10
 Action 22	Work with providers to assess availability and reliability of broadband in the County and identify ways to expand access.	3–5
 Action 23	Work with the Douglas County School District and other agencies to develop career and technical training, apprenticeship programs, and internships to provide a qualified and educated workforce for our local businesses and industries.	1–3
 Action 24	Consider amendments to the Development Code to create a process for applying to install public art, including separate criteria for murals and sculptures and consideration for temporary, permanent, and rotating displays.	1–3
 Action 25	Facilitate the creation of a Cultural Commission, which will be an advisory board to the County Commissioners for matters relating to arts and culture for the benefit of all residents and visitors.	1–3
 Action 26	Continue to work with our network of partners to promote and advocate for arts and cultural programming.	Ongoing
 Action 27	Explore incentives for the inclusion of live/workspace in planned developments.	1–3






Priority Explanation in Years | 1–3 (High), 3–5 (Medium), 5–10 (Low)




		Priority
G GROWTH MANAGEMENT & HOUSING		









		Priority
G GROWTH MANAGEMENT & HOUSING		
 Action 1	Develop key indicators to monitor the impacts of growth and the progress toward implementing the County’s growth management programs; report annually on their effectiveness and possible improvements.	1–3
 Action 2	Ensure that the Community Development Department provides input during the preparation of the annual CIP to ensure consistency with the Master Plan and the Growth Management Chapter of the Douglas County Development Code.	Ongoing
 Action 3	Analyze the effectiveness of the TDR program before the next update of the Douglas County Master Plan and prepare recommendations on sending and receiving areas and TDR values.	1–3
 Action 4	Evaluate and update land development regulations in rural areas to better protect wildlife habitat, habitat connections, scenic vistas, and rural character.	1–3
 Action 5	Evaluate and update design regulations to encourage quality public space.	3–5
 Action 6	Amend the Douglas County Development Code to include minimum density requirements in the multi-family residential and mixed-use commercial zoning districts.	1–3
 Action 7	Revise the Master Plan land use designations to permit multi-family zoning within the Commercial land use designation.	1–3
 Action 8	Review the single-family design standards in the Development Code to determine whether impediments exist for the development of moderately priced entry-level homes, including single-family attached units.	1–3
 Action 9	Revise the criteria in the Mixed-Use zoning district to reduce the percentage of commercial usage required.	1–3











		Priority
G GROWTH MANAGEMENT & HOUSING		
 <p>Action 10 Prepare recommendations for amending the Development Code to require developers to include a percentage of affordable units in large subdivisions in return for a density bonus.</p>	1–3	
 <p>Action 11 Explore the viability of community land trusts to develop and maintain entry-level housing stock for households with incomes below 80 percent of median income.</p>	3–5	

Priority Explanation in Years | 1–3 (High), 3–5 (Medium), 5–10 (Low)




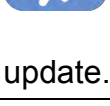





		Priority
PF PUBLIC FACILITIES, SERVICES, & RECREATION		
 <p>Action 1 Develop a facilities master plan to address space needs for government services.</p>	3–5	
 <p>Action 2 Identify critical services and define desired service levels from government service providers that address all policies of this section.</p>	3–5	
 <p>Action 3 Define desired service levels and establish clear expectations for service providers to ensure efficient and cost-effective delivery of services.</p>	3–5	
 <p>Action 4 Explore the feasibility of connecting communities with high concentrations of private wells, such as Ruhestroth, Johnson Lane, Topaz Lake and Topaz Ranch Estates, to public water systems.</p>	1–5	
 <p>Action 5 Create incentives to encourage existing development to connect to public water and sewerage systems upon public service provider’s system expansion, particularly in areas with high concentration of nitrates reaching groundwater, such as Johnson Lane and Ruhestroth.</p>	3–5	




	<p>Evaluate and update development exaction regulations to address capital improvements, intersection impacts, road or turning lane impacts, impacts to water or the sewer system, and other needs.</p>	<p>1–3</p>
	<p>Evaluate the feasibility of establishing impact fees in urban service/receiving areas (areas where increased density is proposed) to support expansion of required infrastructure and public facilities.</p>	<p>1–3</p>
	<p>Identify appropriate locations for infrastructure before it is needed by projecting the location of future growth.</p>	<p>1–3</p>

		Priority
PF PUBLIC FACILITIES, SERVICES, & RECREATION		
 Action 9	Evaluate and update the definition of publicly valuable open space to include the provision of active recreation opportunities in less critical habitat in order to relieve recreation pressure in areas of more critical habitat and to manage public lands access.	1–3
 Action 10	Evaluate private land recreation needs and management to relieve the impact on public lands.	3–5
 Action 11	Establish an open space acquisition program that identifies acquisition area priorities based on capital costs, operation and maintenance costs, accessibility, open space needs, resource preservation, ability to complete or enhance the existing open space linkage system, and unique environmental features. Techniques for acquisition may include fee simple acquisition, acquisition of development rights, transfer of development rights, clustering, or other measures.	1–3
 Action 12	Utilize State of Nevada standards for the evaluation of new septic systems on the basis of the site’s susceptibility to groundwater pollution by septic effluent.	3–5
 Action 13	Continue to monitor areas with high septic system densities for signs of groundwater contamination from nitrates.	Ongoing
 Action 14	Prepare amendments to the Development Code to support a Dig Once policy for underground telecommunications and fiber infrastructure.	1–3
 Action 15	Evaluate database offerings, including Nevada State Library and other database additions/subtraction.	3–5
 Action 16	Pursue development of a trail concept plan for the upper Kingsbury Grade segment of the Pony Express National Historic Trail.	3–5

		Priority
PF PUBLIC FACILITIES, SERVICES, & RECREATION		
 Action 17	Update the Comprehensive Trails Plan.	3–5
 Action 18	Partner with and support USGS to update the Numerical Groundwater-Flow Model of the Carson Valley, Douglas County, Nevada, and Alpine County, California, in order to develop a complete understanding of the availability and quality of water in the Carson Valley/Carson River Basin.	1–3
 Action 19	Develop a regional water resource plan, pursuant to NRS 278.	3–5
 Action 20	Update the water conservation plan, pursuant to NRS 540.	3–5
 Action 21	Update the Nevada 80 th Session’s AB240 growth management report, as required.	Ongoing
 Action 22	Implement the Airport, Johnson Lane, Alpine View Estates, and Ruhenstroth Area Drainage Master Plans.	1–3
 Action 23	Encourage funding for art and cultural facilities and form a public arts coalition between the Towns of Minden and Gardnerville, Main Street Gardnerville, the Carson Valley Arts Council, and other interested parties to enhance cultural and performing arts.	1–3
 Action 24	Investigate the feasibility of a County hospital with mental health facilities, including facilities for special needs children and adults.	Ongoing
 Action 25	Examine feasibility studies for arts complexes and the development and design of a theater venue for the Carson Valley.	1–3
 Action 26	Assist in the improvement of arts organizations’ existing facilities to enhance the quality and quantity of arts offerings.	1–3

Priority Explanation in Years | 1–3 (High), 3–5 (Medium), 5–10 (Low)

		Priority
PS PUBLIC SAFETY		
 Action 1	Update and refine urban wildland interface and steep slopes maps and consider adopting the International Wildland Urban Interface Code (IWUI) within the East Fork Township.	1–3
 Action 2	Evaluate and update development regulations for naturally hazardous areas based on mapping and other relevant data.	1–3
 Action 3	Ensure that the Community Development Department, in coordination with East Fork Fire and the County Sheriff, provides an evaluation of population growth and changing demographics to effectively maintain fire service coverage and police services at an optimal level, as part of each Master Plan update.	5–10
 Action 4	Respond to and prepare for continued increases in emergency and non-emergency medical responses, with consideration to the aging population, new senior living facilities, and the evolving socio-economics of the Douglas community.	1–3
 Action 5	Meet the national standards for emergency response times for EMS and fire calls and the department standards for police Priority 1 calls.	Ongoing
 Action 6	Evaluate new technological advances and programs to modernize public safety efforts and provide efficient and effective services in the most cost-effective manner.	Ongoing
 Action 7	Develop a priority and phasing plan for a detailed watershed analysis and for improvement recommendations by watershed, in relation to the seriousness of the existing and potential flood flow problems.	3–5
 Action 8	Investigate the use of existing irrigation ditches and canals to help alleviate Carson River and stormwater flooding problems and to prevent critical water conveyances from being obstructed or abandoned.	1–3
 Action 9	Investigate acquisition of rights-of-way, development of conveyances, and utilization of wetlands southeast of Genoa as possible detention facilities.	3–5

		Priority
PS PUBLIC SAFETY		
 Action 10	Establish and enhance neighborhood programs to involve the community in crime and fire prevention, disaster preparedness, and shelter management.	3–5
 Action 11	Study the areas developed by serial land parceling and verify the current water conveyance capacity of the infrastructure. Note deficiencies and correct, as practicable. Analyze downstream capacities and improve if needed.	3–5
 Action 12	Explore and expand the use of social networks as a communication tool to reach as many residents as possible with public safety matters.	1–3

MASTER PLAN ANNUAL REPORTS AND ACCOMPLISHMENTS

The Planning Commission is required to submit an annual report to the Board of Commissioners on the implementation status of the Master Plan (NRS 278.190). When the 2011 Master Plan (15-year update) was adopted on March 1, 2012, it contained 95 actions. When the South Shore Area Plan was adopted by the County in 2013, 11 more actions were added, increasing the total to 106 actions.

The Planning Commission has submitted four annual reports (in 2012, 2013, 2014, and 2015) to the Board of Commissioners on the implementation status of each action. The 2015 Annual Report stated that 22 actions had been completed, 33 actions were underway, and 51 had not been started. In 2016, 2017, 2018, 2019, and 2020, data from the report was presented to the Planning Commission and the Board of Commissioners as part of the 20-year Master Plan update.

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ELEMENT 7 – RESERVED FOR FUTURE WASHOE TRIBE ELEMENT

None

DOUGLAS COUNTY



A COMMUNITY TO MATCH THE SCENERY