

DOUGLAS COUNTY 2020 MASTER PLAN



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.



Scenic morning, photo by John Walker

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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TABLE OF CONTENTS

ACRONYMS	xviii
OVERVIEW	xix
EXECUTIVE SUMMARY	1
Geography	2
History	3
Government	4
Land Jurisdictions	5
Tahoe Regional Planning Agency	7
Populations	9
Housing	13
Economy	17
Education	21
1. LAND USE & HISTORIC PRESERVATION	23
PURPOSE	23
GOALS	24
POLICIES	24
LAND USES IN DOUGLAS COUNTY	28
REGIONS & COMMUNITY PLANS	32
CARSON VALLEY REGION	36
AGRICULTURE COMMUNITY PLAN	38
AIRPORT COMMUNITY PLAN	40
EAST VALLEY COMMUNITY PLAN	44
FISH SPRINGS COMMUNITY PLAN	48
FOOTHILL COMMUNITY PLAN	52
GARDNERVILLE RANCHOS COMMUNITY PLAN	56
GENOA COMMUNITY PLAN	60
INDIAN HILLS/JACKS VALLEY COMMUNITY PLAN	64
JOHNSON LANE COMMUNITY PLAN	69
GARDNERVILLE & MINDEN COMMUNITY PLANS	72
GARDNERVILLE COMMUNITY PLAN	72

MINDEN COMMUNITY PLAN.....	75
RUHENSTROTH COMMUNITY PLAN.....	77
PINENUT REGIONAL PLAN.....	80
SIERRA REGIONAL.....	82
TAHOE REGION.....	84
TOPAZ REGION.....	86
TOPAZ LAKE COMMUNITY PLAN.....	88
TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN.....	91
ANTELOPE VALLEY COMMUNITY PLAN.....	94
HISTORIC PRESERVATION IN DOUGLAS COUNTY.....	97
LOOKING TO THE FUTURE.....	103
2. AGRICULTURE & CONSERVATION.....	107
PURPOSE.....	107
GOALS.....	107
POLICIES.....	108
CURRENT TRENDS.....	110
LOOKING IN THE FUTURE.....	141
3. ECONOMIC DEVELOPMENT.....	147
PURPOSE.....	147
GOALS.....	147
POLICIES.....	148
CURRENT TRENDS.....	150
LOOKING TO THE FUTURE.....	161
4. GROWTH MANAGEMENT & HOUSING.....	169
PURPOSE.....	169
GOALS.....	169
POLICIES.....	170
HOUSING & GROWTH MANAGEMENT IN DOUGLAS COUNTY.....	172
LOOKING TO THE FUTURE.....	194
5. PUBLIC FACILITIES, SERVICES & RECREATION.....	199
PURPOSE.....	199
GOALS.....	199
POLICIES.....	200

CURRENT TRENDS.....	203
LOOKING TO THE FUTURE.....	258
6. PUBLIC SAFETY	265
PURPOSE.....	265
GOALS.....	265
POLICIES.....	266
CURRENT TRENDS.....	269
LOOKING TO THE FUTURE.....	302
7. RESERVED FOR FUTURE WASHOE TRIBE ELEMENT	305
8. IMPLEMENTATION	307

LIST OF MAPS

CHAPTER 1 – LAND USE & HISTORIC PRESERVATION

Map L1: Douglas County Future Land Use Map.....	31
---	----

LIST OF TABLES

EXECUTIVE SUMMARY

Table ES1: Douglas County Population 1970 to 2019.....	9
Table ES2: Total Population Change by Census Tract (2013 to 2018).....	9
Table ES3: Population Projections for Northwestern Nevada by County.....	10
Table ES4: Douglas County Population Growth Scenarios.....	11
Table ES5: Median Age Change in Douglas County (2013 to 2018).....	12
Table ES6: Median Age Change (2013 to 2018).....	12
Table ES7: Total Number of Housing Units.....	13
Table ES8: Percentage of Housing Units Owner-Occupied (2014 to 2018).....	14
Table ES9: Percentage of Housing Units Renter-Occupied (2014 to 2018).....	15
Table ES10: Total Number of Housing Units by Type of Structure (2020).....	15
Table ES11: Year Built, All Housing Units.....	16
Table ES12: Median Household Income, Median Family Income, and Per Capita Income (2013 to 2018).....	17
Table ES13: Civilian Labor Force Unemployment Rate (2013 to 2018).....	18

ELEMENT 1 – LAND USE & HISTORIC PRESERVATION

Table L1: Future Land Use Categories (Master Plan and Douglas County Code).....	28
Table L2: Douglas County Properties on the National Register of Historic Places.....	91
Table L3: Douglas County Properties Listed Only on the State Register of Historic Places.....	91
Table L4: State of Nevada Historic Roadside Markers in Douglas County.....	92

ELEMENT 2 – AGRICULTURE & CONSERVATION

Table A1: Farms in Selected Northern Nevada Counties (2017).....	114
Table A2: Census of Agriculture for Douglas County (1945-2017).....	115
Table A3: NRS 361A Agricultural Acreage, by Community Plan.....	116
Table A4: Companies with Air Quality Operating Permits.....	122
Table A5: TDR Conservation Easements, 2002-2020.....	123
Table A6 – Completed SNPLMA Environmentally Sensitive Land Acquisitions.....	123
Table A7: 100 Year Floodplain Acreage, by Community Plan Area.....	128
Table A8: Water Pumpage, by Basin & Manner of Use	135
Table A9: Endangered and Threatened Species in Douglas County.....	139

ELEMENT 3 – ECONOMIC DEVELOPMENT

Table E1: Principal Taxpayers in Douglas County Fiscal Year End June 2020	147
Table E2- Commercial and Industrial Future Land Use by Community Area.....	153

ELEMENT 4 – GROWTH MANAGEMENT & HOUSING

Table G1: Available Residential Allocations, by Category.....	184
Table G2: Available Residential Allocations, by Category Status of TDR Program.....	185
Table G3: Receiving Area Acreage by Community Plan	185
Table G4: Douglas County VESTED Project List (2020)	186
Table G5: Douglas County PROJECTS List (2020).....	187
Table G6: Undeveloped Residential Acreage Outside Receiving Areas, by Residential Zoning District.....	192

ELEMENT 5 – PUBLIC FACILITIES, SERVICES & RECREATION

Table PF1: Douglas County General Improvement Districts, by Region.....	204
Table PF2: Douglas County Unincorporated Towns.....	208
Table PF3: Major Water Systems in Carson Valley.....	210
Table PF4: Major Water Systems in Topaz Region.....	211
Table PF5: Major Water Systems in Tahoe Basin.....	211
Table PF6: Wastewater Service Providers in the Carson Valley.....	221
Table PF7: USDA RD Community Program Loans and Grants for Wastewater.....	227
Table PF8: Recycling Rates for Nevada, Douglas County, and Adjacent Counties.....	230
Table PF9: School Capacity vs. Actual Enrollment.....	238
Table PF10: School Enrollment by Residential Unit.....	238
Table PF11: Library Visits, FY 2013 to FY 2019.....	242
Table PF12: Registered Library Users.....	243
Table PF13: Regional Parks in Douglas County.....	250
Table PF14: Neighborhood/Community Parks in Douglas County.....	250
Table PF15: Special Use Facilities in Douglas County.....	251
Table PF16: Community Centers.....	252
Table PF17: Existing Open Space and Park Land Uses and Zoning Districts.....	262

ELEMENT 6 – PUBLIC SAFETY

Table PS1: EFFPD Calls for Service.....	271
Table PS2: Staffing Ratios for career On-Duty Firefighters.....	272
Table PS3: Tahoe Douglas Calls for Service.....	275
Table PS4: Staffing Ratios for Law Enforcement (July 2020).....	278
Table PS5: Statistics for Douglas County Sheriff’s Office.....	279
Table PS6: 911 Emergency Services Call, 2010 – 2019.....	281
Table PS7: Larger Wildland Fire Loss History 2011-2020.....	294

ELEMENT 7 – RESERVED FOR FUTURE WASHOE TRIBE ELEMENT

None

LIST OF FIGURES

EXECUTIVE SUMMARY

Figure ES1: Douglas County, NV at A Glance.....	1
Figure ES2: A History of Douglas County.....	4
Figure ES3: Land Ownership in Douglas County.....	5
Figure ES4: Douglas County Population Projections through 2038.....	11
Figure ES5: Total Employment by Major Industry Sector for Douglas County	19
Figure ES6: Commuting Patterns for Douglas County for 2020.....	20
Figure ES7: Graduation Rates for 2019-2020 School Year.....	21
Figure ES8: Student Enrollment in Douglas, Lyon, and Carson City.....	22

ELEMENT 1 – LAND USE & HISTORIC PRESERVATION

Figure L1: Carson Valley Region.....	35
--------------------------------------	----

ELEMENT 2 – AGRICULTURE & CONSERVATION

Figure A1: Gardnerville Ranchos PM 2.5 Monitoring Station 24 Hour Design Values (EE Excluded).....	113
Figure A2: Douglas County TDR Conservation Easements Protecting Floodplains....	123

ELEMENT 3 – ECONOMIC DEVELOPMENT

Figure E1: Net Position by Component.....	143
Figure E2: Summary of Net Position.....	144
Figure E3: Expenses & Program Revenues- Governmental Activities.....	145
Figure E4: Revenues by Source- Governmental Activities.....	146
Figure E5: Expenses and Program Revenues- Business-Type.....	146
Figure E6: Revenue by Source- Business-Type Activities.....	147
Figure E7: General Fund Budgetary Highlights.....	148

ELEMENT 4 – GROWTH MANAGEMENT & HOUSING

Figure G1: Housing Types.....	172
Figure G2: Regional Housing Inventory (2020).....	173
Figure G3: Year Built, All Housing Units.....	173

Figure G4: House Sales Information.....	174
Figure G5: Building Permits by Structure Type.....	182

ELEMENT 5 – PUBLIC FACILITIES, SERVICES & RECREATION

Figure PF1: Carson Valley Water Use by Purveyor.....	216
Figure PF2: Douglas County Student Enrollment (2010-2020)	237
Figure PF3: Park Acreage in Douglas County, by Type.....	249

ELEMENT 6 – PUBLIC SAFETY

Figure PS1: Crimes in Douglas County, 2006-2018.....	280
Figure PS2: 1840's to 2010 Earthquakes in Douglas County.....	288

ELEMENT 7 – RESERVED FOR FUTURE WASHOE TRIBE ELEMENT

None

LIST OF DIAGRAMS

EXECUTIVE SUMMARY

Diagram ES1: Douglas County Vicinity Map.....	2
Diagram ES2: Land Ownership in Douglas County.....	6
Diagram ES3: Tahoe Douglas Area Plan.....	8

ELEMENT 1 – LAND USE & HISTORIC PRESERVATION

Diagram L1: Douglas County Townships.....	33
Diagram L2: Douglas County Regional Area.....	34
Diagram L3: Agricultural Community	38
Diagram L4: Airport Community	41
Diagram L5: East Valley Community.....	38
Diagram L6: Fish Springs Community	38
Diagram L7: Foothill Community	50
Diagram L8: Gardnerville Ranchos Community	53
Diagram L9: Geno Community	57
Diagram L10: Indian Hills/Jacks Valley Community.....	62

Diagram L11: Johnson Lane Community.....	65
Diagram L12: Gardnerville Community.....	68
Diagram L13: Minden Community.....	70
Diagram L14: Ruhenstroth Community.....	70
Diagram L15: Topaz Lake Community.....	84
Diagram L15: Topaz Lake Community.....	84
Diagram L16: Topaz Ranch Estates/Holbrook Junction Community.....	87
Diagram L17: Antelope Valley Community Plan.....	89
Diagram L18: National & State Register of Historic Places.....	93
Diagram L19: Genoa Historic District, National Register & Town Boundary.....	95

ELEMENT 2 – AGRICULTURE & CONSERVATION

Diagram A1: Prime Farmland in Douglas County.....	112
Diagram A2: Prime Farmland in Carson Valley.....	113
Diagram A3: NRS 361 Agricultural Parcels in Douglas County.....	117
Diagram A4: NRS 361 Agricultural Parcels in Carson Valley.....	118
Diagram A5: NRS 361 Agricultural Parcels in Southern Douglas County.....	119
Diagram A6: TDR Conservation Easements.....	124
Diagram A7: Completed SNPLMA Environmentally Sensitive Land Acquisitions.....	127
Diagram A8: Floodplain Areas in Carson Valley.....	130
Diagram A9: Hydrographic Basins in Douglas County.....	133
Diagram A10: Wetlands in The Carson Valley.....	138
Diagram A11: Mule Deer and Pronghorn Antelope Distribution and Movement Corridors.....	140

ELEMENT 3 – ECONOMIC DEVELOPMENT

Diagram E1: Business Parks and Industrial & Commercial Zoning in The Airport and East Valley Community Plans.....	154
Diagram E2: Industrial & Commercial Zoning in Gardnerville And Minden Community Plans.....	155
Diagram E3: Industrial & Commercial Zoning in Gardnerville Ranchos Community Plan.....	156

Diagram E4: Industrial & Commercial Zoning in Topaz Ranch Estates/Holbrook Junction Community Plan.....	157
---	-----

ELEMENT 4 – GROWTH MANAGEMENT & HOUSING

Diagram G1: Affordable Housing in The East Fork Township.....	178
Diagram G2: Affordable Housing in Tahoe Township.....	179
Diagram G3: Vacation Home Rentals in The Tahoe Township.....	181
Diagram G4: Receiving Areas in North County.....	188
Diagram G5: Receiving Areas in Airport and Agricultural Area.....	189
Diagram G6: Receiving Areas in Gardnerville, Gardnerville Ranchos, Minden, And Ruhenstroth.....	190
Diagram G7: Receiving Areas in The Topaz Region.....	191

ELEMENT 5 – PUBLIC FACILITIES, SERVICES & RECREATION

Diagram PF1: GIDs In Carson Valley Region.....	205
Diagram PF2: GIDs In Topaz Region.....	206
Diagram PF3: GIDs In the Tahoe Basin.....	207
Diagram PF4: Unincorporated Towns.....	209
Diagram PF5: Water Systems in The Carson Valley.....	212
Diagram PF6: Water Systems in Gardnerville	213
Diagram PF7: Water Systems in Topaz Region	214
Diagram PF8: Water Systems in the Tahoe Basin.....	215
Diagram PF9: Wastewater Service Area in The Carson Valley Region.....	224
Diagram PF10: Wastewater Service Area, Minden-Gardnerville Sanitation District...	225
Diagram PF11: Wastewater Service in The Tahoe Basin Region.....	226
Diagram PF12: Septic System in The Johnson Lane Community Plan.....	228
Diagram PF13: Utility Corridors.....	231
Diagram PF14: Douglas County Facilities.....	236
Diagram PF15: Residential Count by Elementary School.....	239
Diagram PF16: Residential Count by Middle School.....	240
Diagram PF17: Residential Count by High School.....	241
Diagram PF18: School & Library Facilities in North County.....	244

Diagram PF19: School & Library Facilities in The Carson Valley.....	245
Diagram PF20: School & Library Facilities in The Pinenut & Topaz Region.....	246
Diagram PF21: School & Library Facilities in The Tahoe Basin Region.....	247
Diagram PF22: Parks in North Douglas County.....	253
Diagram PF23: Parks in Central Douglas County.....	254
Diagram PF24: Parks in South Douglas County.....	255
Diagram PF25: Parks in Topaz Ranch Estates/Topaz Lake.....	256
Diagram PF26: Parks in the Tahoe Basin.....	257

ELEMENT 6 – PUBLIC SAFETY

Diagram PS1: Location of Public Safety Facilities in Douglas County.....	268
Diagram PS2: Tahoe Fire and East Fork Fire Response Districts.....	269
Diagram PS3: Tahoe Douglas Fire District.....	274
Diagram PS4: Fire Districts in Douglas County.....	277
Diagram PS5: Special Flood Hazard Zones in Carson Valley Region.....	285
Diagram PS6: Special Flood Hazard Zones in Topaz Ranch.....	286
Diagram PS7: Special Flood Hazard Zones in Tahoe Basin Region.....	287
Diagram PS8: Douglas County Long Term Hazard Area.....	290
Diagram PS9: Carson Valley Region - Geologic Features / Faults.....	291
Diagram PS10: Pinenut Region - Geologic Features / Faults.....	292
Diagram PS11: Tahoe Basin & Sierra Region - Geologic Features / Faults.....	293
Diagram PS12: Wildland Fires in The Carson Valley Region.....	295
Diagram PS13: Wildland Fires in The Pinenut Region	296
Diagram PS14: Wildland Fires in The Topaz Region	297
Diagram PS15: General County Evacuation Routes.....	299

ELEMENT 7 – RESERVED FOR FUTURE WASHOE TRIBE ELEMENT

None

ACRONYMS

ADA	Americans with Disabilities Act
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
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
SHPO	State Historic Preservation Office
TDFFPD	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.

Minden, NV, Douglas County seat

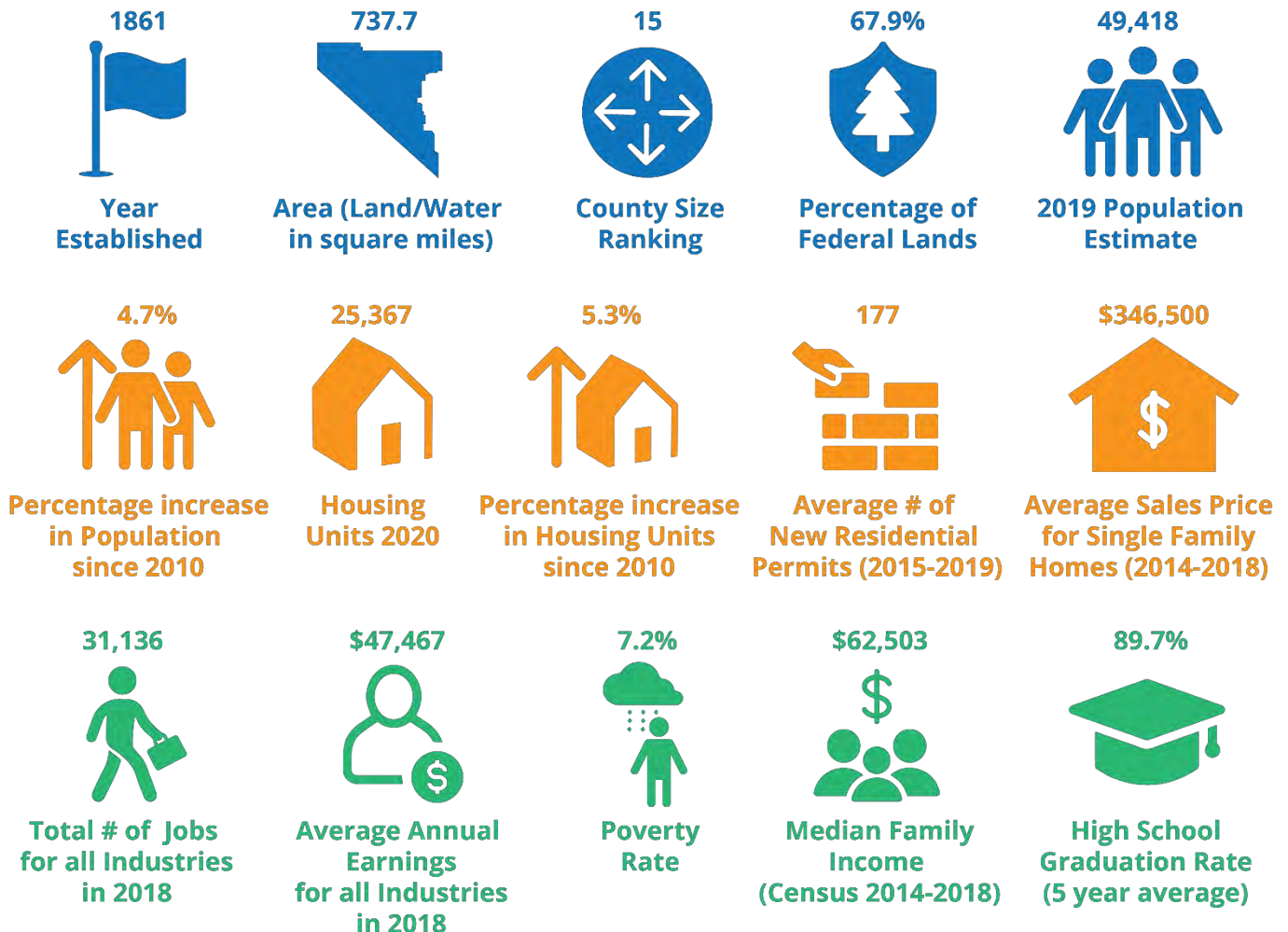


EXECUTIVE SUMMARY

Douglas County is one of the original nine counties established in 1861 as part of the Nevada Territory. Today Douglas County is one of seventeen counties in the State of Nevada, and is one of the smallest in the State, ranking fifteenth 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

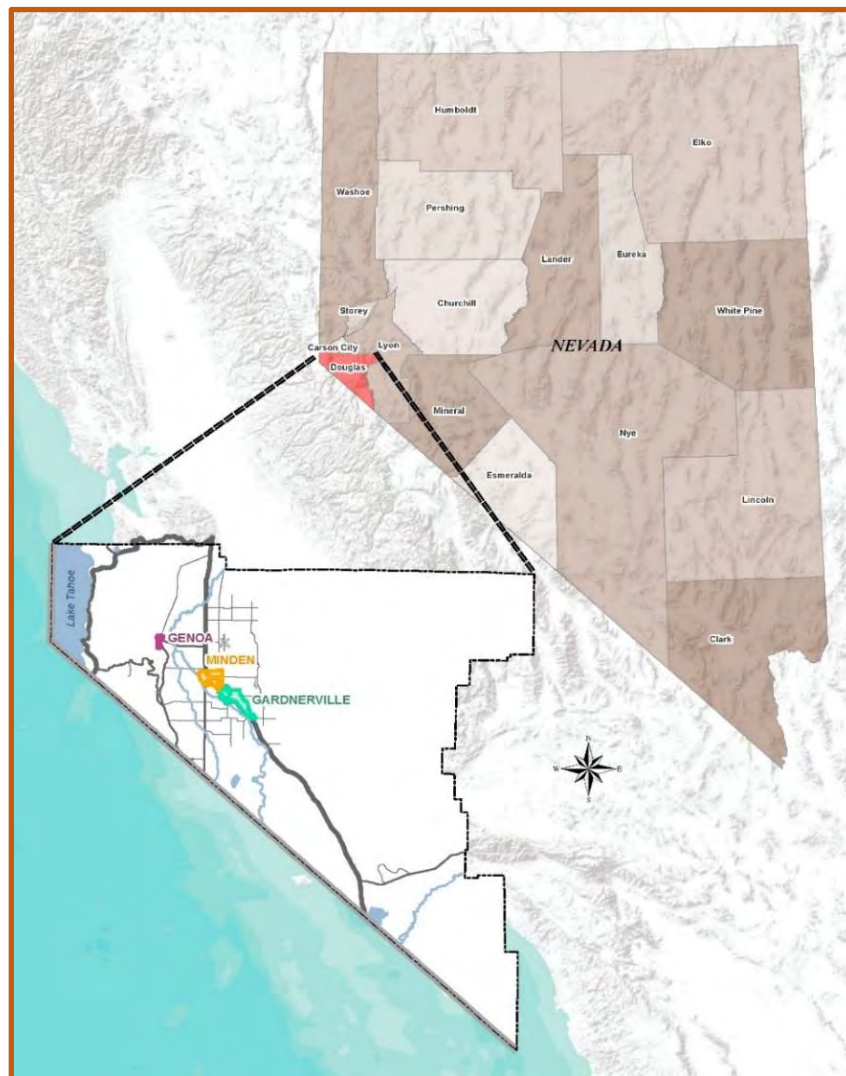


¹ "land" refers to parcels and does not include rights-of-way or water bodies. Total land area includes 28,395 parcels with 455,275 acres.

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 1). 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 which 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 as well as former trading posts and settlements from the 1800s, such as Double Springs and Mottsville. The oldest non-indigenous settlement in the County as well as the State of Nevada is the Town of Genoa (est.1851), formerly known as Mormon Station. Genoa served as the first seat of government for Douglas County. A portion of the town is on the National Register of Historic Places. Genoa also has a local historic district.

Named after John Gardner, the Town of Gardnerville was established in 1879. 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, which was 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 as well as Alpine County, CA. Minden's growth was spurred with the extension of the Virginia & Truckee Railway to Minden in 1906.

Douglas County's history also 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 were designed by Nevada architect Frederick DeLongchamps, including the Douglas County Historic Courthouse in Minden and the Gardnerville High School (now the Carson Valley Museum and Cultural Center).

Senator Stephen A. Douglas (1813-1861)

Douglas County is named after Stephen A. Douglas, a U.S. Senator from Illinois and 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 that 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.

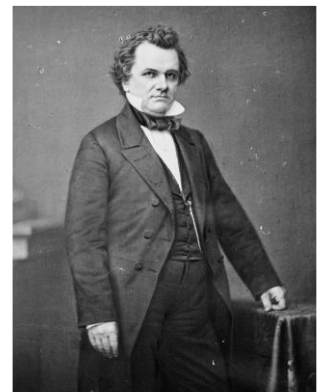
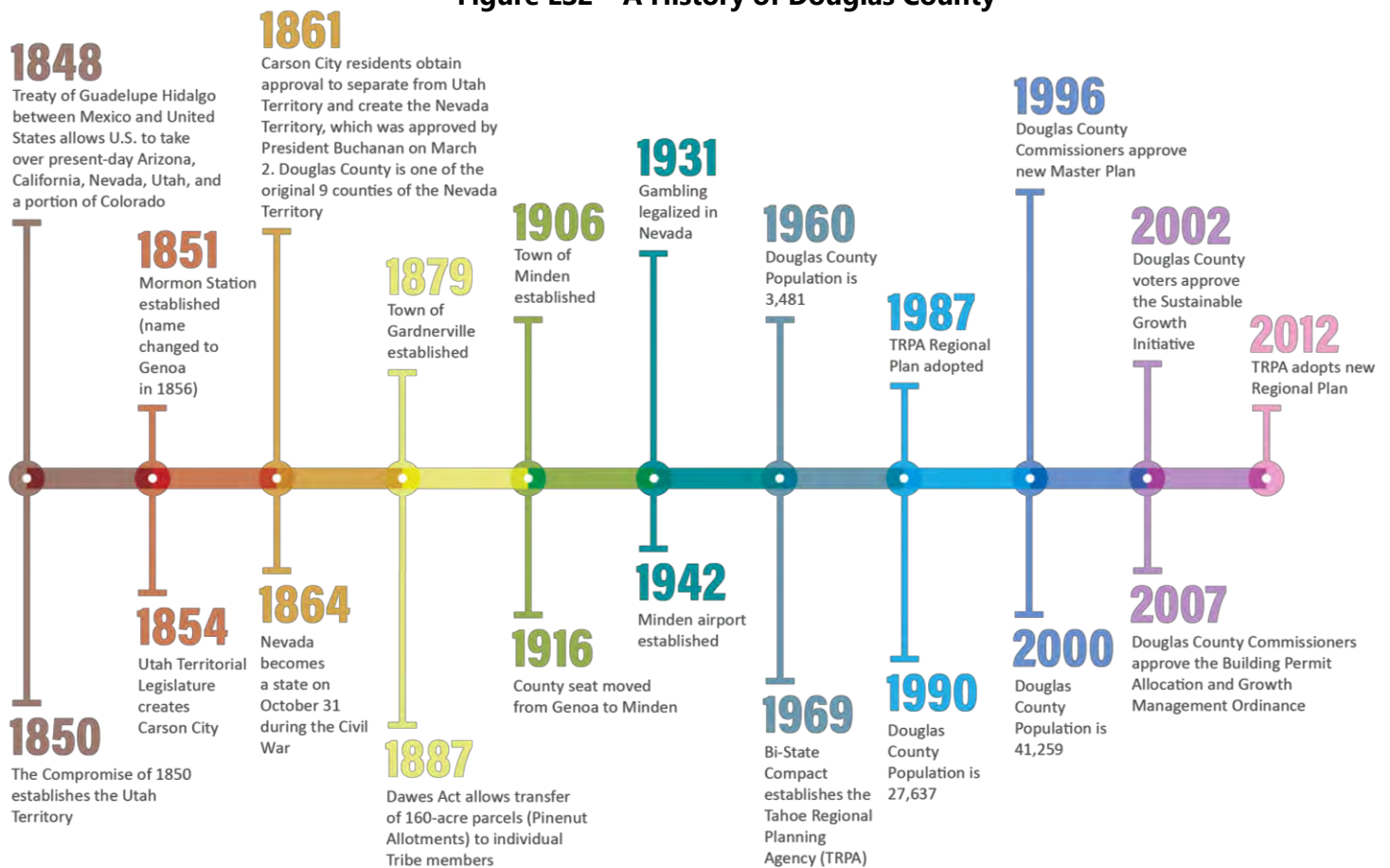


Figure ES2 – A History of Douglas County



GOVERNMENT

Douglas County is governed by a five-member elected Board of County Commissioners. Other elected officials in the county include the District Attorney, the Sheriff, the Assessor, the Recorder, the Public Administrator, District Court Judges, the Justices of the Peace and the 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 557.80 full-time employees in Douglas County (excluding the Towns of Gardnerville, Genoa and Minden).

Each unincorporated town in Douglas County (Gardnerville, Genoa, and Minden) 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 (GID). 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 as well as 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 while the Tahoe-Douglas Fire Protection District serves the Tahoe Basin portion. The US Forest Service and the Bureau of Land Management are 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 also as an aerial firefighting center (Sierra Front Interagency Dispatch Center). There are approximately 430 aircraft based at the airport as of October 2020.

Public transit services are provided by the County-owned Douglas Area Rural Transit, or DART. DART provides local transit services in the Carson Valley only, but provides connections to regional express services provided 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 below and Diagram 2 on the following page display the amount and location of federal lands within the County. The Bureau of Land Management (BLM) properties are located to the east in the Pinenut Region while the U.S. Forest Service properties are located to the west in the Pinenut Region while 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)

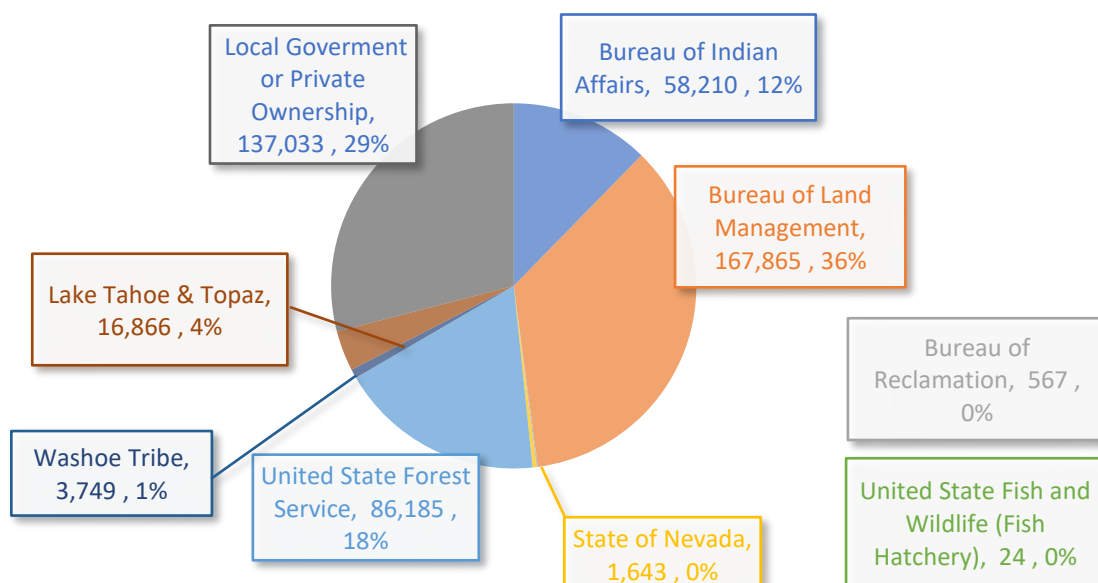
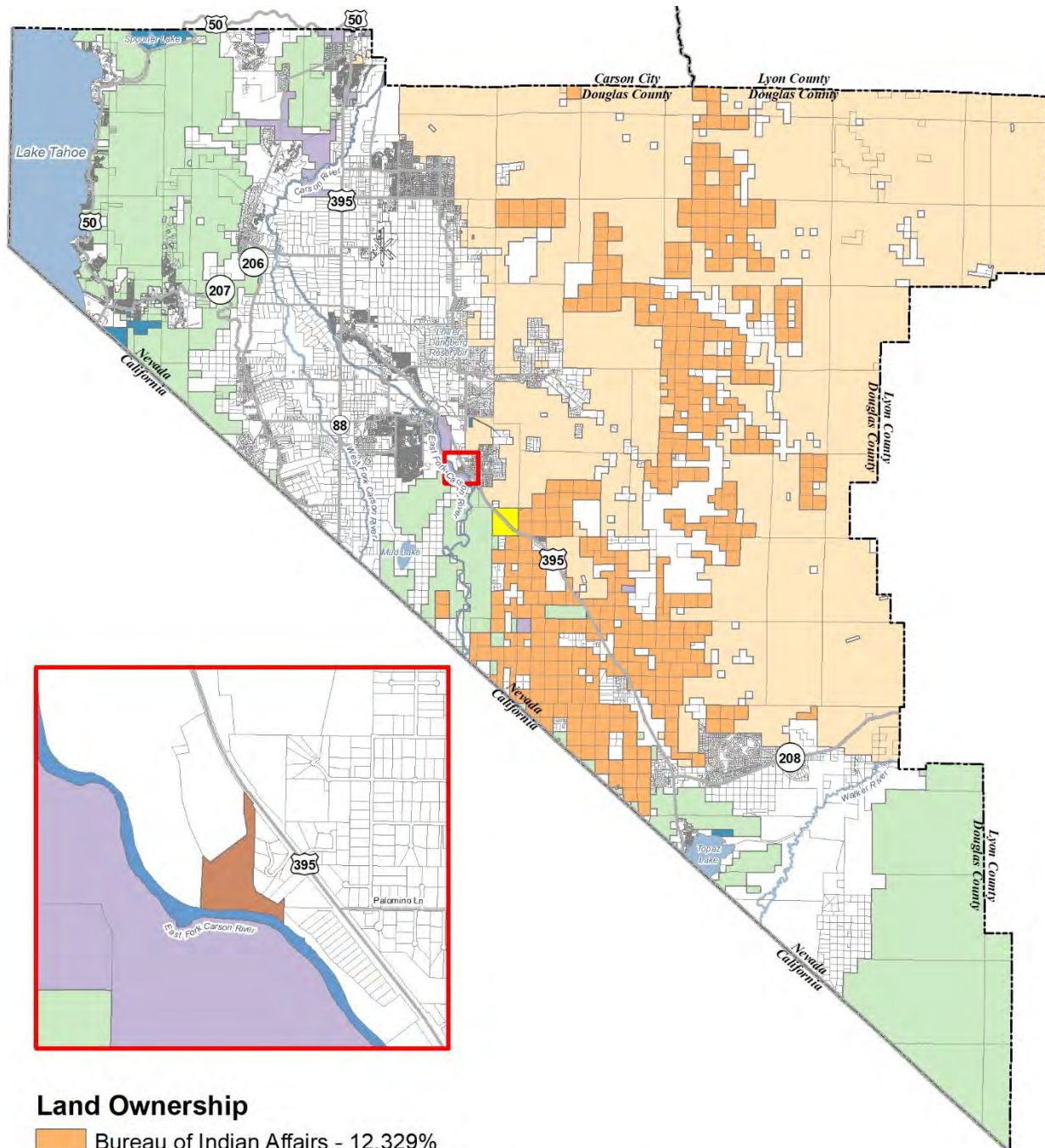


DIAGRAM ES2 – LAND OWNERSHIP IN DOUGLAS COUNTY



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). The SGI was never implemented due to litigation, 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 and became “excess” allocations. Excess allocations have increased from 560 in July 2011 to 882 in July 2016, and 1,946 as of September 2020.

TAHOE REGIONAL PLANNING AGENCY (TRPA)

The Tahoe Basin portion of Douglas County is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA). 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) consistent with the new TRPA Regional Plan.



DIAGRAM ES3 – TAHOE DOUGLAS AREA PLAN





POPULATION

As of 2019, Douglas County's total population was estimated at 49,418 total individuals according to the Nevada State Demographer. Between 2000 and 2010 Douglas County's population growth slowed compared to the historic growth rates most likely as a result of new growth management policies that were put in place during that time frame.

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's population projection estimates indicate that total population growth in Douglas County will plateau between 2030 and 2031 at a total population of 50,675 total individuals and will begin to gradually decline between 2032 and 2038. Based on current population projection estimates provided by the Nevada State Demographer's Office (2018), Douglas County's residential population is expected to grow by an estimated annual average of 0.1 percent per year or by a total of 1,061 total individuals or 2.2 percent between 2018 and 2038, increasing from an estimated 49,070 total individuals in 2018 to an estimated 50,131 total individuals 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 only included through 2038.

Table ES4 includes 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 0.10 percent growth per year (as estimated by the Nevada State Demographer), a Slow Growth rate of 1.00 percent per year, Historic Growth of 1.3 percent per year, and maximum growth of 2.0 percent per year. It should be noted that the Slow Growth Rate of 1.0 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.

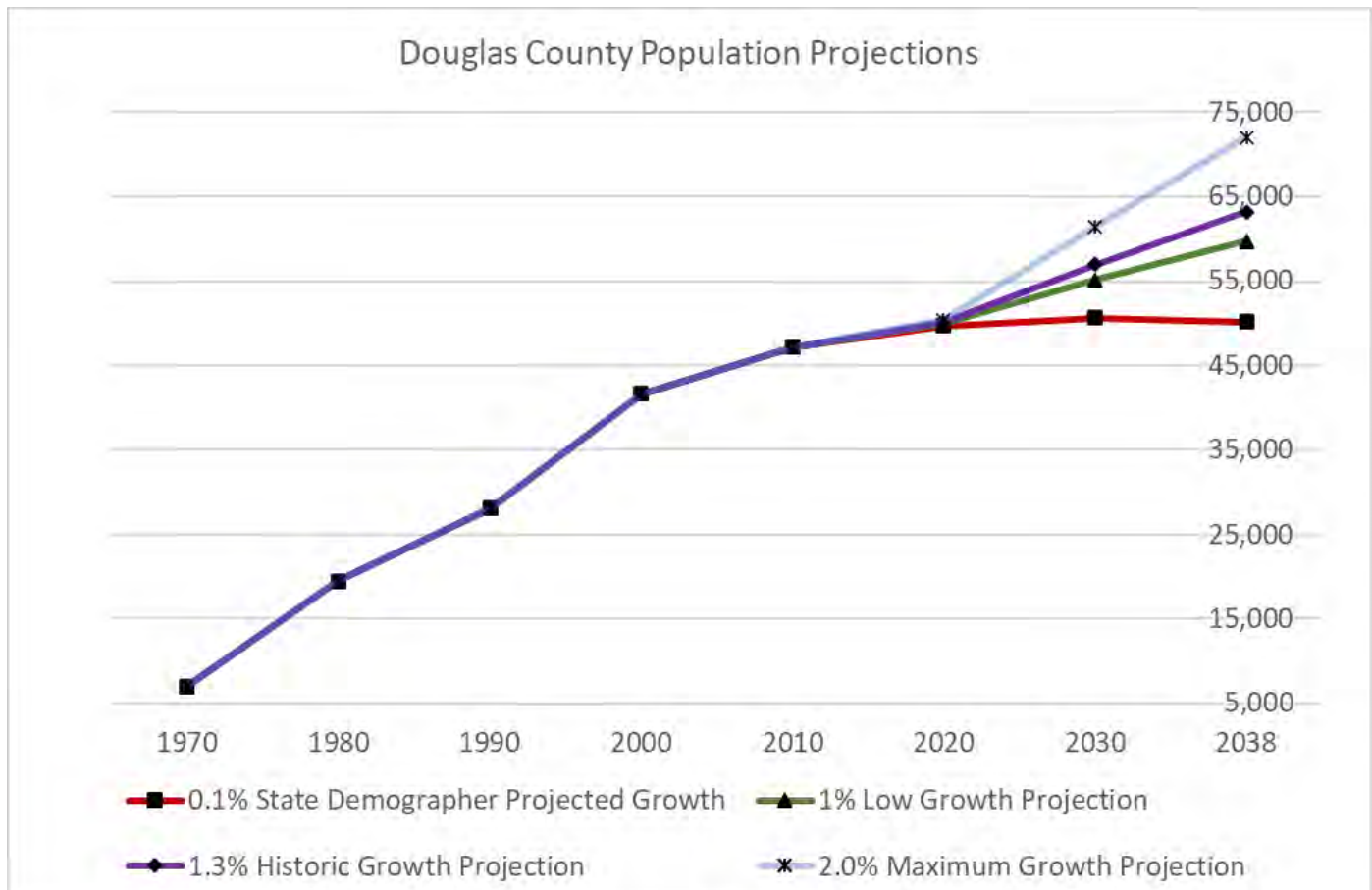
Below is a graph depicting population projections under the proposed rates of growth (slow, historic and maximum scenarios) through 2038.

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 included 2019 through 2038.

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

Figure ES4 – Douglas County Population Projections through 2038



The median age of the residential population living in Douglas County continued to increase between 2013 and 2018, increasing 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 for the various communities and population centers throughout Douglas County experienced a mix of both increase and decline in the median age. 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 entire state of Nevada and the entire 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 by a total of 30 housing units. A Census Designated Place (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

On average, a significant majority of Douglas County's total housing stock was owner-occupied between 2014 and 2018, with an annual average 58.7 percent of total housing stock in Douglas County being owner-occupied. In the Carson Valley area, which includes the Gardnerville CDP and Minden CDP, an annual average 65.7 percent of the

area's total housing stock was owner-occupied. However, a significant minority of the total 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 between 2014 and 2018, with just an annual average of 30.5 percent of the area's total housing stock being owner-occupied.

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, and for the entire state of Nevada and 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

In contrast, a significant minority of Douglas County's existing housing stock was renter-occupied between 2014 and 2018, with an annual average of 25.4 percent of total housing stock in Douglas County being renter-occupied. In the Carson Valley area, an annual average of 26.5 percent of the area's total housing stock was renter-occupied and, in the Tahoe Basin area, an annual average of 21.0 percent of the area's total housing stock was renter-occupied. Comparatively, for the entire state of Nevada, an annual average of 38.3 percent of the state's entire housing stock was renter-occupied.

A significant portion of Douglas County's total existing housing stock remained vacant from 2014 through 2018, with an annual average of 15.9 percent. In the Carson Valley area, an annual average of 7.8 percent of the area's total housing stock remained vacant and, in the Tahoe Basin area, an annual average of 48.6 percent of the area's total housing stock remained vacant between 2014 and 2018.

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 entire state of Nevada, and the United States between 2014 and 2018.

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%

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 for all of Douglas County with an estimated 19,787 total housing units in the Carson Valley area and an estimated 5,580 total housing units in the Tahoe Basin area. There was a 5.3% increase in total housing units single-family detached remained the dominant characteristic of the type of housing stock available in Douglas County in fiscal year 2020 and for both the Carson Valley area and for the Tahoe Basin area. Table ES10 presents the number of single-family detached, single-family attached, multifamily, and mobile home housing units for Douglas County, the Carson Valley area, and the Tahoe Basin area for fiscal year 2020.

5.3% Increase in total housing units since 2010 from 24,095 (2010) to 25,367 (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%
Multifamily	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	100.0%	5,580	100.0%	25,367	100.0%

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

Douglas County's existing housing stock has continued to significantly age; 23.6 percent of the county's total housing stock was built between 1990 and 1999, an additional 20.4 percent was built between 1970 and 1979, and an additional 19.8 percent was built between 2000 and 2009. Approximately 50.5 percent of all housing units, either owner-occupied, renter-occupied, or 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 ten to nineteen 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 existing property tax base. Approximately 83.0 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 ten to fifteen years. Table ES11 presents the estimated year of construction by group for all housing, occupied, vacant, owner-occupied and renter-occupied, for the Carson Valley, the Tahoe Basin area, and for all of Douglas County for fiscal year 2020.

Table ES11 – Year Built, All Housing Units (Occupied and Vacant, Owner-Occupied and Renter-Occupied) - 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	100.0%	5,577	100.0%	25,339	100.0%

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 entire state of Nevada, and the United States for 2013 and 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, a net increase of \$2,403 or 4.0 percent. The annual average median household income in Douglas County between 2013 and 2018 was \$60,171; second only to the annual average median household income in Storey County (\$63,773) between 2013 and 2018 out 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, a net increase of \$7,144 or 10.6 percent. The annual average median family income in Douglas County between 2013 and 2018 was \$69,513; the single largest annual average median family income for all of northwestern Nevada between 2013 and 2018. 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, a net increase of \$2,267 or 6.6 percent. The annual average per capita income in Douglas County between 2013 and 2018 was \$34,772 and was the second largest annual average per capita income for all of northwestern Nevada

between 2013 and 2018. Only Storey County, with an annual average per capita income of \$35,507 between 2013 and 2018, had a higher annual average per capita income than Douglas County.

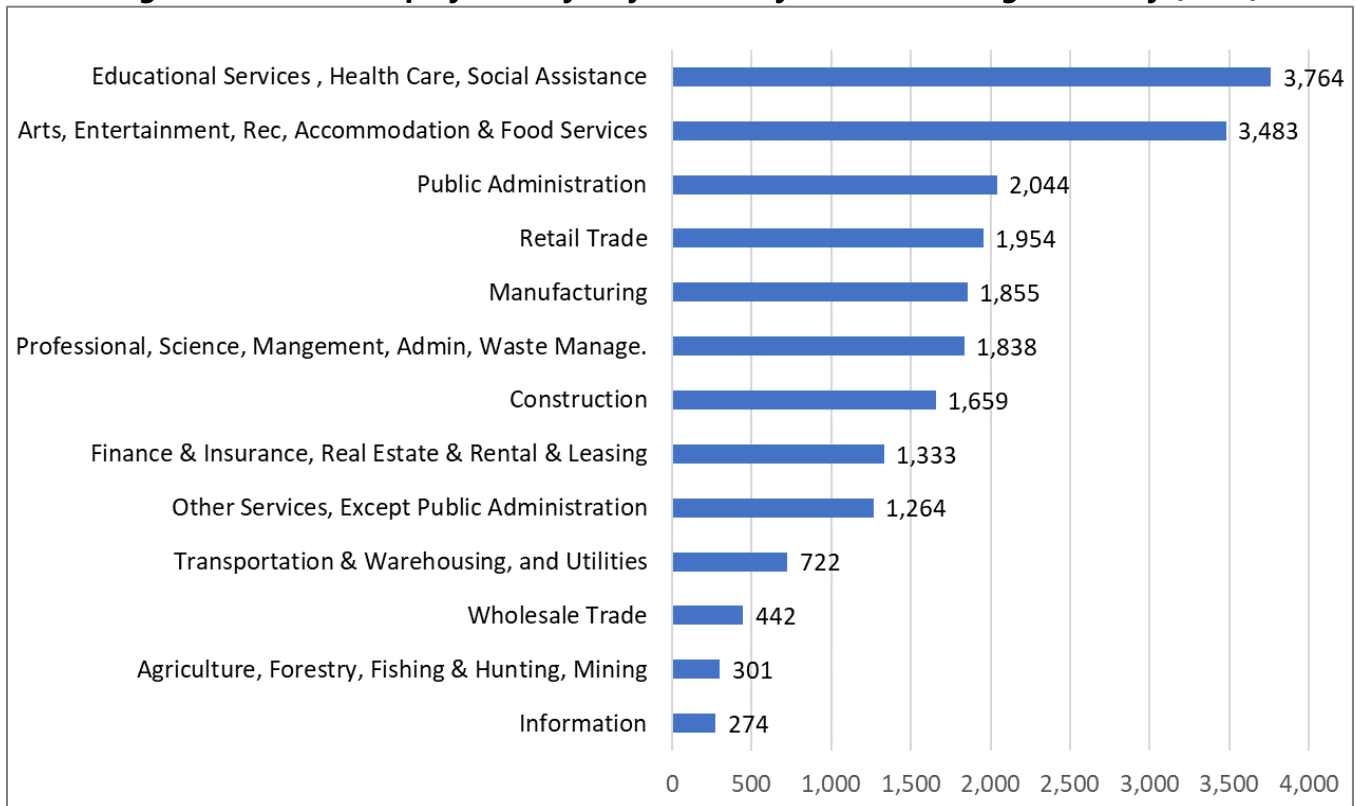
Table ES13 presents the change in the estimated civilian unemployment rate for Douglas County, various other communities and counties throughout northwestern Nevada, the entire state of Nevada, and the United States for 2013 through 2018.

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

Douglas County's civilian labor force unemployment rate declined significantly between 2013 and 2018 from an estimated 10.8 percent in 2013 to an estimated 5.2 percent in 2018. Douglas County's annual average civilian labor force unemployment rate between 2013 and 2018, of 8.0 percent, was the lowest of all communities and counties throughout northwestern Nevada and significantly lower than the average annual civilian unemployment rate for the entire state of Nevada, at 9.8 percent between 2013 and 2018. It was also significantly lower than the average civilian unemployment rate for the entire United States, at 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

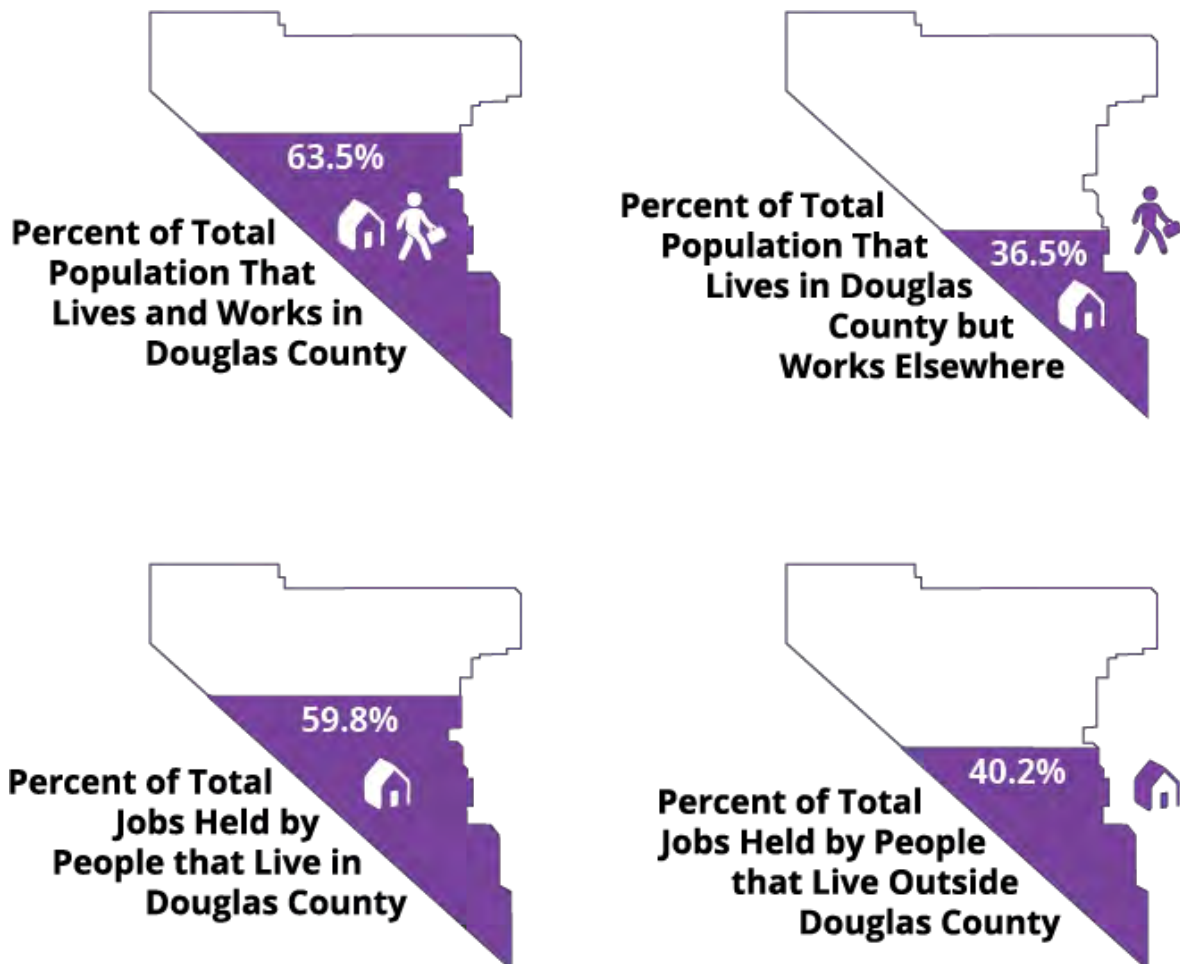
In 2018, the Educational Services, Health Care and Social Assistance was the single largest industry sector, in-terms of total employment, in Douglas County, employing an estimated 3,764 total individuals and accounting for 18.0 percent of the county's total civilian employed population. The Arts, Entertainment, and Recreation, and Accommodation and Food Services industry was the second largest sector, employing 3,483 total individuals, or 16.6 percent of the county's total civilian employed population. Public Administration was the third largest industry sector, employing 2,044 total individuals, or 9.8 percent of total employment; the Retail was the fourth largest industry sector, employing 1,954 total 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, however, commuted out-of-county for work to other communities and counties in northwestern Nevada and east-central California. In contrast, 59.8 percent of all jobs in Douglas County in 2020 were held by people who live in Douglas County. Approximately 40.2 percent of all jobs in Douglas County in 2020 were held by people who live outside Douglas County, in

communities and counties located throughout northwestern Nevada and east central California, and commute into the county for work.

The figure below compares the commuting patterns of Douglas County's existing residential population (or civilian workforce) with the commuting patterns of workers who are employed in Douglas County for 2020.

Figure ES6: Commuting Patterns for Douglas County for 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 existing population relies on employment opportunities found outside Douglas County and commutes daily to communities and counties outside the County. An increasingly large percentage of all jobs available in Douglas County are also being filled by workers who live outside the County but commute daily into the County.

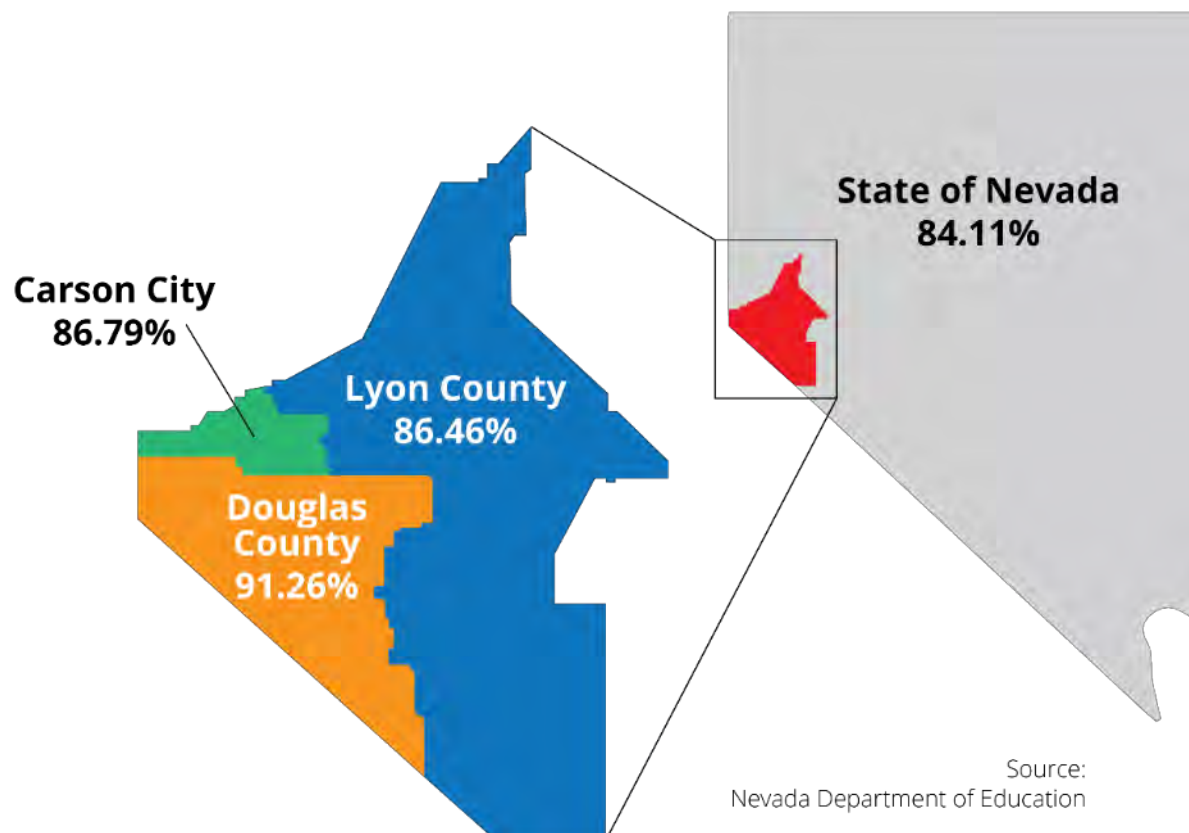


EDUCATION

The Douglas County School District operates three high schools, two middle schools, and seven elementary schools which serve a total student population of 6,054 in FY14/15 School Year, and 5,786 in FY19/20. In addition, the District 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 FY19/20. By comparison, the State of Nevada spent \$8,576 in FY13/14 and \$9,352 per pupil during the same period.

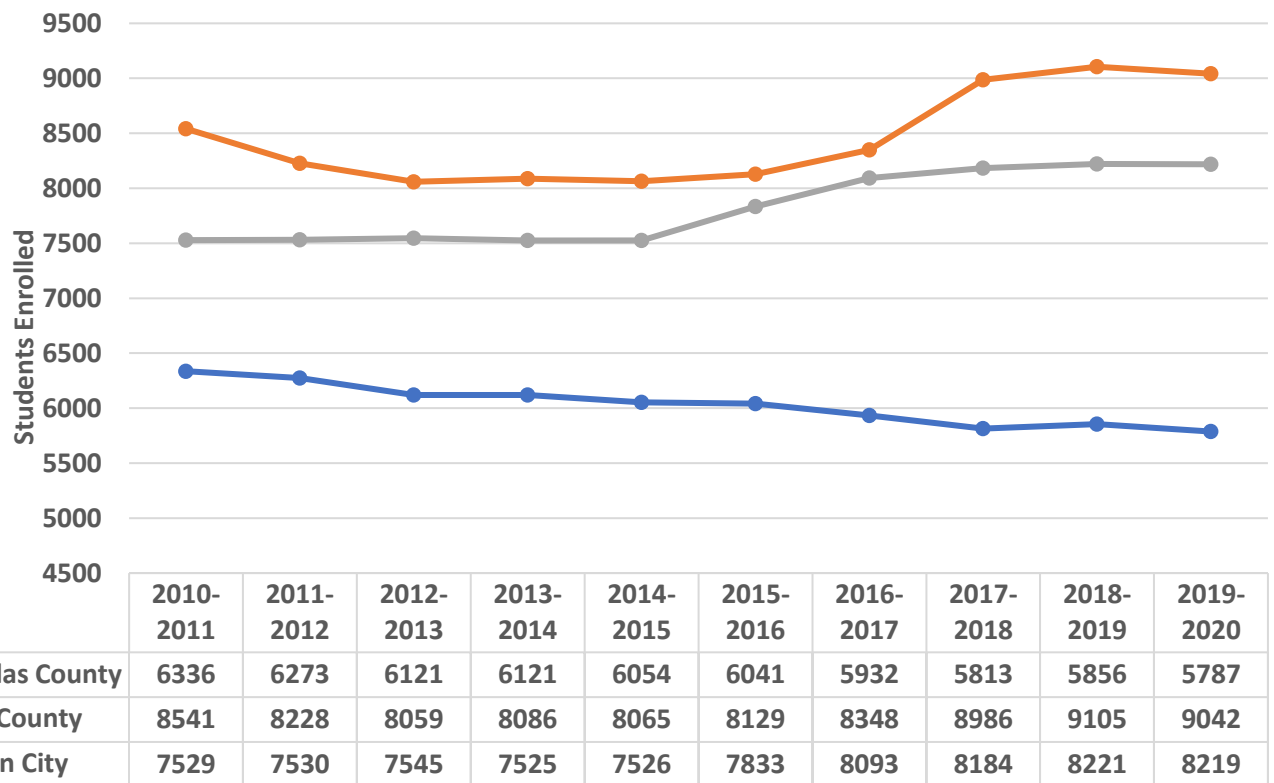
According to the U.S. News 2019 ranking of public high schools in the United States, George Whittell High School was ranked 9th and Douglas High School was ranked 22nd out of 139 ranked public high schools in Nevada. The Douglas County School District had one of the highest graduation rates (four-year adjusted cohort) in the State for the 2019-2020 school year. Figure ES7 includes 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. The graduation rate for Douglas High School alone for this same period was 93.24 percent and 96.43 percent for George Whittell High School.

Figure ES7 – Graduation Rates for 2019-2020 School Year



Total student enrollment in the Douglas County School District has been decreasing for several years, whereas Lyon County and Carson City have seen a different trend with student enrollment trending upwards the past five years. 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/>



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 also acts as the basis for all the remaining Elements of the Master Plan. This Element describes the county's regions and communities, and historic preservation programs and policies.

Land Use in Douglas County is strongly tied to the desire to preserve agriculture and open spaces. Many residents who live in Douglas County support the idea that the County should remain rural, and celebrate the heritage that started with the settlers of the Carson Valley in the 1800's. Programs such as the Transfer of Development Rights, described in the Growth Management & Housing Element 4, coupled with this element, 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. The Land Use 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 the Economic Development Element 3. 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 is done in a manner that protects the interest and desires of the community while achieving the strategic objectives of the County.

This section includes goals and policies to be used 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 the Douglas County Land Use and Historic Preservation set forth priorities to protect and support land use in the County.



To retain the beauty, the natural setting/resources and the rural/agricultural character of the county while providing opportunities for managed growth and development



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



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



Promote the renovation and reuse of existing buildings.



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



In reviewing development proposals, Douglas County shall consider issues of community character, environmental impact, resident security and safety, aesthetics, and efficient service delivery.



Include provisions within 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.



Policy L5

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



Policy L6

The Master Plan's future Land Use Map shall not be 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.



Policy L7

Designate "Urban Service Areas" within identified urban communities. Urban Service Areas are those areas where development of an urban character exists or is developing. 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 developed in accordance with the provisions of the Development Code.



Policy L8

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



Policy L9

Within Urban Service Areas, Douglas County shall plan locations 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.



Policy L10

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 a mix of uses or densities.



Policy L11

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.



Policy L12

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



Policy L13

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



Policy L14

In planning for growth of its communities, Douglas County shall give first priority to development of vacant or under-utilized land within the communities (“infill” and “redevelopment”) and second priority to development that expands the community. The County’s policies regarding public service provision shall support these priorities.



Policy L15

Protect residential neighborhoods from encroachment of incompatible activities and uses which may have a negative impact on their quality of life. Proposed non-residential development adjacent to residential neighborhoods shall be designed and sited 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.



Policy L16

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.



Policy L17

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



Policy L18

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, encourage and support the development of historical preservation efforts within the County, the Towns of Gardnerville, Minden, and Genoa, and other entities in Douglas County as well as developing appropriate programs to establish guidelines for new development adjacent to historic structures, and for the rehabilitation/reuse of historic structures in order to preserve their character and setting.



Use distinctive signage or other techniques to reflect the heritage of historic routes and trails and sites, including but not limited to, 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 transfer of development rights.



Douglas County shall 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 land base designated for Future Land Use. This land base value excludes the actual lake area of Lake Tahoe (approximately 15,817 acres) and Topaz Lake (approximately 1,049 acres).

In an effort to help protect the public health, safety, and welfare of Douglas County 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 twelve (12) Future Land Use designations identified on the Douglas County Master Plan Land Use map, categorized 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 land is not identified as Washoe Tribe Land; see the land ownership map in Executive Summary.

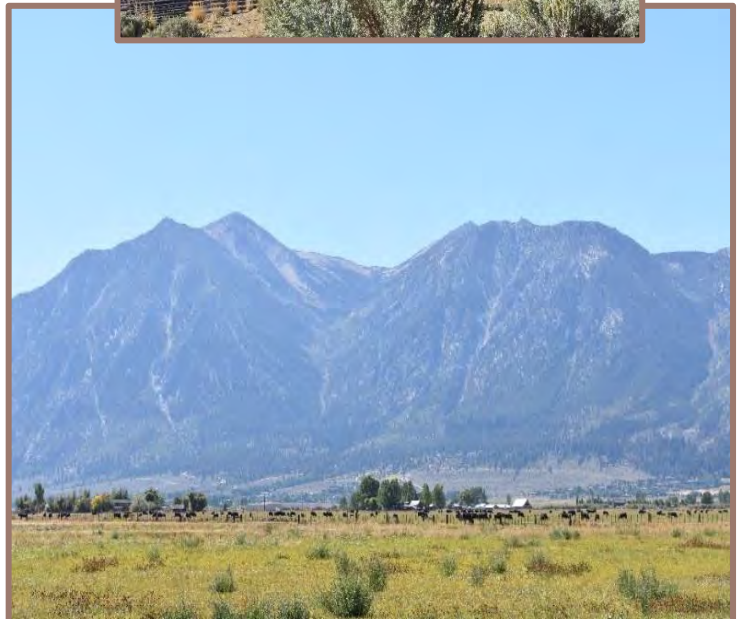
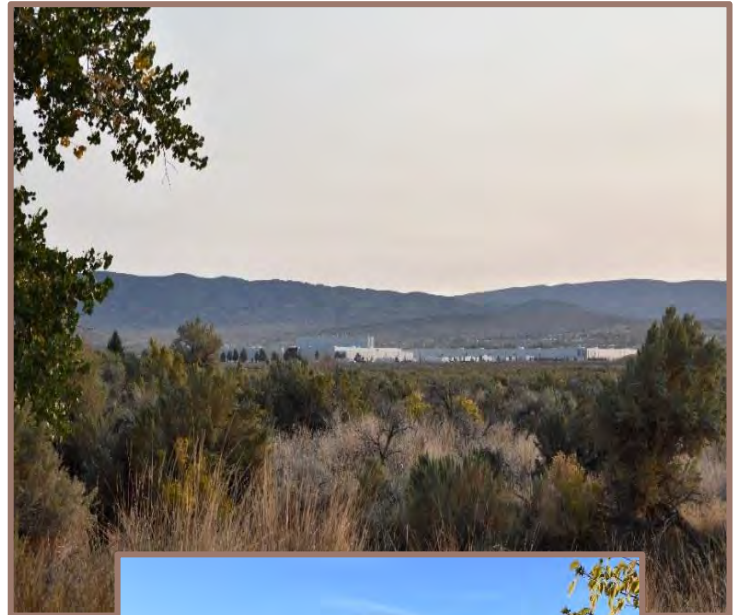


Table L1 – Future Land Use Categories (Master Plan and Douglas County Code Title 20)

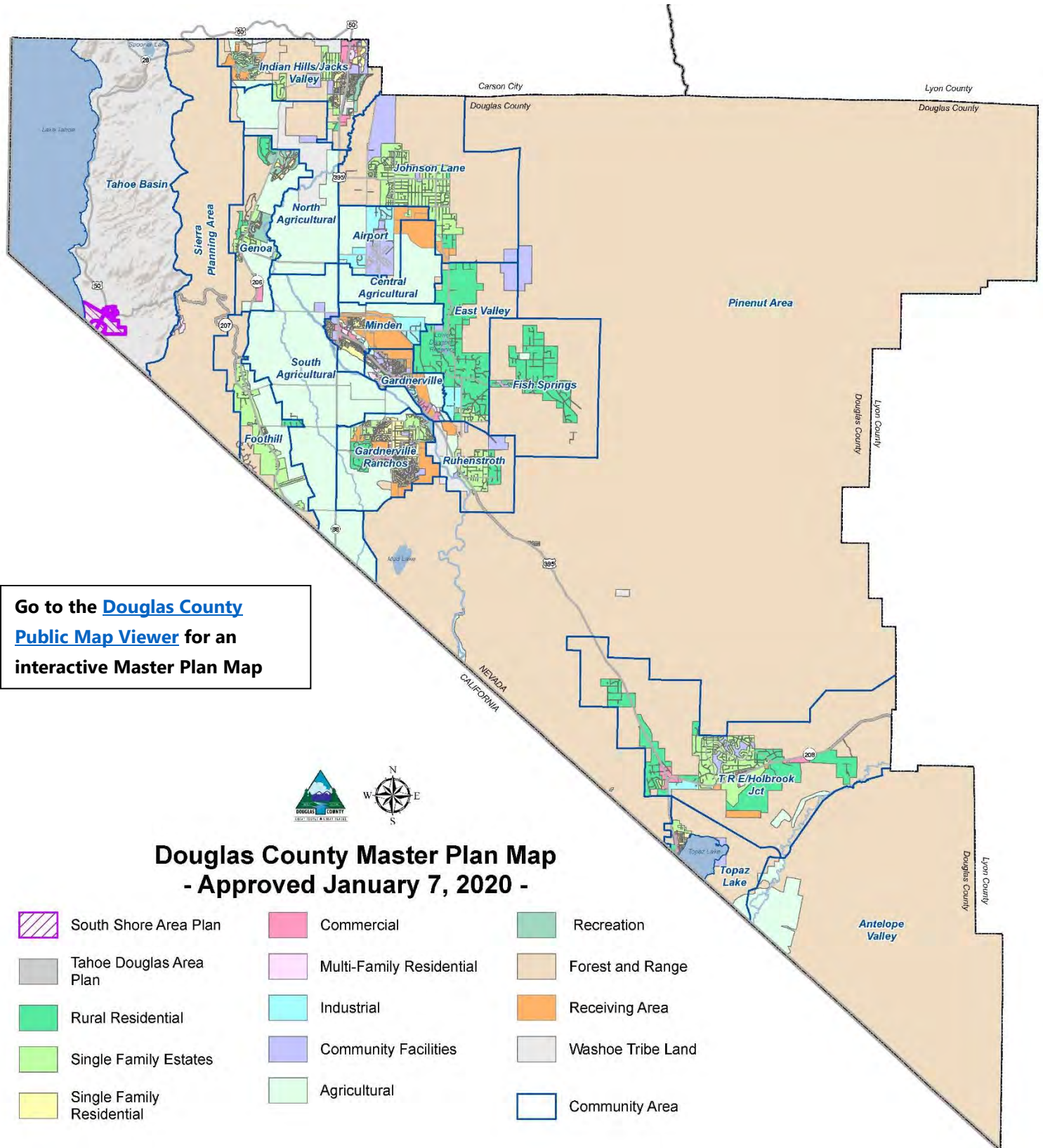
Receiving Land Use	Equivalent Base Zoning Districts	Land Use Description
Receiving Area	Allowed in all Base Zoning Districts; requires a Specific Plan or Planned Development.	Designates parcels within Community Plans identified for future urban development which require, in most circumstances, development rights from sending areas (A-19 and FR-19 zoning districts) within 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 and regional commercial development, as well as 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, for which uses include 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 recreational uses.
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 US Forest Service and Bureau of Land Management, 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.

*Public Facility Zoning is permitted in all Land Uses

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 does not require urban services.
Single-Family Estates	SFR-1 Single-Family Estates - 1 acre minimum SFR-2 Single-Family Estates - 2 acres 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; as well as, townhomes, manufactured homes 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 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 in the County and the least developed.
- 3) The **Sierra** Region straddles the portion of Douglas County between the Carson Valley and the Tahoe Basin.
- 4) Although located partially within Douglas County, the **Tahoe Basin** Region is also under the authority of the Tahoe Regional Planning Agency (TRPA). There are two community plans in the Tahoe Basin, which are called "Area Plans". The Area Plans under the 2012 TRPA Regional Plan are: the South Shore Area Plan and the Tahoe Douglas Area Plan.
- 5) The **Topaz** Region includes the communities of: Topaz Ranch Estates/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 is no community plan for these areas at the current time.

The Community Plan areas extend beyond the boundaries of existing Towns or General Improvement Districts (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 within 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

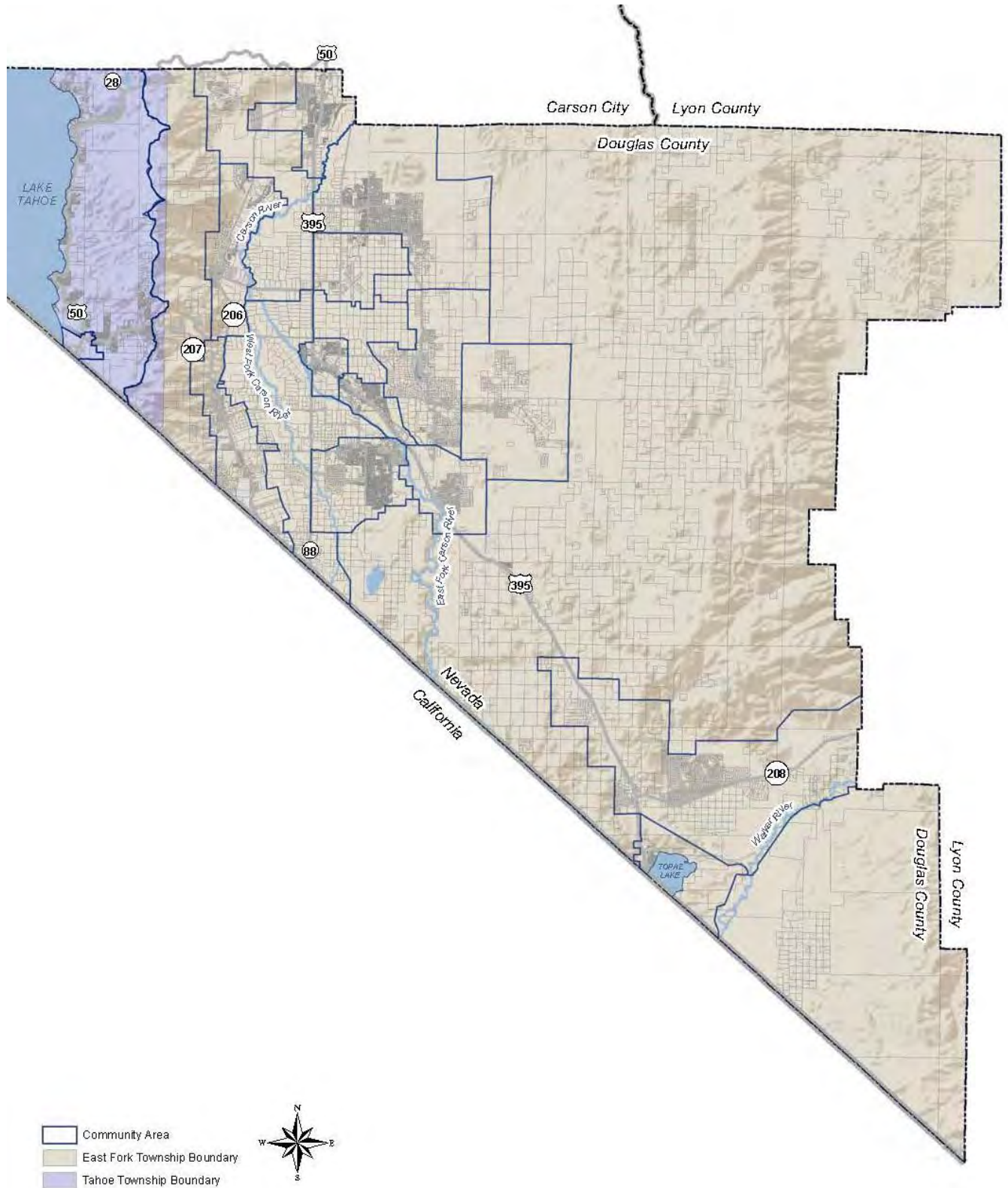
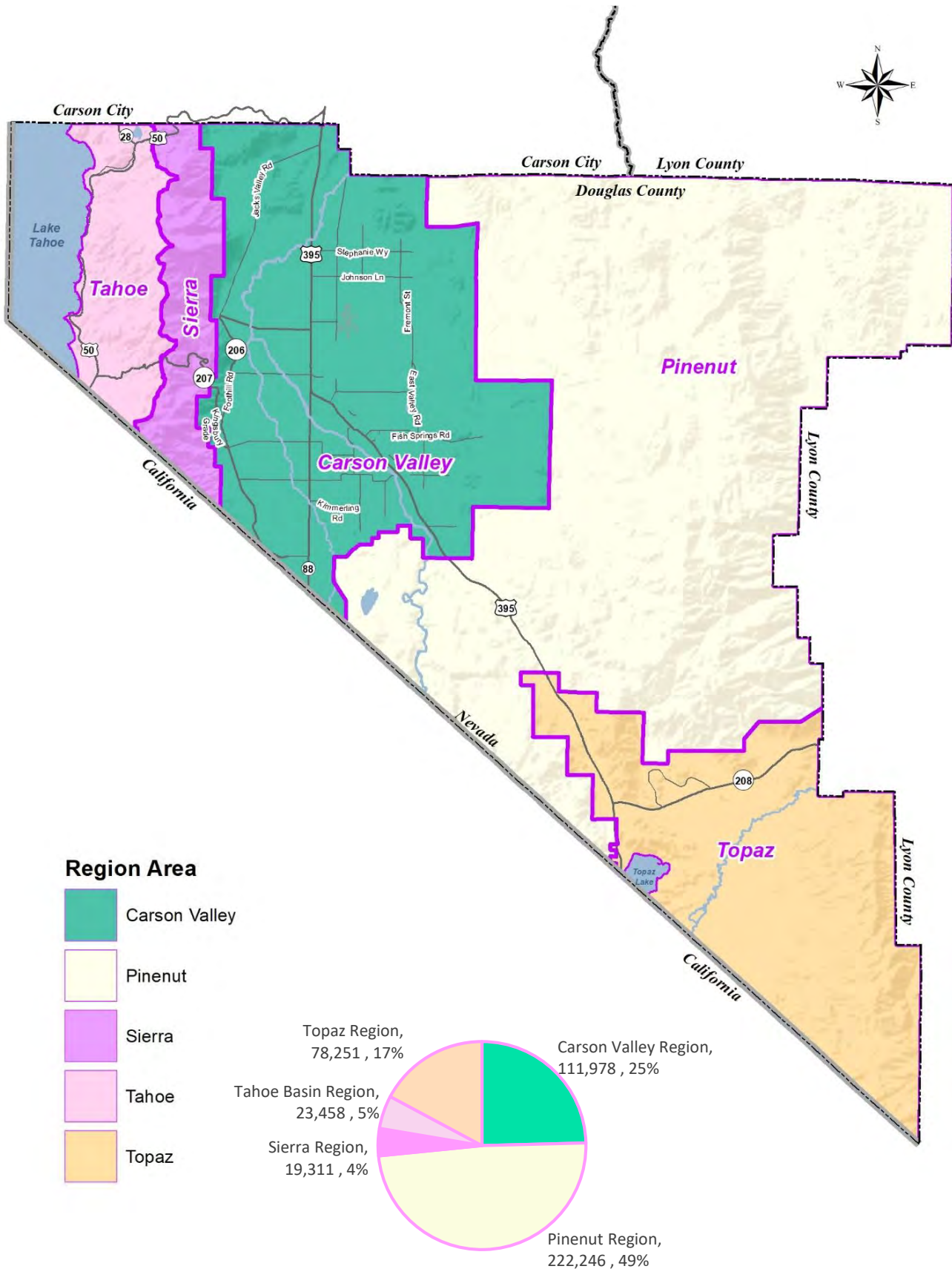


DIAGRAM L2 – DOUGLAS COUNTY REGIONS



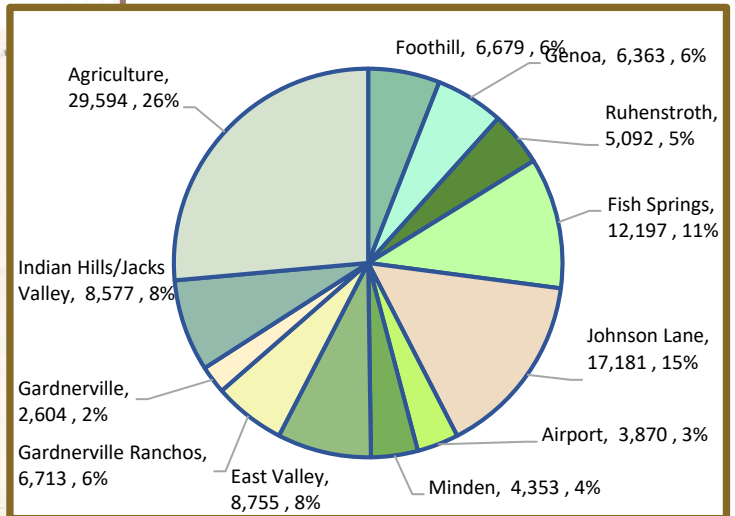
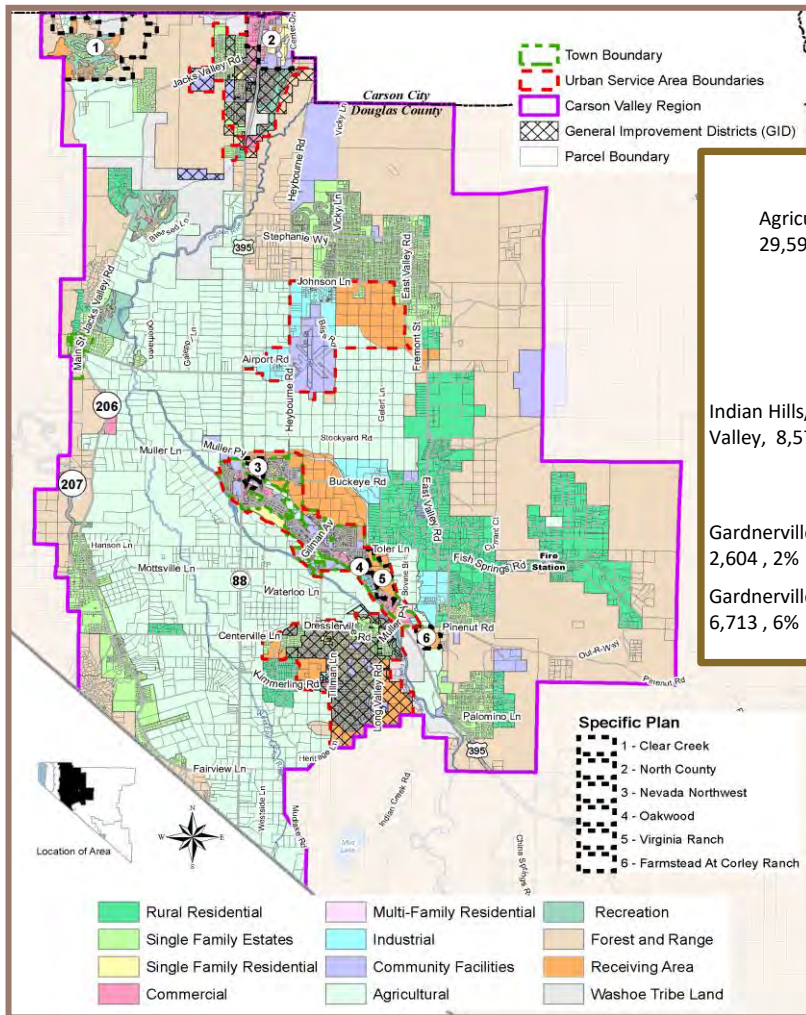


CARSON VALLEY REGION

The Carson Valley is bounded by the Sierra Nevada Mountains on the west and the Pinenut 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.

Figure L1- 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 2 percent of all residential land in Carson Valley. Agricultural lands account for 29,594 acres in the Carson Valley. Carson Valley is also the location for most of the industrial and a majority of the 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.





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 (3) sub areas: north, central, and southern portions of Carson Valley. These three areas contain most of the productive irrigated farms and ranch lands within 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 these 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 back to the irrigated farmland and back to the Carson River. There are three water masters that regulate the flows of the irrigation water in accordance with the Alpine Decree. Both East Fork and West Fork of the Carson River merge in the center of the Carson Valley before flowing into Carson City.



Photo by Vivian Powers

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.

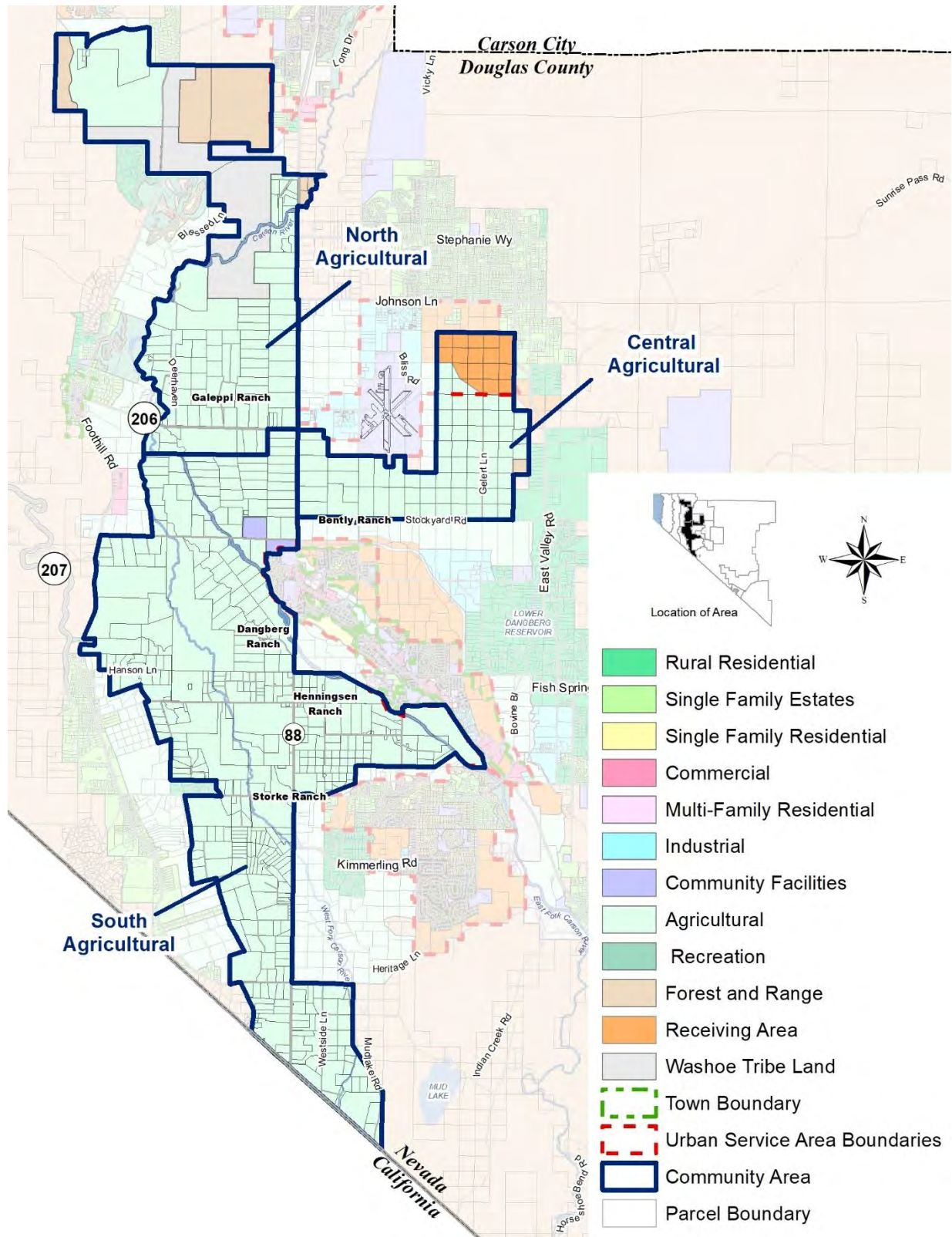


Policy 2

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

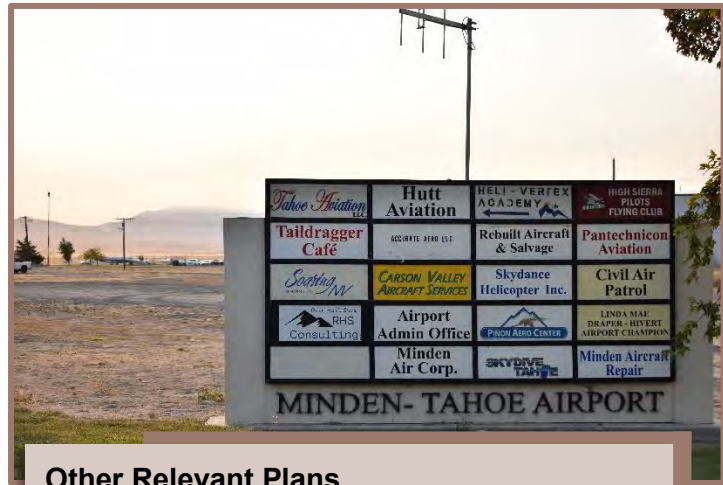
Land Use	Acres	Percentage
Agricultural	24,768	85%
Washoe Tribe Land	1,996	7%
Forest & Range	1,498	5%
Receiving Area	660	2%
Community Facilities	139	1%

DIAGRAM L3- AGRICULTURE COMMUNITY



AIRPORT COMMUNITY PLAN

The Airport Community Plan, approximately 3,870 acres and is centrally located within 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 use of Transfer of Development Rights (TDRs). 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

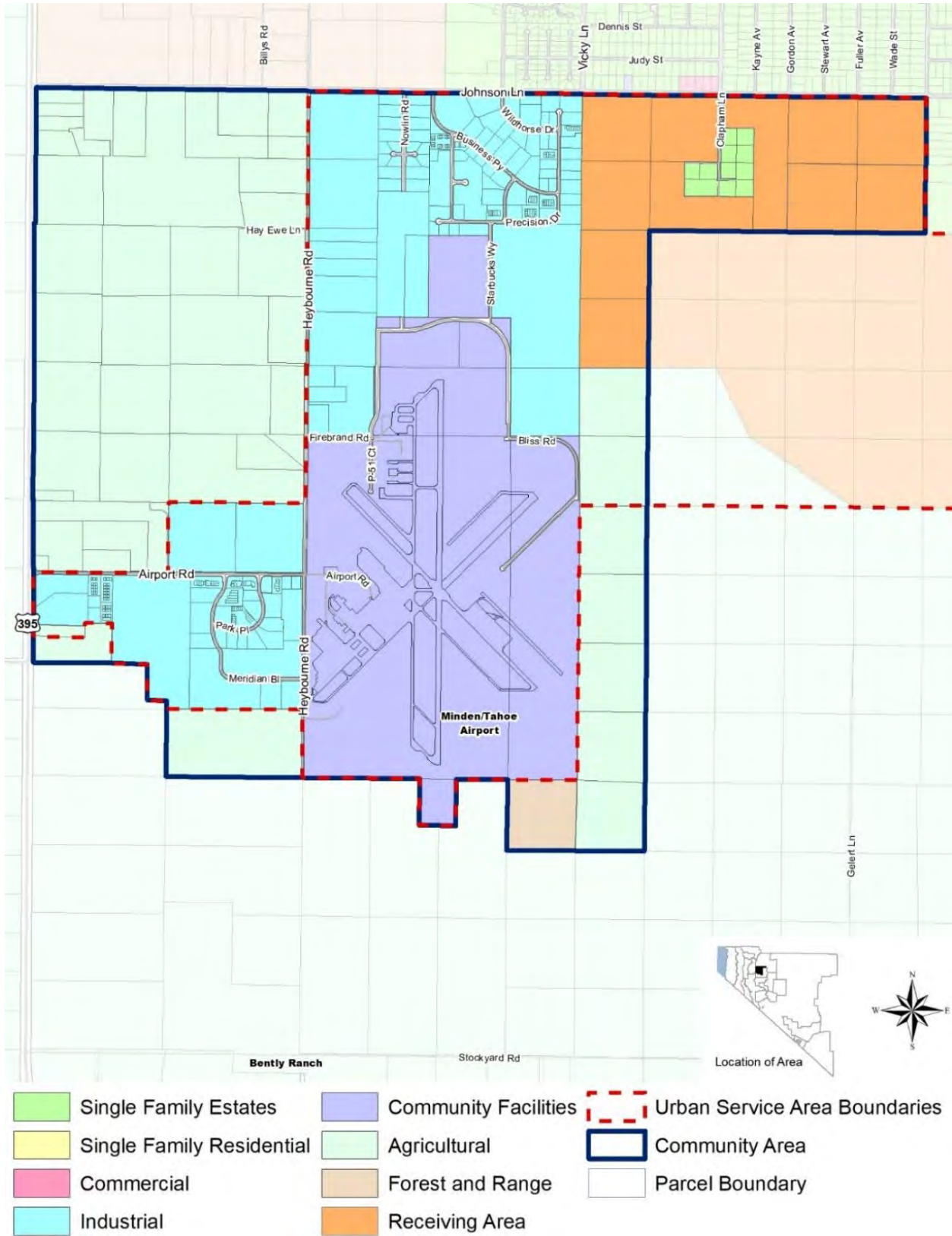
Airport Master Plan

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 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 L4 – AIRPORT COMMUNITY





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 still maintaining a buffer around the Airport perimeter for safety and noise abatement.



Policy 2

Industrial and commercial uses are encouraged to be developed along the south side of Johnson Lane and shall be designed 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. Vicki Lane should extend to the south of Johnson Lane. The county should promote the connection of East Valley Road.



Policy 4

A specific plan for the receiving areas of the airport community area shall be prepared by the property owner for review by Douglas County. New single family estate or other land uses proposed need to address a variety of issues that include, but not be limited to, on- and off-site 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 street lights, 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 an FAA Part 150 Noise Study and Part 77 Hazard Study so as 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, and East of central Agricultural, Minden and Gardnerville Communities, and north of Ruhenstroth. The community enjoys views across the Carson Valley agricultural lands; with open spaces with the scenic vistas of the Sierra



Nevada Mountains to the west and Pinenut Mountains 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 here. There is interest in extending Grant Drive 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 Pinenut 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 Bureau of Land Management (BLM) to identify areas to be included as permanent publicly accessible open space along the eastern side of the East Valley community.



Policy 6

All single-family estate designations within the East Valley community shall be maintained at a two (2) 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.

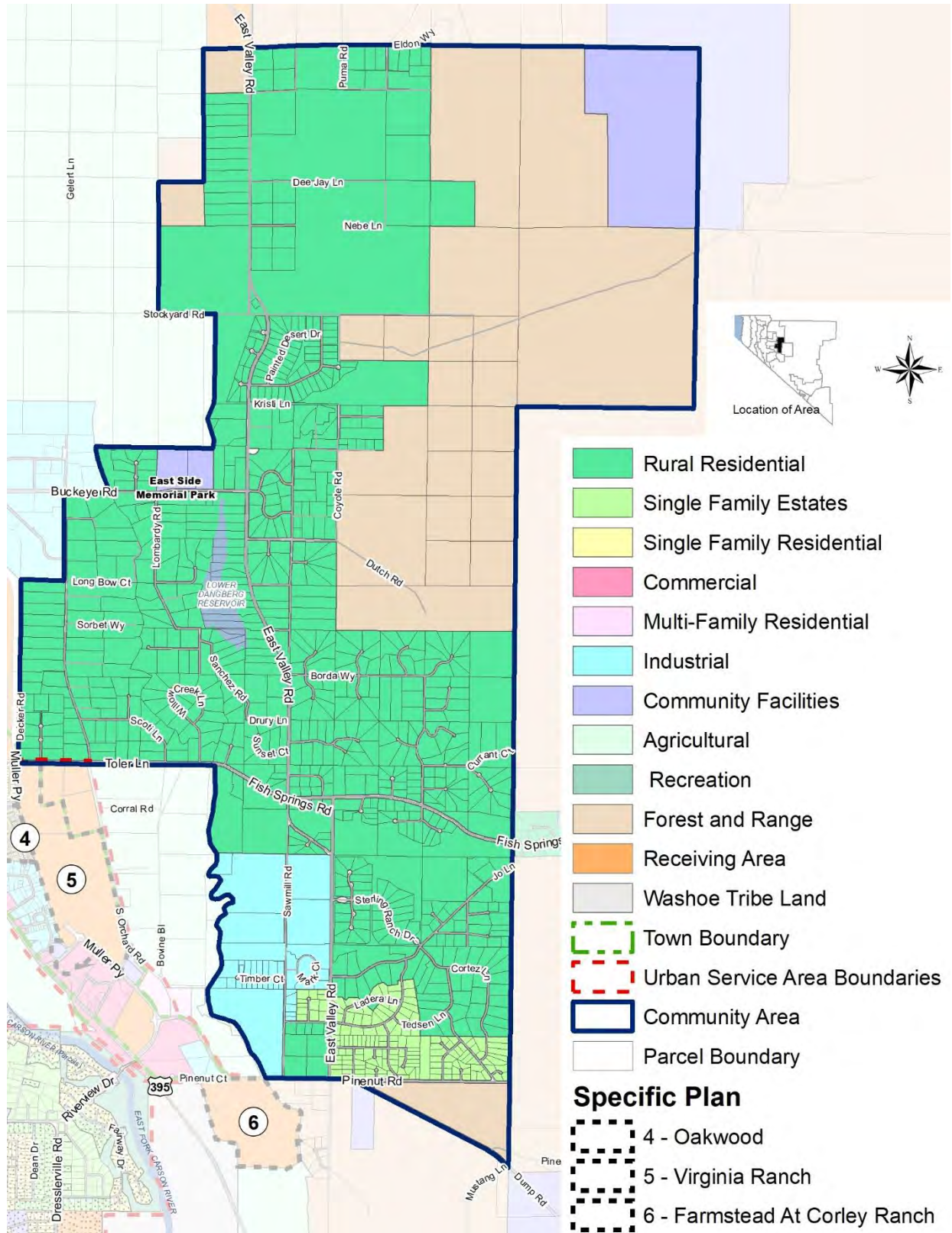


Policy 8

Coordinate with and strongly encourage the Bureau of Land Management (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 L5 – 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 fresh water 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 Pinenut Range. The community consists of single-family residences characterized by lots between one and ten acres in size generally scattered throughout the area. Based on historic patterns and topography, it is assumed this pattern of development will continue.

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

The Fish Springs Volunteer Fire Department and two (2) parcels of land owned by Douglas County on either side of Fish Springs Road at the entrance to the canyon are the only public facilities located in the community.

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.



COMMUNITY SPECIFIC POLICIES



Policy 1

Not plan to expand the Rural Residential areas in Fish Springs until areas presently planned for this use are 85% developed unless the governing body determines otherwise.



Policy 2

Work with the Bureau of Land Management (BLM) to establish a buffer of permanent, publicly accessible open space around the Fish Springs community.



Policy 3

Plan and provide public facilities and services to the Fish Springs community at established rural levels of service, including, but not limited to, minimizing installation of street lights, curbs, gutters or sidewalks.



Policy 4

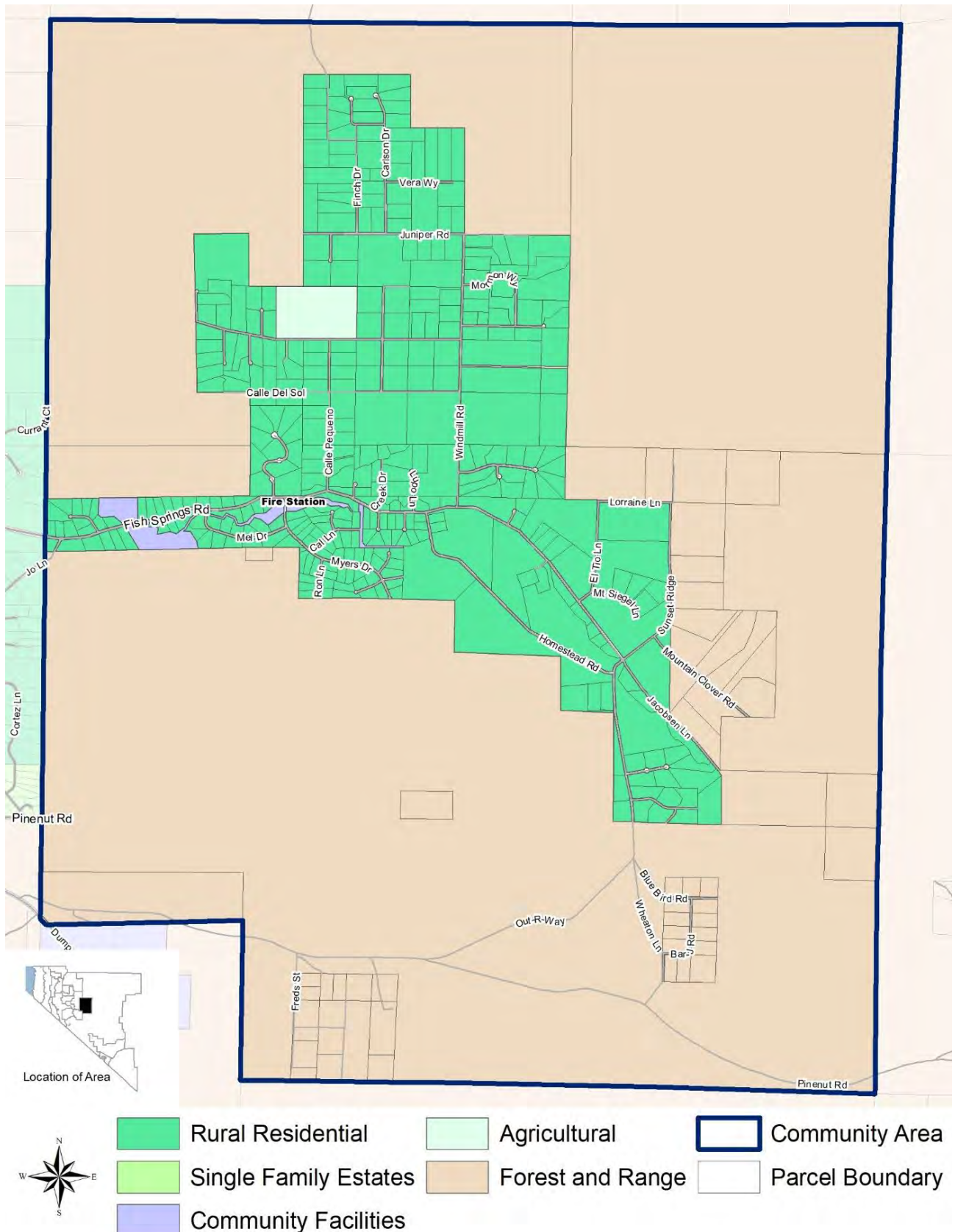
Determine the appropriate route and plan for a secondary emergency access for the Fish Springs community.



Policy 5

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. Hiking, bicycling, and equestrian trails should be planned with appropriately designed trailheads in cooperation with Bureau of Land Management (BLM). Public access points should be established by Douglas County through the planning and permitting process.

DIAGRAM L6 – FISH SPRINGS COMMUNITY





FOOTHILL COMMUNITY PLAN

The Foothill Community area includes approximately 6,679 acres with forest and range, single-family estate, rural residential with parcel sizes between 1 and 10 acres, adjacent to agricultural lands. In the mid 1800's, the two settlements established within the Foothill community were Mottsville and Sheridan. Both of these names are used today to identify these settlement areas. The scenic quality of the Foothill community is the 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. Surrounding the community are agricultural fields to the north, east, and south. This community contains a clustering of homes along Foothill Road which 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 Foothill 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

Not support the installation of street lights, 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.

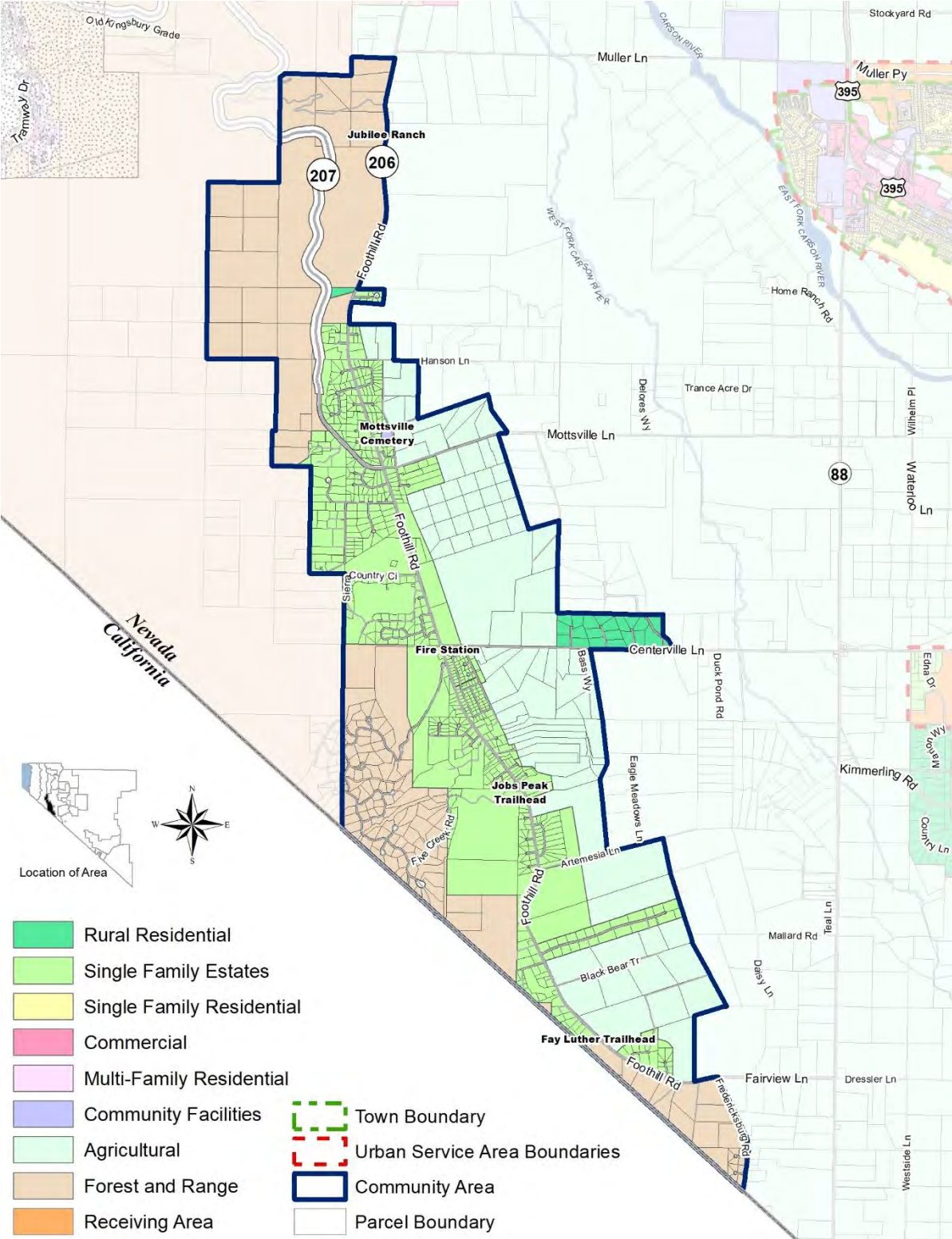


Policy 5

Work with the United States Forest Service (USFS) to establish areas of permanent, publicly accessible open space along the western boundary of the Foothill community, as well as a network of hiking, bicycling, and equestrian trails with accessible trailheads.



DIAGRAM L7 – FOOTHILL COMMUNITY





GARDNERVILLE RANCHOS COMMUNITY PLAN

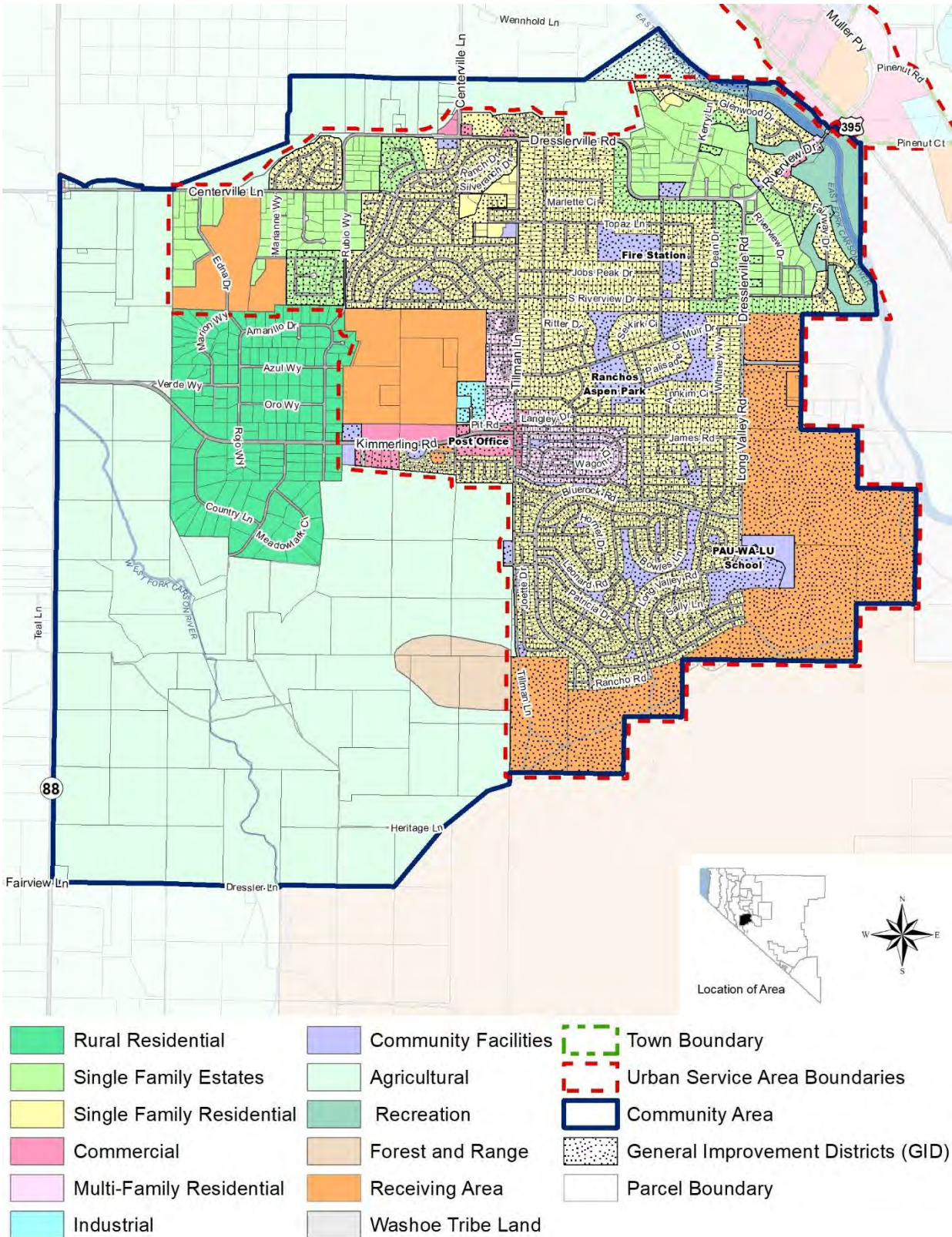
The Gardnerville Ranchos area includes approximately 6,713 acres, and is home to the largest population base in Douglas County. In the mid 1960's, C.E. (Red) Swift owned a large tract of land that he wanted to build homes on. Douglas County required the proposed subdivision to be serviced by a municipal water system and have paved roads to drive on. 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 (GID) 318 District was then created by Douglas County Ordinance 147 on April 9, 1965. The District is one of the oldest GID's 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 area.

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-space 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 over-development of designated Receiving Area in the plan area while still providing housing opportunities that meet the needs of the Gardnerville Ranchos Community. Roadway designs should improve traffic circulation patterns, while 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 L8 – GARDNERVILLE RANCHOS COMMUNITY



COMMUNITY SPECIFIC POLICIES



Policy 1

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.



Policy 2

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



Policy 3

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



Policy 4

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



Policy 5

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



Policy 6

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



Policy 7

Encourage water system connections for emergency services to be made between GRGID and Gardnerville water.



GENOA COMMUNITY PLAN

Nestled at the foot of the Carson Range of the East Slope of 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 is the oldest town within Nevada, settled in 1851. It holds an important place in the history of Nevada and the West. Explorers and trappers often made their way through this area



heading west to California. In June of 1851, John Reese and his party built a trading post and the area began to attract settlers and became a permanent settlement, known as Mormon Station renamed "Genoa" in 1855. Many of the structures within 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 Nevada as a whole, 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 within the Town of Genoa in a manner that is compatible with the Town's existing historic character. The County shall work with the Town to establish appropriate parking requirements for the commercial corridor.



Policy 3

Development regulations should 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. This process shall address the amount, scale, design, location and intensity of development.



Policy 5

The Town of Genoa and the County should periodically review the advisability of expanding the historic district.



Policy 6

The Town of Genoa and Douglas County should encourage the displacement of overhead power and communication transmission lines to underground facilities within the Town of Genoa.



Policy 7

Douglas County shall encourage a quiet residential neighborhood and shall not approve any development or projects that will unreasonably disrupt the livelihood or peace of the residents that live in the area.



Policy 8

Ensure that all streets within the Town of Genoa are designed for slow speeds and safe vehicular and pedestrian routes.



Policy 9

Local roads within the Town of Genoa shall 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 through Genoa are compatible with the existing character of Genoa and increase the safety or desirability of pedestrian traffic in the Town.

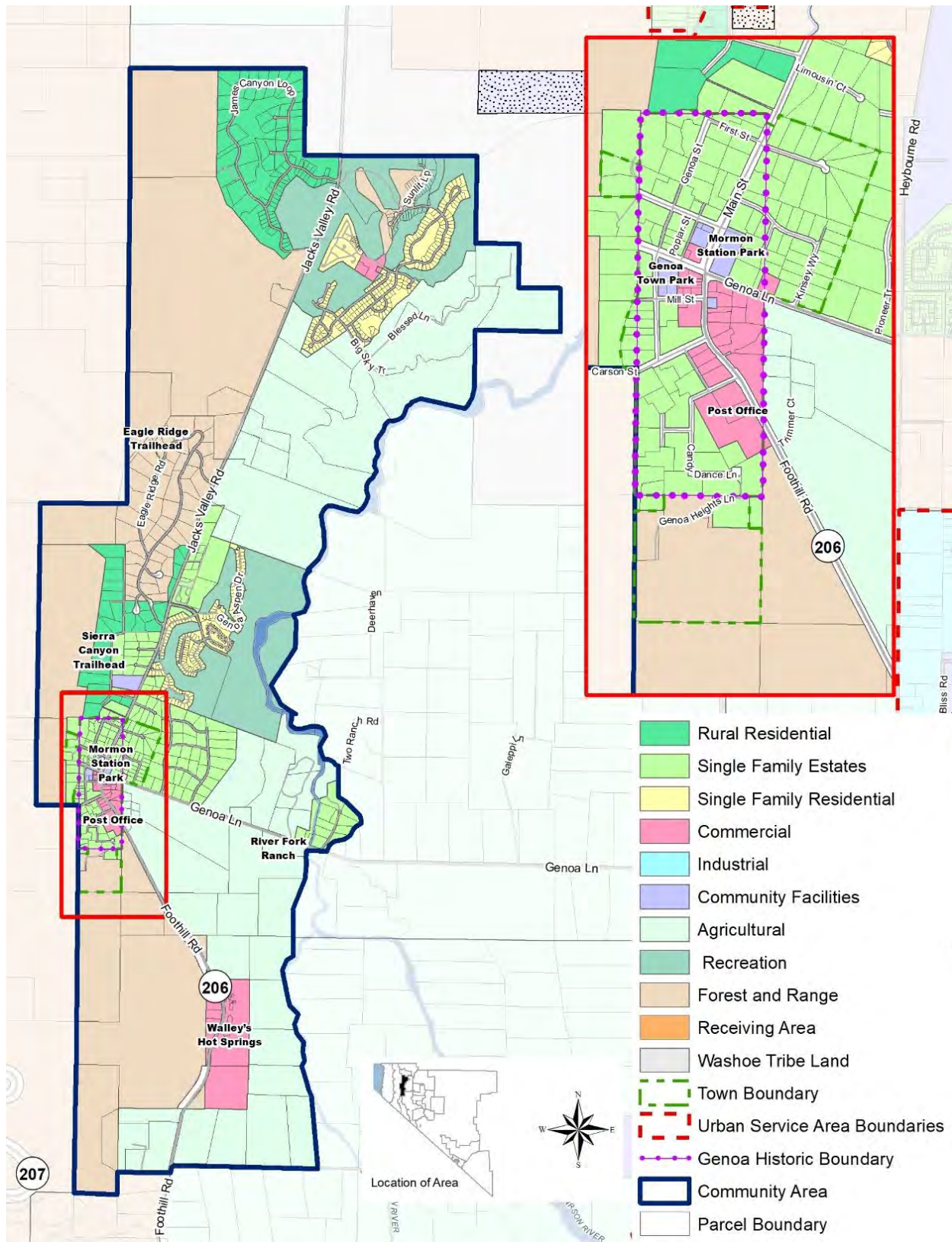


GENOA TOWN HALL

SPA & BOUTIQUE

GENOA
SPA & BOUTIQUE

DIAGRAM L9 – GENOA COMMUNITY



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 Carson City and Douglas County lines of the North Valley area. The community is bisected by the Jacks Valley Wildlife Management area on United States Forest Service Land and Bureau of Indian Affairs, including the Clear Creek Tahoe development. The mountains of the Toiyabe National Forest to the west augment the other natural open spaces and contribute to the picturesque scenery that is such an important part of this community's character.

This area lies between 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 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

Commercial development outside of the existing business corridors along US 395 shall be limited to neighborhood commercial uses that serve the needs of the community's residents.



Policy 2

Commercial designation located at the intersection of Jacks Valley Road and Highway 395 should provide for mixed residential and commercial uses.



Policy 3

Commercial designations associated with the resort/casino area in the south portion of the plan area should be oriented toward tourism.



Policy 4

Commercial designations at the gateway to Douglas County/Carson City should provide for regional commercial activities. The designation of commercial on Forest Service lands anticipate 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 multifamily 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. Direct access from private property should be limited.



Require connection to a centralized water system as well as 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. Streets in urban areas shall be paved to urban standards; streets in rural areas shall be paved to rural standards.



The Clear Creek Specific Plan Development is characterized by golf estate lots surrounded by alpine meadows and forest lands. Future development in this area should be consistent with the specific plan and should remain hidden from offsite views and maintain buffer areas with the Alpine View Estates and Freedom Ranch subdivisions to the southeast.



The North Douglas County Specific Plan Development is characterized by a mix of regional commercial, multi-family and high-density single-family developments. Future development in this area should be consistent with the specific plan and should be evaluated on its impacts to regional infrastructure.

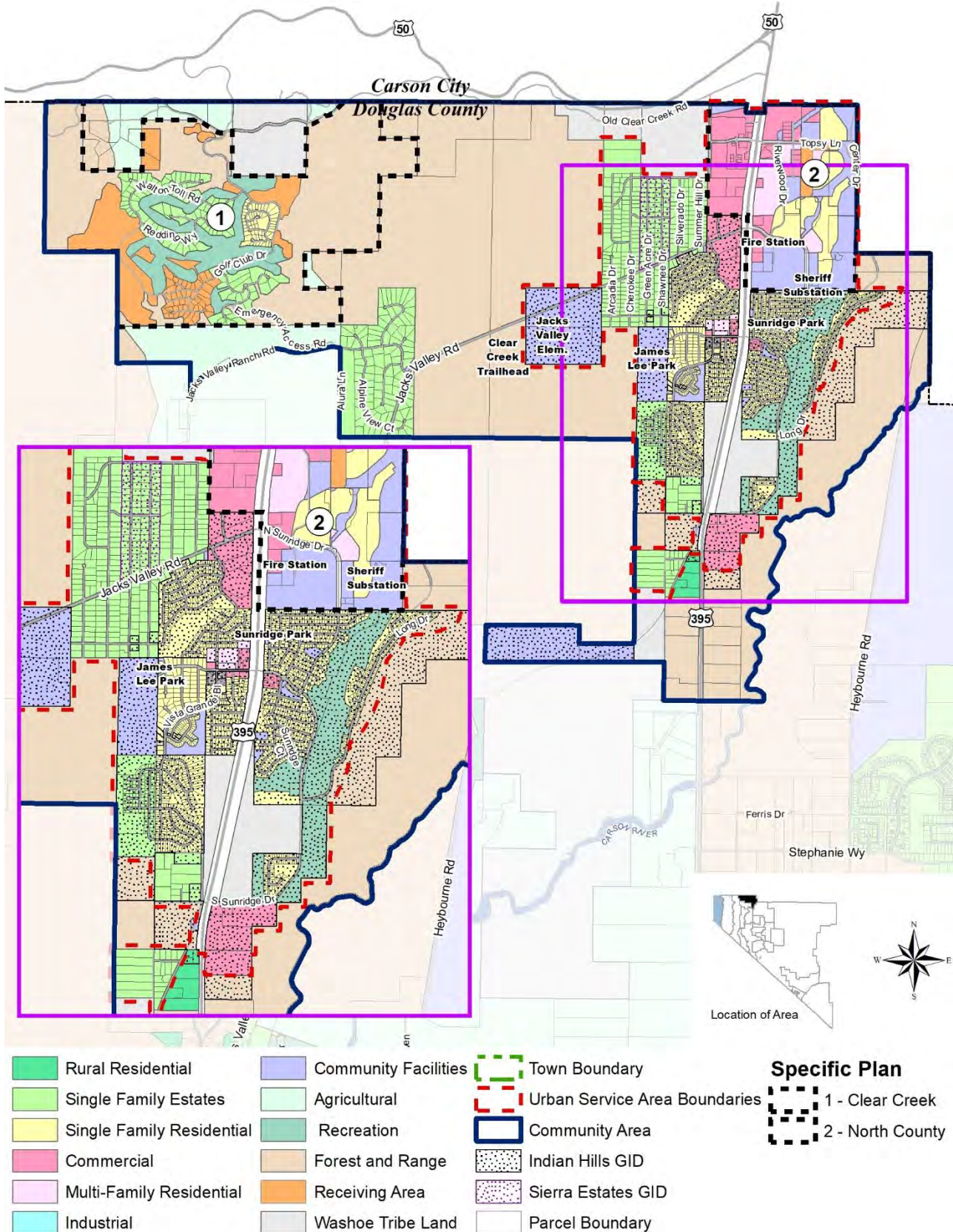
Indian Hills General Improvement District area consists of a mixture of detached single-family homes, manufactured housing, and apartments in a suburban residential development setting. A neighborhood commercial center is located on Mica Drive (one of the gateways into the community), and a large regional 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; and is home to the Sierra Estates General Improvement District, serving around 64 single-family homes. The homes are custom-built homes with styles and sizes varying greatly. 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 preserved agricultural fields, where cattle graze year-round. Alpine View Estates has detached single-family homes on an average lot size of two acres. These homes are custom-built homes, which are generally large and upscale. Alpine View Estates' community character is rural residential parcels of two (2) acres with paved streets. Vacant land and public open space dominate undeveloped parts of this community.

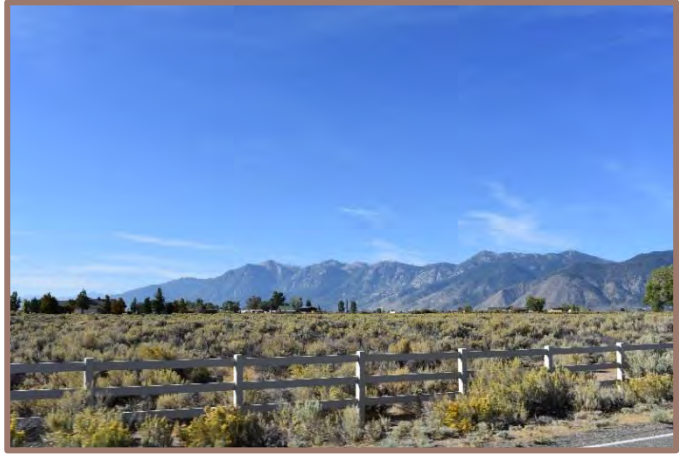


DIAGRAM L10 – INDIAN HILLS/JACKS VALLEY COMMUNITY



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 enjoy access to open public lands to the Pinenut Mountains to the east; with the scenic vistas of the tree-covered Sierra Nevada mountain range to the west, while overlooking the Carson Valley. 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 and protected from natural hazards, utilize resources best management practices, and easy access to the Pinenut 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



Policy 1

Commercial development outside of the existing business corridors shall be limited to neighborhood commercial uses that serve the needs of the Johnson Lane community's residents.



Policy 2

The scale and design of commercial development shall blend with the community's predominantly residential character.



Policy 3

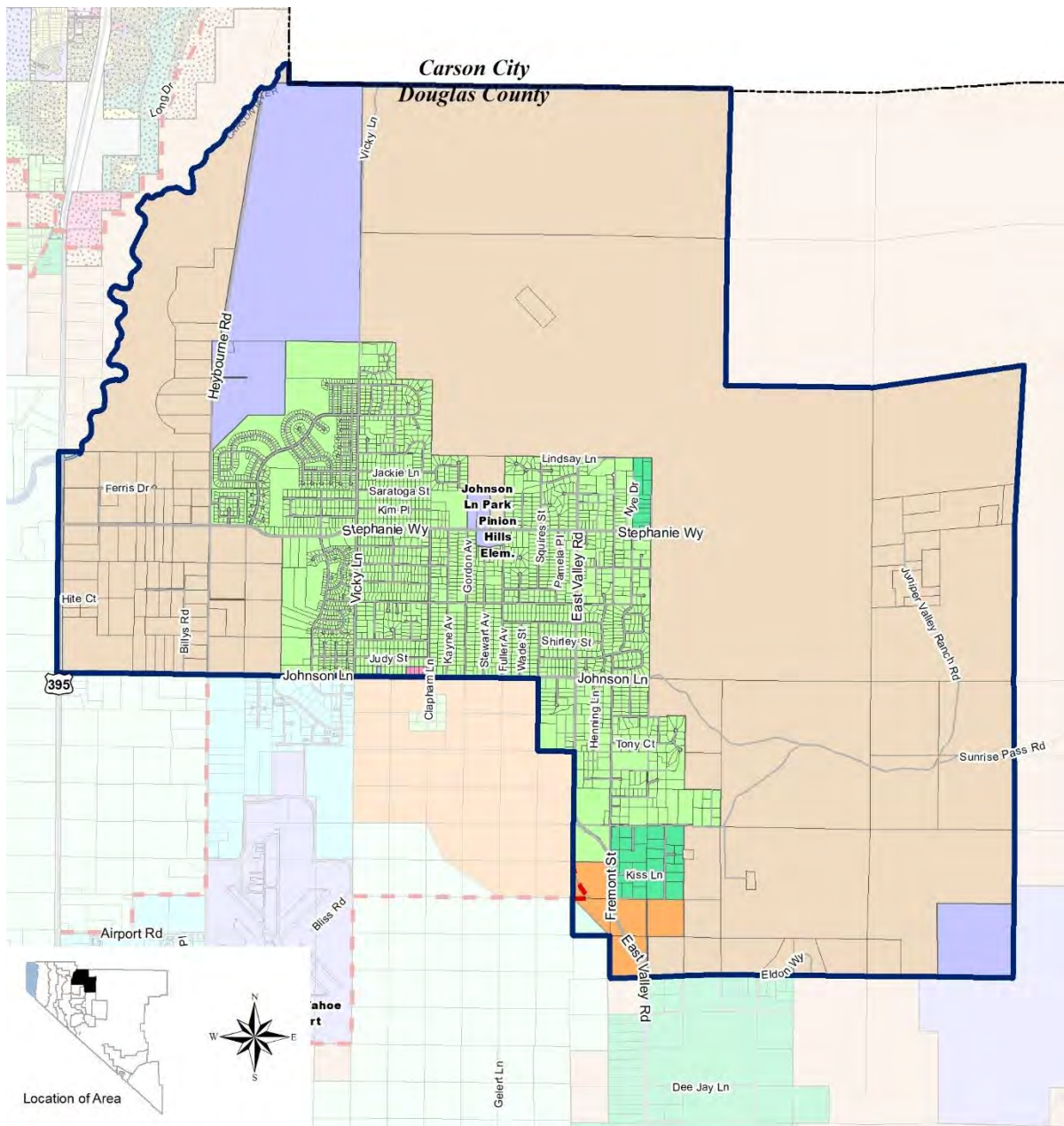
Work with Bureau of Land Management (BLM) to identify those BLM properties essential to creating a permanent open space buffer to the north and east of the Johnson Lane community and to retain properties as permanent publicly accessible open space while providing for detention basins to protect residences within drainage ways.



Policy 4

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

DIAGRAM L11 – 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 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 within 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 and includes 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 located a short walk 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 suited for future urban



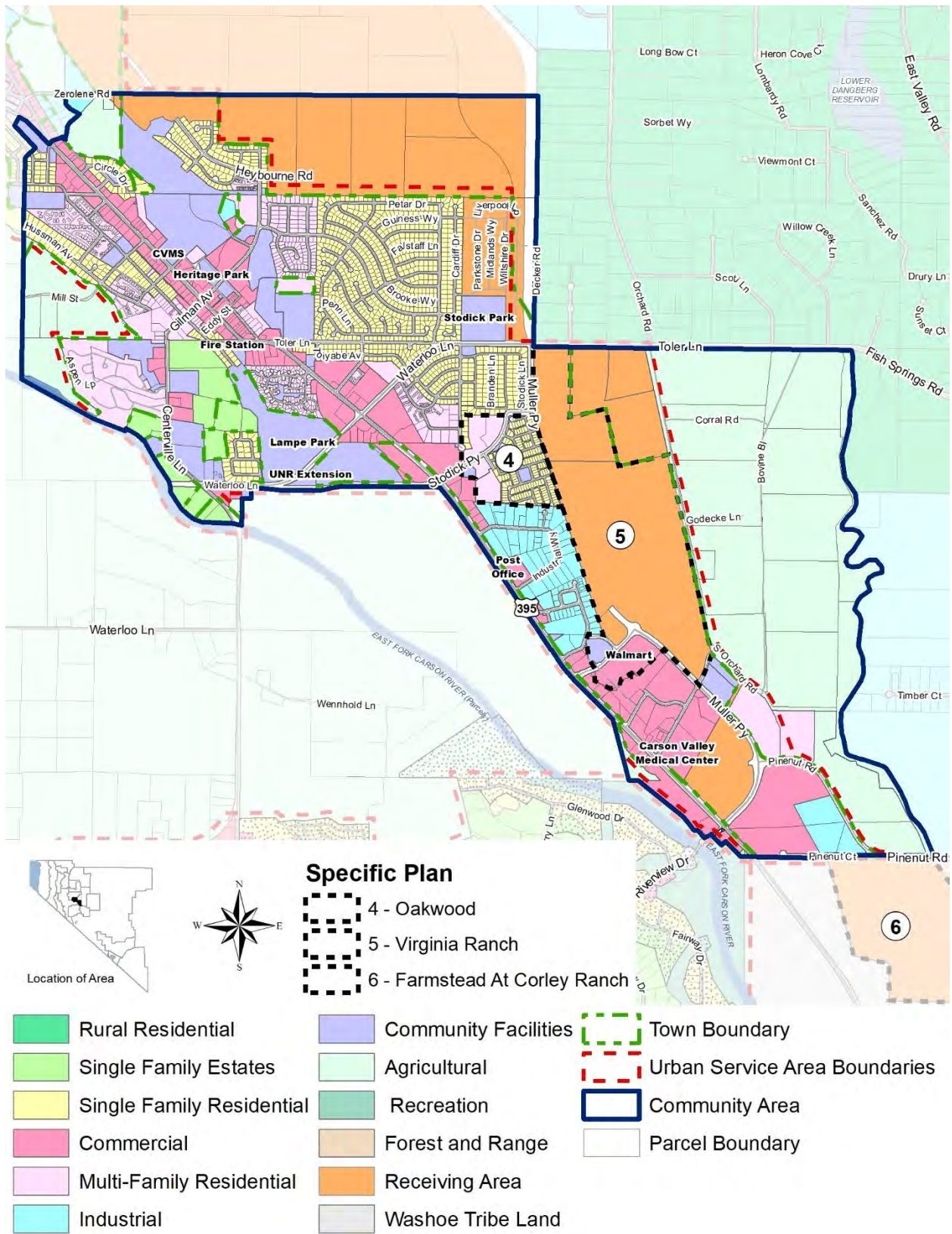
development or conservation. The Town of Gardnerville was established in 1879 when Lawrence Gilman moved the Kent House from Genoa to a seven-acre tract in the Carson Valley owned by Lawrence Gardner. The Kent House then became the Gardnerville Hotel. The Gardnerville Community Plan contains a large variety of different future land uses.

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%

Other Relevant Plans

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

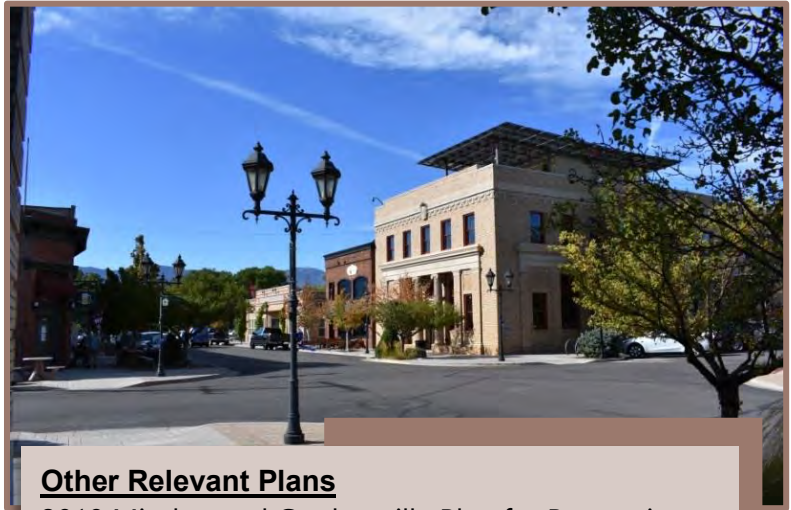
DIAGRAM L12 – GARDNERVILLE COMMUNITY



MINDEN COMMUNITY PLAN

The Minden Community Plan is approximately 4,353 acres and includes the Town and adjacent areas suitable for future urban development otherwise preserved for open space. Minden was founded in 1905 and contains many structures and sites of historic value including ten (10) properties that are listed on the National Register of Historic Places. On average, this community provides a residential density of 5 units per acre.

Several areas are designated as Receiving Areas in the Minden Community Plan. The areas 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 which specify densities and land uses, and this mitigates planning and environmental issues. The specific plan must be adopted prior to establishing these areas for actual development and rights must be acquired to support the planned densities. The areas should be developed as distinct neighborhoods compatible and complimentary 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 concentrating this use. Housing for seniors and affordable housing should be included within 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 which create linear parks and pathways to connect elements of the existing Towns. Buffering of agricultural lands should be included in future development plans.

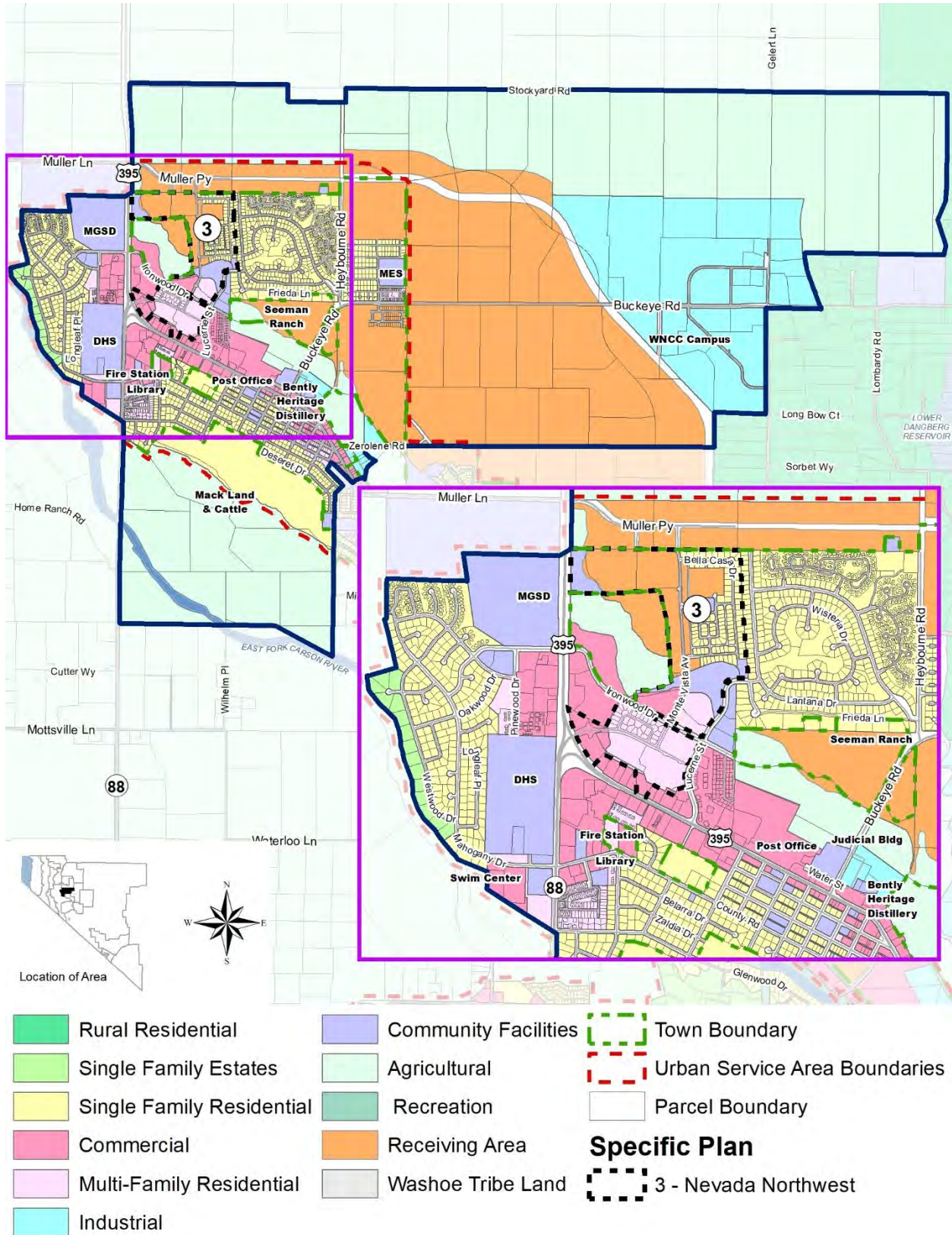


Other Relevant Plans

2018 Minden and Gardnerville Plan for Prosperity
Nevada Northwest Specific Plan

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 L13 – MINDEN COMMUNITY



RUHENSTROTH COMMUNITY PLAN

Ruhenstroth is located in the southeastern part of the Carson Valley Region and consists of approximately 5,092 acres. It enjoys the scenic vistas of the Carson Range of the Sierra Nevada Mountains and the rugged terrain of the Pinenuts. The Fairgrounds, located in this Community, provide the largest public facility in the County for special events. The



Other Relevant Plans

Corley Ranch Specific Plan
Dry Creek Estates
Settelmeyer Ranches

Washoe Tribe's Dresslerville Community is also located within 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 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. It was created to provide for an active adult and over 55-year-old community with a maximum of 250 dwelling units; needed neighborhood services and a mix of housing types, including small-lot development that allows for maximum retention of agricultural land and open space.

VISION STATEMENT

Ruhenstroth will keep flourishing as a rural community nested within 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



Policy 1

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



Policy 2

Rehabilitation or reuse of any gravel pit shall be completed 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.



Policy 3

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



Policy 4

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



Policy 5

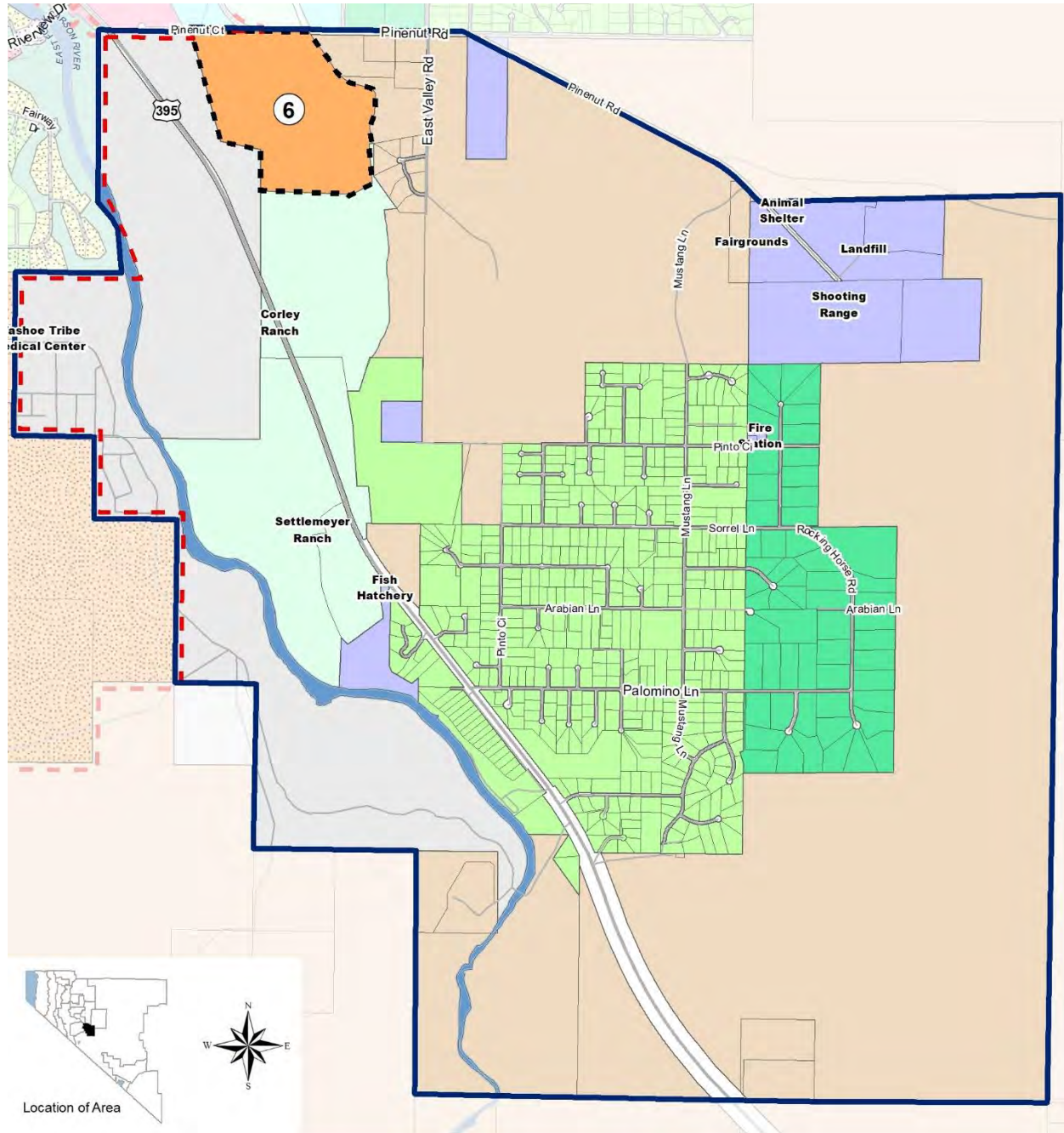
Allow the use of individual sewage disposal systems and domestic wells for service in this rural community, unless continuing water quality studies identify the need for community systems. Long-range plans should continue to provide community water and sewer services to the area.



Policy 6

In order to provide a second access out of the Ruhenstroth community during an emergency, a road to connect the Ruhenstroth community to Pinenut Road should be constructed.

DIAGRAM L14 – RUHENSTROTH COMMUNITY

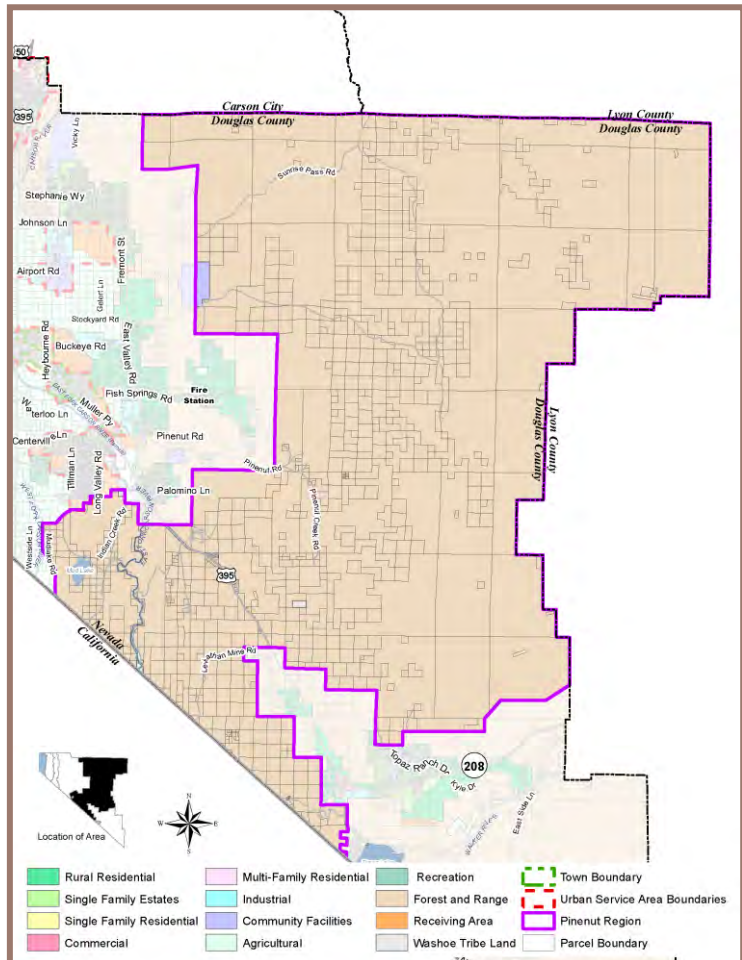


- | | | |
|---------------------------|----------------------|-------------------------------------|
| Rural Residential | Community Facilities | Urban Service Area Boundaries |
| Single Family Estates | Agricultural | Community Area |
| Single Family Residential | Recreation | General Improvement Districts (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 portion of Douglas County. The area includes portions of the Pinenut Range, including the lower lying foothills to the Carson Valley. Several year-round creeks flow from natural springs in the Pinenut 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 topography and rural setting, it is unlikely the area will 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. This is also 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 Ruhenstroth community along U.S. Highway 395 South have seen increased residential development in the form of manufactured homes with little or no infrastructure provided. 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

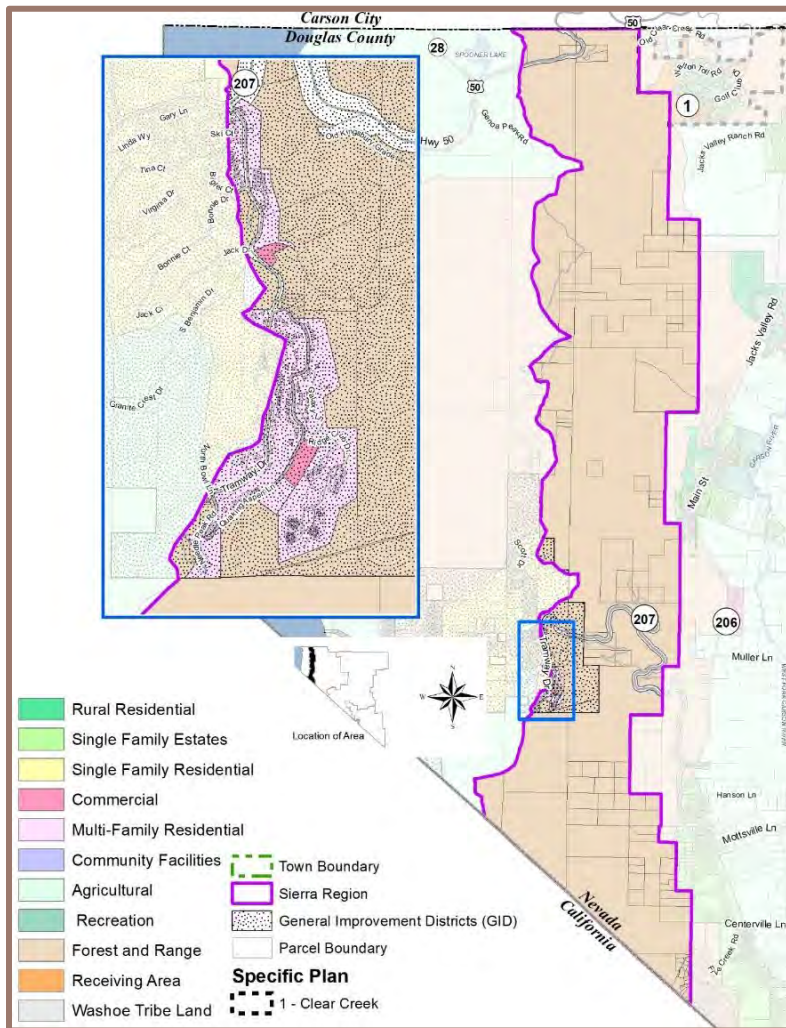
Protect the Scenic Corridor along U.S. Highway 395.



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 lies between the Carson Valley and the Tahoe Basin. The area is very sparsely populated. About 75 percent of the lands in the area are in public ownership. Due to 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 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. The size

of the Sierra Region is approximately 19,311 acres. This area will continue to act as a buffer between the Tahoe and the Carson Valley Regional Plans. With the exception of the Tahoe Village and the Summit Village neighborhoods, there is very little development in the area. The Tahoe Village and Summit Village neighborhoods contain approximately 850 dwelling units outside the Tahoe Basin, which are primarily comprised of timeshare condominiums. Therefore, the community contains only a limited permanent residential population. The two neighborhoods are serviced by the Kingsbury General Improvement District, which is located within the Tahoe Basin. The estimated 2010 population of the Sierra Regional Plan is approximately 169 people. The Tahoe Village and Summit Village neighborhood 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 (slopes greater than 10 percent) to conform to the hillside development policies.



Policy 5

Support efforts to implement the Heavenly Ski Resort Master Plan.

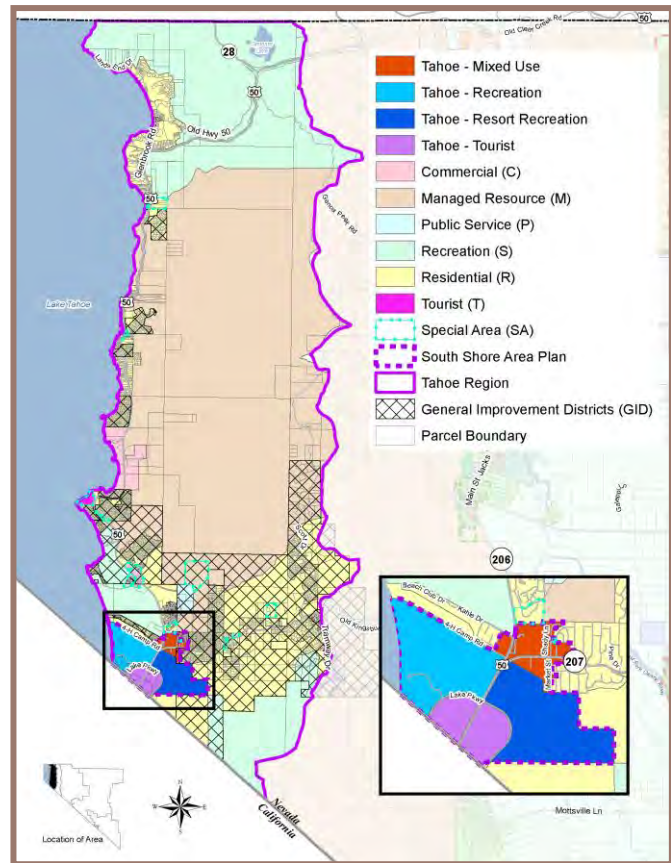


Policy 6

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, Nevada. The area totals 23,458 acres, or about 5 percent of the County. Approximately 84 percent of land is in public ownership, and the remaining 16 percent is in private ownership. The area borders Lake Tahoe, the 10th deepest lake in the world; known for the clarity of its waters and scenic beauty. The Lake Tahoe Region is under the jurisdiction of the TRPA, established in 1969 under the Bi-State Tahoe Regional Planning Compact in order 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

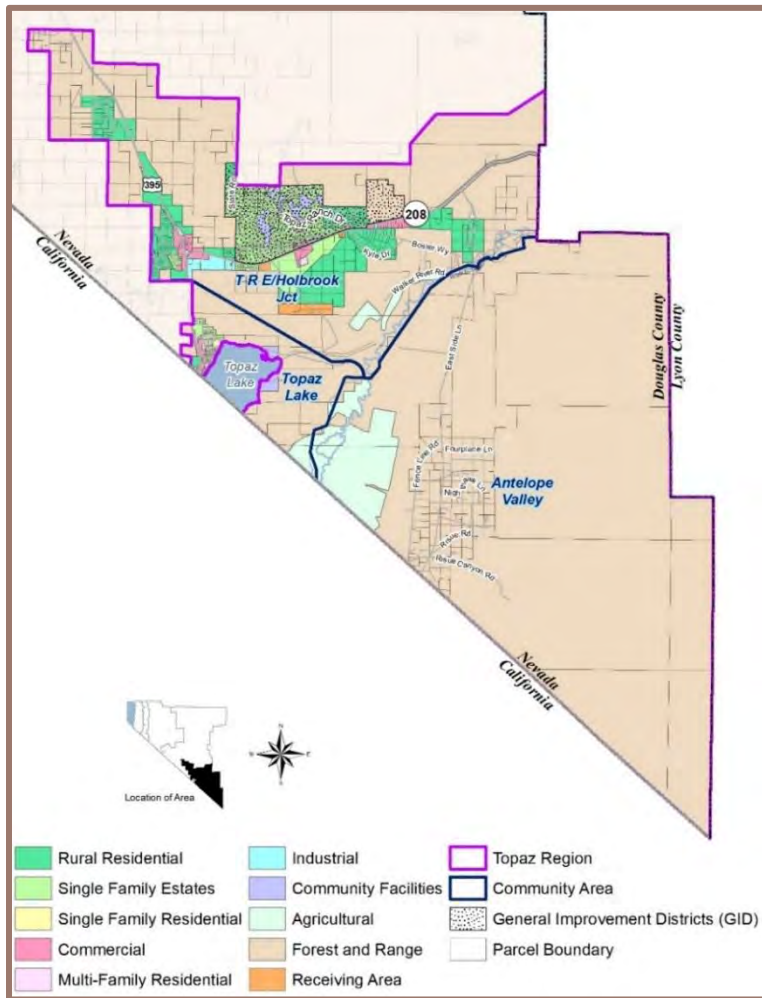
Support the unique recreation business opportunities without compromising the enjoyment of activities for local residents.



Policy 3

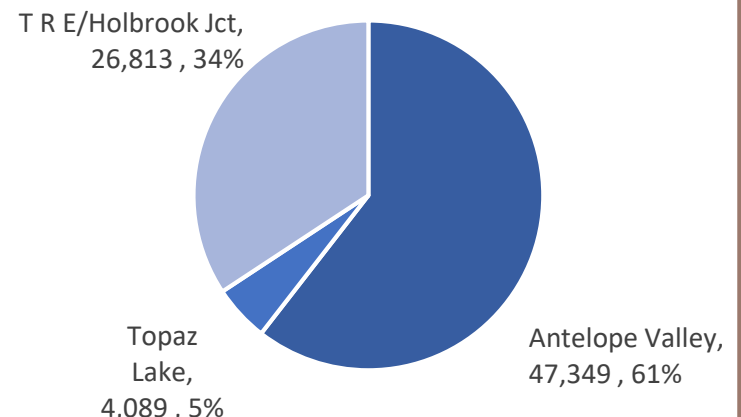
Promote an integrated regional approach to planning between Tahoe and the Carson Valley.

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. Approximately 2,065 acres are devoted to urban uses, with 80 percent of the urban land allocated to residential uses. There are three distinct areas within the Regional Plan: Topaz Ranch Estates (TRE)/ 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. Along the Walker River there are agricultural lands and riparian vegetation. The Walker River separates Antelope Valley from the rest of the Topaz area. The

topography is characterized with steep slopes, sparsely wooded piñon pines, hillsides, and a scattering of agricultural lands. One of the challenges related to future development in this region is the lack of municipal water service and sewerage 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. The County should work to upgrade facilities in existing rural areas over time and with available resources.



Policy 3

The Douglas County School District should continue 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 Bureau of Land Management (BLM) to plan public access and use of BLM lands in the Topaz area, particularly where BLM lands are adjacent to Topaz Park or other County recreational facilities.

TOPAZ LAKE COMMUNITY PLAN

The Topaz Lake Community includes approximately 4,089 acres located in the southern portion of Douglas County bounded by Topaz Lake, U.S. Highway 395 and California State line on the west. The existing Topaz Lodge Casino and commercial land use designations flank U.S. Highway 395, which forms the westerly 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 ½ acre. Lot sizes that have developed on the hillside to the north vary from 1 to 5 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 of the community.



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 be paved and should minimize the installation of street lights, curbs, gutters or sidewalks.



Policy 4

Evaluate the special recreational needs of senior citizens in the Topaz communities and include these in its 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

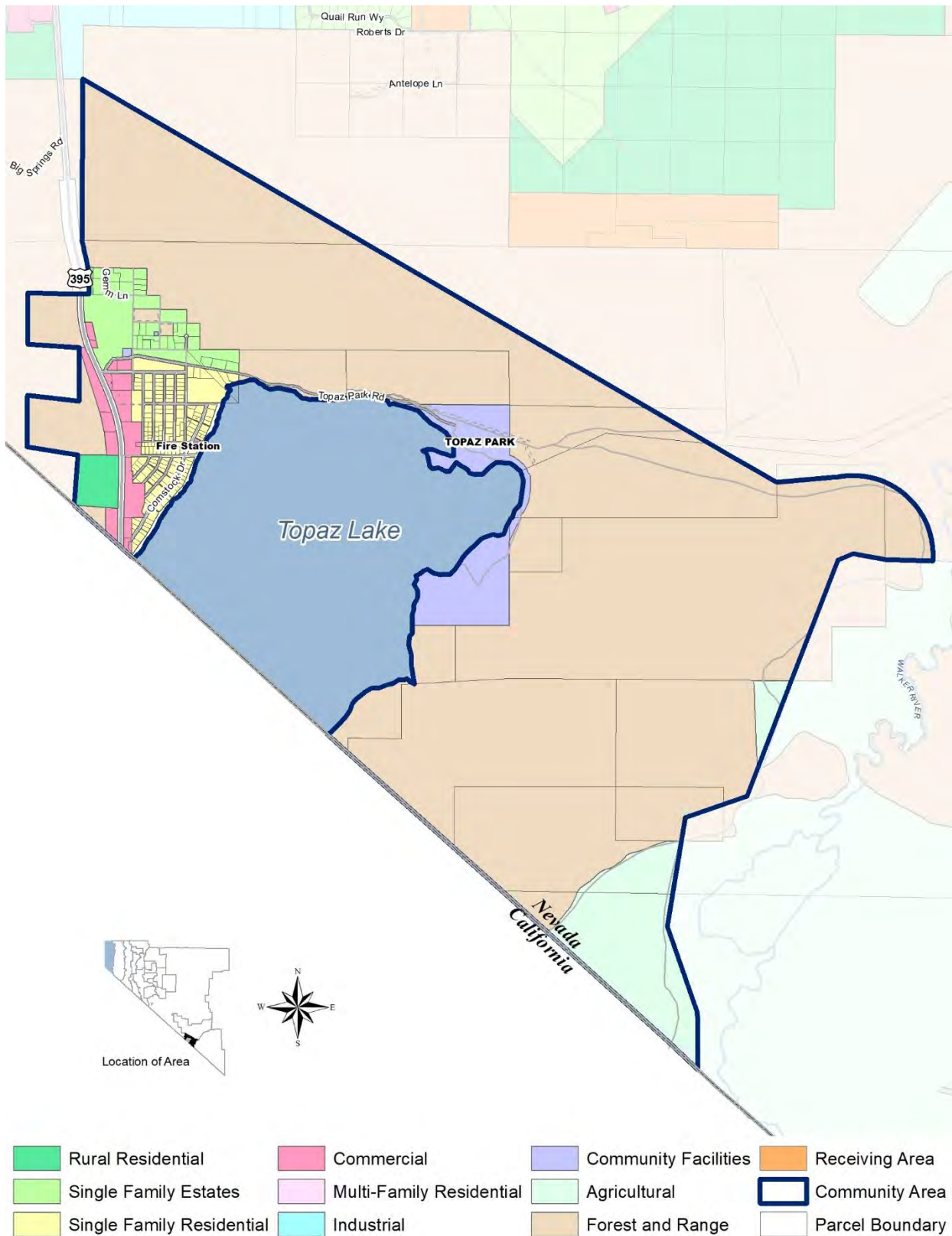
Encourage expansion and consolidation of water service systems.



Policy 7

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

DIAGRAM L15 – TOPAZ LAKE COMMUNITY



TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN

The Topaz Ranch Estates (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 that have an impact on development in the area including the location of a major range-front fault. 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, focused around 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 – 2 acre minimum as a standard for areas designated as single-family estates.



Policy 3

Encourage the Topaz Ranch Estates General Improvement District (GID) to use the same roadway paving standards established for County roads, and should encourage the GID to pave existing collector roadways.



Policy 5

Encourage expansion of the Topaz Ranch Estates municipal water system.



Policy 6

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



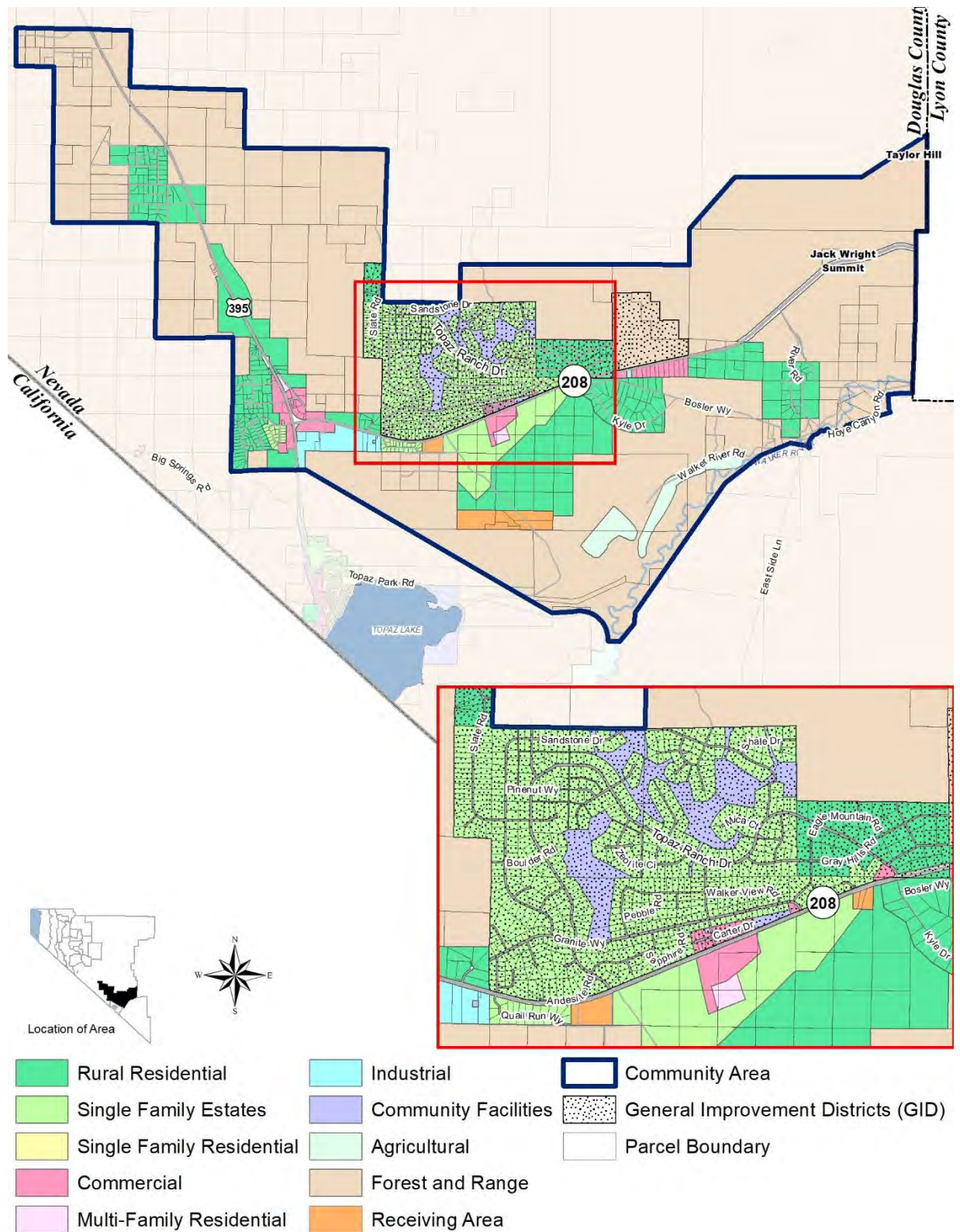
Policy 7

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

Land uses in the Topaz Ranch/Holbrook community includes 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 1 to 10 acres with the majority of the existing homes on lots in the 2 – 2.5-acre range. The irrigated agricultural lands lie in the southeast portion of this community. Range lands are located on the western side of this community. 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 Receiving Area. A specific plan which 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 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, which would contain several housing types, including limited multi-family housing and densities, and be supported with community and commercial facilities. A community of 1,000-2,000 units would be anticipated, which would require water and sewer systems.

DIAGRAM L16 – TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN



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. There are two (2) land use designations in this plan: 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 of public off highway vehicle use and camping with a number of creeks in the area; namely 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%

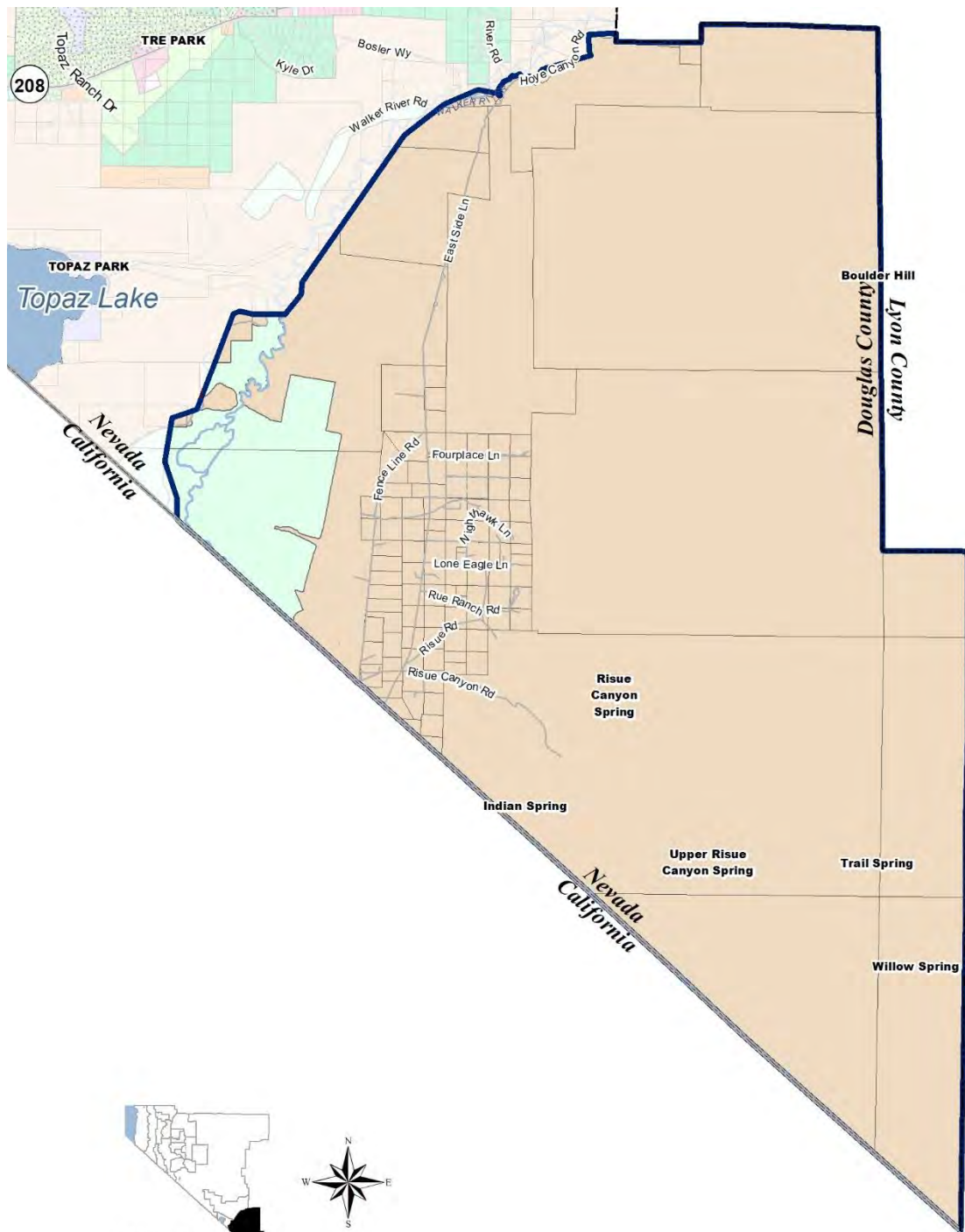
VISION STATEMENT

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



Source: Walker River Irrigation District website 2017 Flood
<https://youtu.be/ISdFbHu3Tb0>

DIAGRAM L17 – 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 John G. Bourke, a prominent figure in the development of the area. It is a fine example of late 19th-century architecture, featuring a wide porch and a gabled roof. The house was used as a residence and a place for entertaining guests.

Entrance

The entrance to the Ranch House is marked by a large, ornate doorway. The porch is supported by tall, slender columns, and the roof is covered in dark shingles. The house is surrounded by a well-kept lawn and a gravel driveway.

HISTORIC PRESERVATION IN DOUGLAS COUNTY

Historic Preservation in Douglas County involves federal, state, 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 to honor the people, buildings, and places associated with the development of Douglas County; while providing educational opportunities for residents and visitors as well as providing opportunities for sustainable development by 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 Washoe People inhabited Douglas County for thousands of years prior to the 1800’s 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 within 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 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). The National Register includes buildings, sites, districts, and structures as shown in Table L2, while Table L3 shows the state register. See Table L2 for the location of the properties.

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 US 395	Minden
1979	Carson Valley Hospital* - 1466 US 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	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 – US 50 near SR 207	Stateline
1989	Arendt Jensen House* - 1243A and 1243B Eddie St.	Gardnerville
1992	Douglas County High School – 1477 Us 395	Gardnerville
1994	Arendt Jensen, Jr. House – 1431 Ezell St.	Gardnerville
2000	Farmers Bank of Carson Valley* – 1596 Esmeralda	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 SHPO *Properties that are also listed on the State Register of Historic Places

Table L3 – Douglas County Properties Listed Only on 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 within Douglas County.



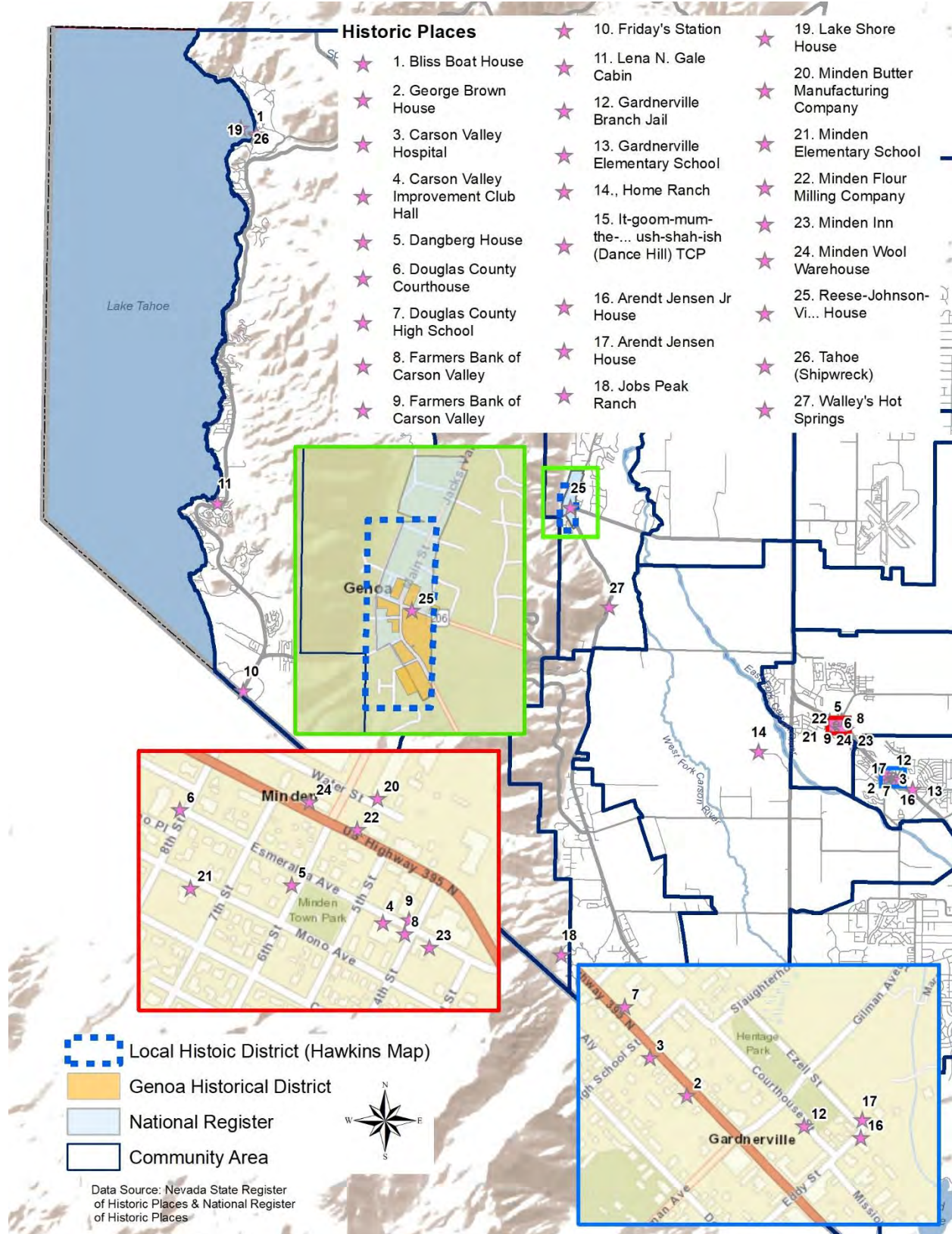
Table L4 – State of Nevada Historic Roadside Markers in Douglas County

Marker Number	Name
12	Nevada's Birth Place
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 L18 – NATIONAL & STATE REGISTER OF HISTORIC PLACES

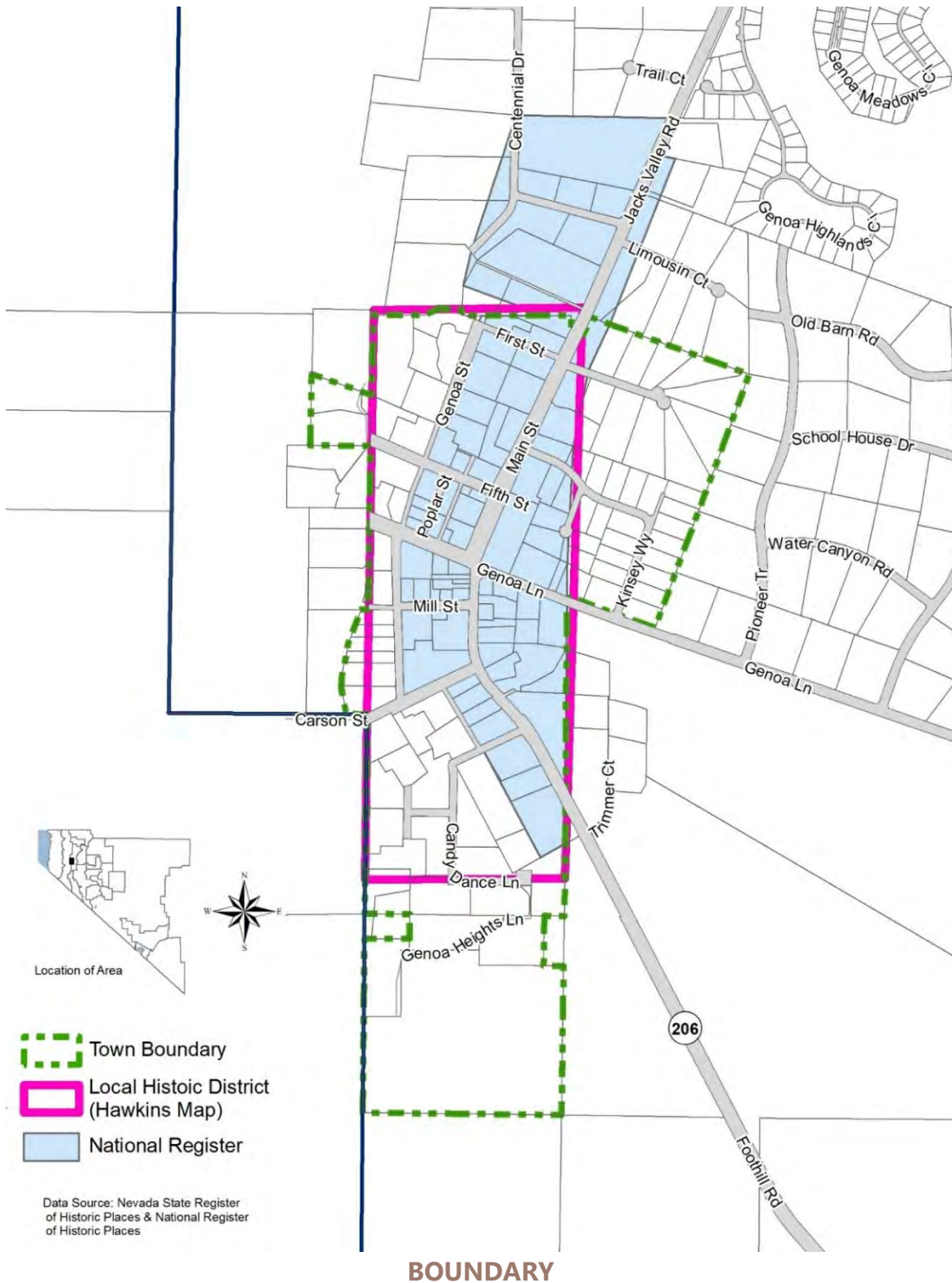


SHPO Multiple Property Document Form

In 2018, the Nevada State Historic Preservation Office (SHPO) adopted a study, called a 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, already listed in 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 in 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 L19 – GENOA HISTORIC DISTRICT, NATIONAL REGISTER & TOWN



LOOKING TO THE FUTURE

Preservation of Historic Resources

At the current time, 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.

- 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 in 2014 to J.T. Basque Bar and Dining Room. Douglas County could further education efforts by providing information about historic resources, such as the National Register listings and the Historic Markers on its web site.
- Apply to be a Certified Local Government – There are currently four certified local governments (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 State Historic Preservation Office (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. Nevada receives approximately \$80,000 per year from the National Park Service and the City of Las Vegas does not usually apply for CLG funds.

Douglas County should apply to be a Certified Local Government through the State Historic Preservation Office making them eligible for CLG funds

- Protecting 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.
- Genoa Historic District – 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 Commission members 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 nonresidential properties. The district does not regulate alterations or 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. In addition, 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 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 within the zoning ordinance set a mechanism to reflect this change into the land use map, with the result that most of them are still shown as a legacy Receiving Area. 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 and 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 chapter discusses conservation tools used to preserve agriculture farmlands as open space, the County's Transfer Development Rights (TDRs) 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 are 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

Development shall be designed to minimize the amount of newly created impervious surfaces. Open spaces and landscaped areas shall be encouraged.



Policy A4

Historic drainage patterns shall be utilized, shall maintain operations for the benefit of the downstream users of the irrigation network, and pre-development conditions maintained except as planned as a part of a regional drainage plan. Run-off rates and volumes shall be maintained.



Policy A5

Industrial uses shall implement best management practices and enact on-going monitoring programs aimed at reducing the potential for impacts to groundwater quality.



Policy A6

Existing non-supplemental groundwater rights should be obtained for quasi-municipal use when such rights become available.



Policy A7

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



Policy A9

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



Policy A10

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



Policy A11

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



Policy A12

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



Policy A13

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



Policy A14

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



Policy A16

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 A17

Work with the United State Forest Service, Bureau of Land Management, and Nevada Department of Wildlife to retain and enhance the viability of wildlife habitats and migration corridors.



Policy A18

Protect against and mitigate for invasive and nonnative species.



Policy A19

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



Policy A20

Define agricultural uses as economic development and promote and encourage agriculture as an important industry and as a desirable land use which serves to define the desired character of the county.



Support and encourage developments which include: commitment to farmland and open space preservation, production of agricultural products, preservation of our agricultural history, and provide economic/social/environmental values to the community.



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



Recognizing the importance of wild horses in Nevada history, Douglas County should encourage the protection of wild horses 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 and receives a number of benefits from some of the finest agricultural lands in Nevada. These benefits include,



but are not limited to, floodplain storage, stormwater conveyances, wildlife habitat, and wildlife migration corridors. For many people, the most obvious advantage of agriculture as a land use is the open space associated with thousands of acres of pasture and crop production; it contributes to the quality of life for residents and defines the rural character of the County.

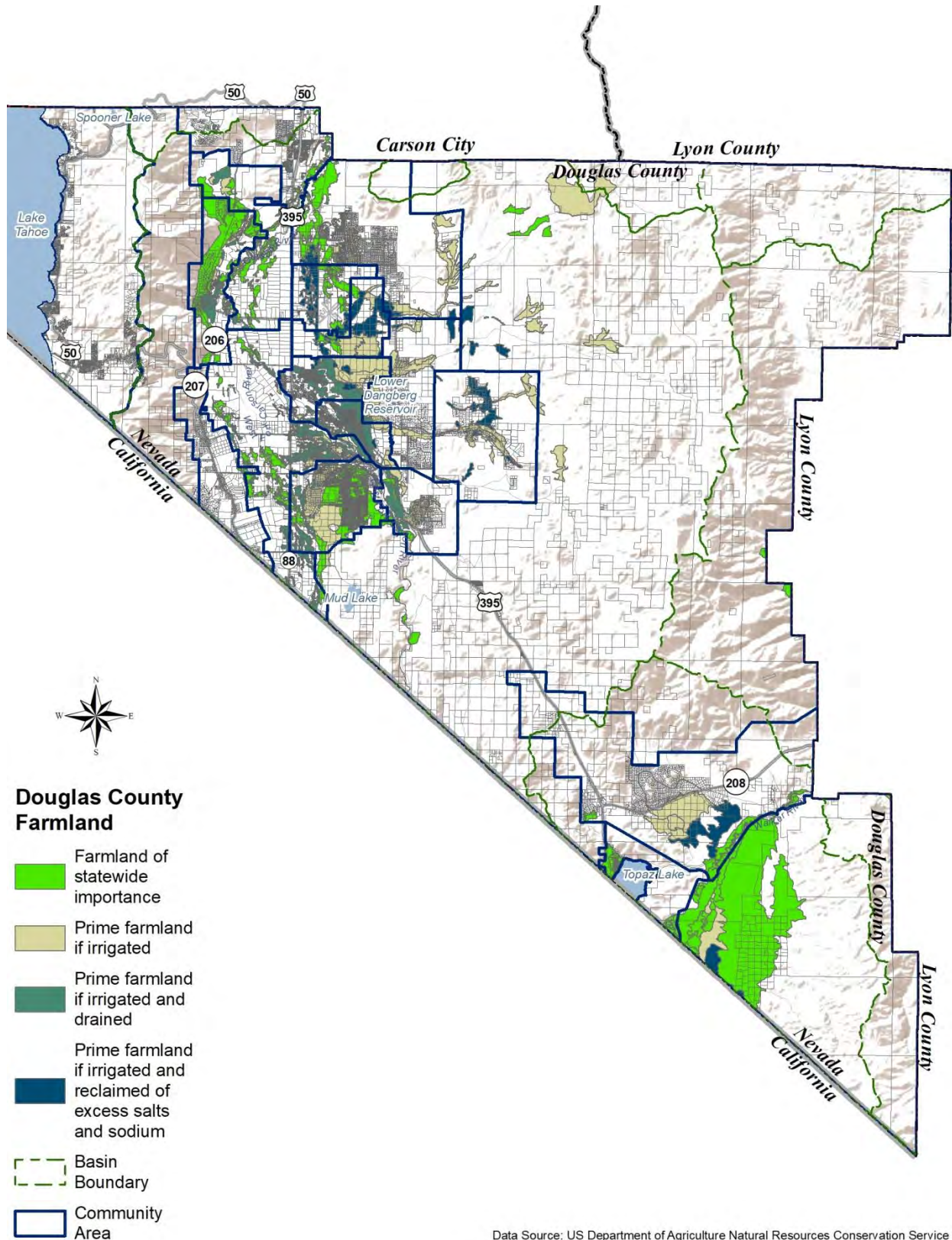
The Agriculture industry (NAICS Sector 11) includes growing crops, raising animals, harvesting timber, and growing and harvesting fish and other animals. Agriculture establishments include, but are not limited to, farms, ranches, dairies, greenhouses, nurseries, orchards, and hatcheries. The two basic 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 entire 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 US Highway 208, in Antelope Valley, and throughout the Carson Valley adjacent to the East and West Forks of the Carson River as well as east of US Highway 395.

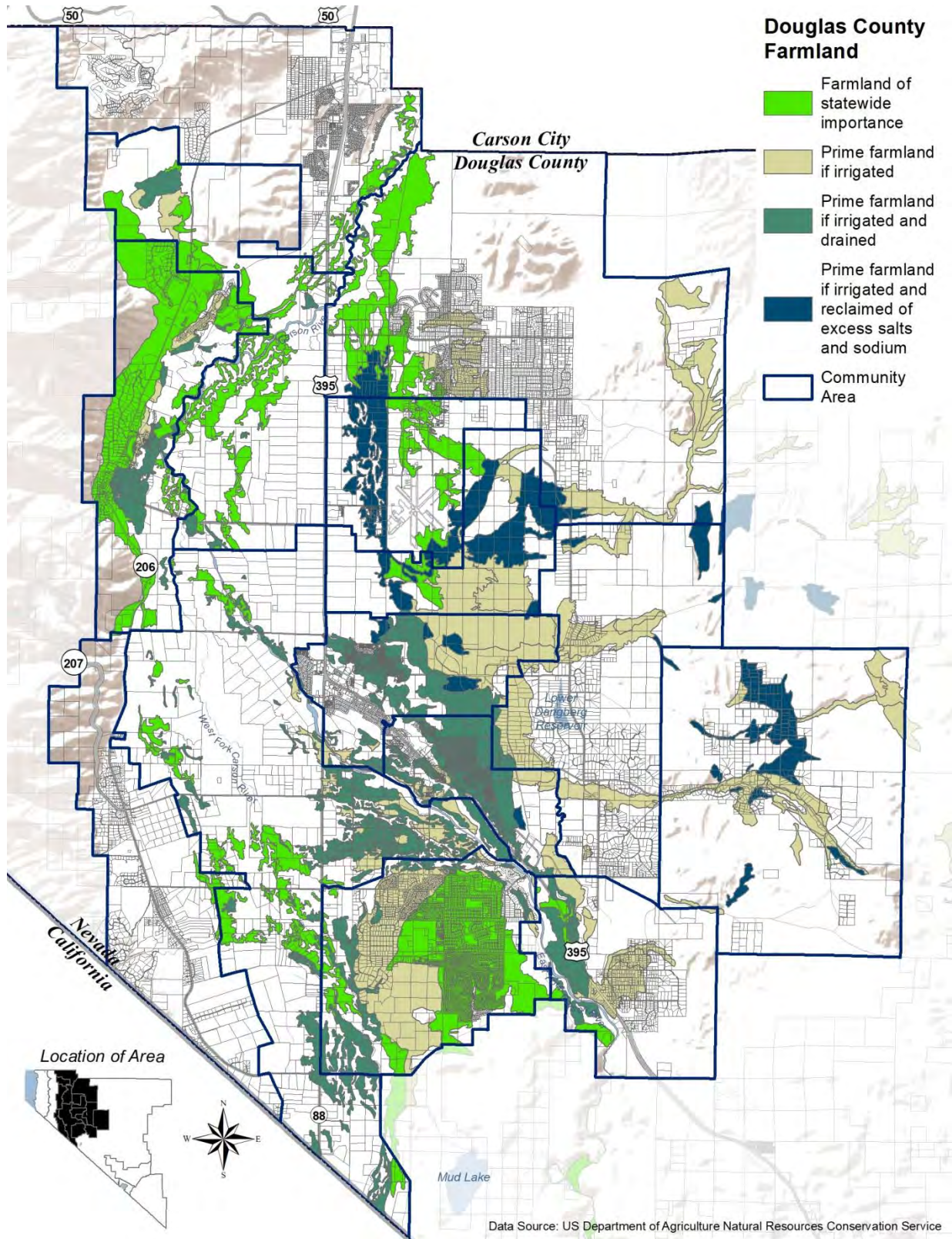


DIAGRAM A1 – PRIME FARMLAND IN DOUGLAS COUNTY



Data Source: US Department of Agriculture Natural Resources Conservation Service

DIAGRAM A2 – PRIME FARMLAND IN CARSON VALLEY



FARMS IN DOUGLAS COUNTY

There are different estimates regarding the number of farms in Douglas County. The 2012 Census of Agriculture (U.S. Department of Agriculture) reports a total of 255 farms in Douglas County. The 2017 Census shows that number dropped to 239 farms in Douglas County. Table A1 includes information on the number of farms and farm acreage for Douglas County and other counties in Northern Nevada. Churchill County has the highest number of farms at 529 although Washoe County contains the most farm land with 485,893 acres. Table A2, contains historical numbers on 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. The number of head in Douglas County (2017 Census of Agriculture) 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; and Churchill County had 60,209 head, or 12.6 percent of the state 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)	Farm Land 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 as to 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 which qualifies for NRS 361 agricultural use value taxation. The Assessor's Office is currently reporting 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 policy is intended to promote a good neighbor policy and to protect agricultural operations from nuisance complaints from adjacent owners of non-agricultural properties, provided 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

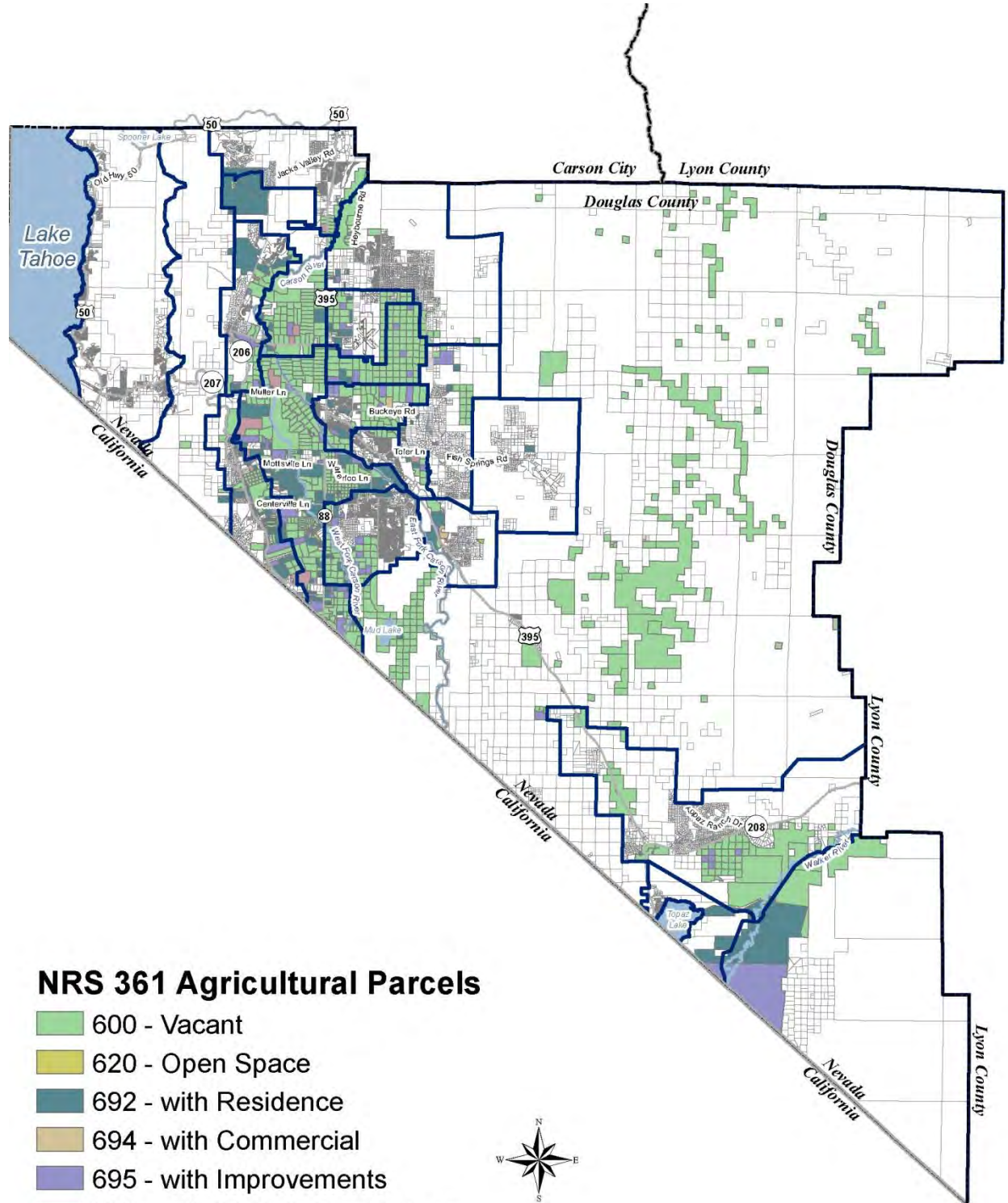
Table A3 provides information on the amount of acreage in each Community Plan that qualifies for NRS 361A. The Property owners who are agricultural producers qualify for an agricultural use assessment based on NRS 361A. This statute, passed in 1975 by the Nevada Legislature, allows agricultural and open 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%
Pine Nut 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



NRS 361 Agricultural Parcels

- 600 - Vacant
- 620 - Open Space
- 692 - with Residence
- 694 - with Commercial
- 695 - with Improvements
- 698 - with Multiple Residences

Community Area

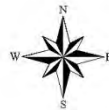


DIAGRAM A4 –NRS 361 AGRICULTURAL PARCELS IN CARSON VALLEY

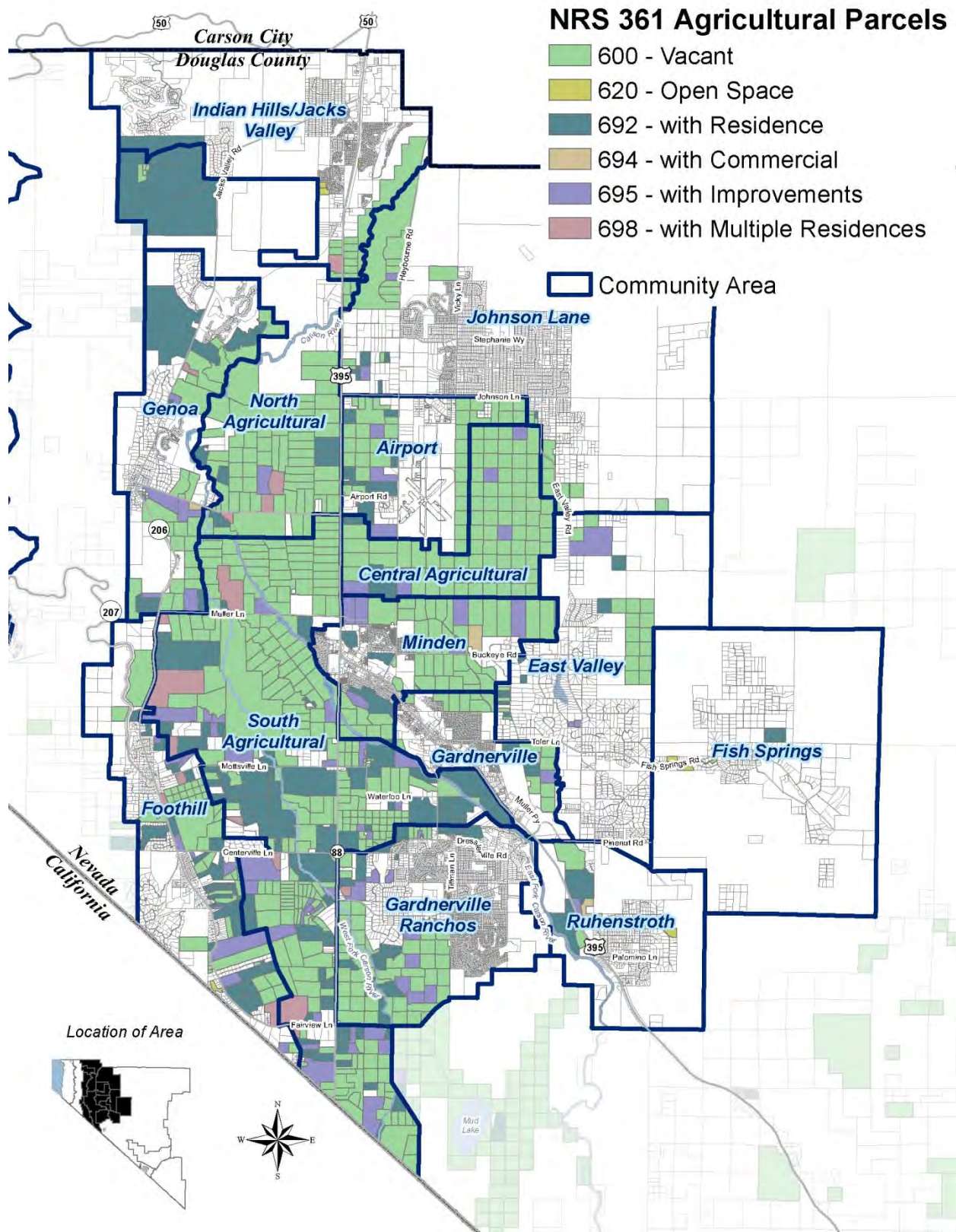
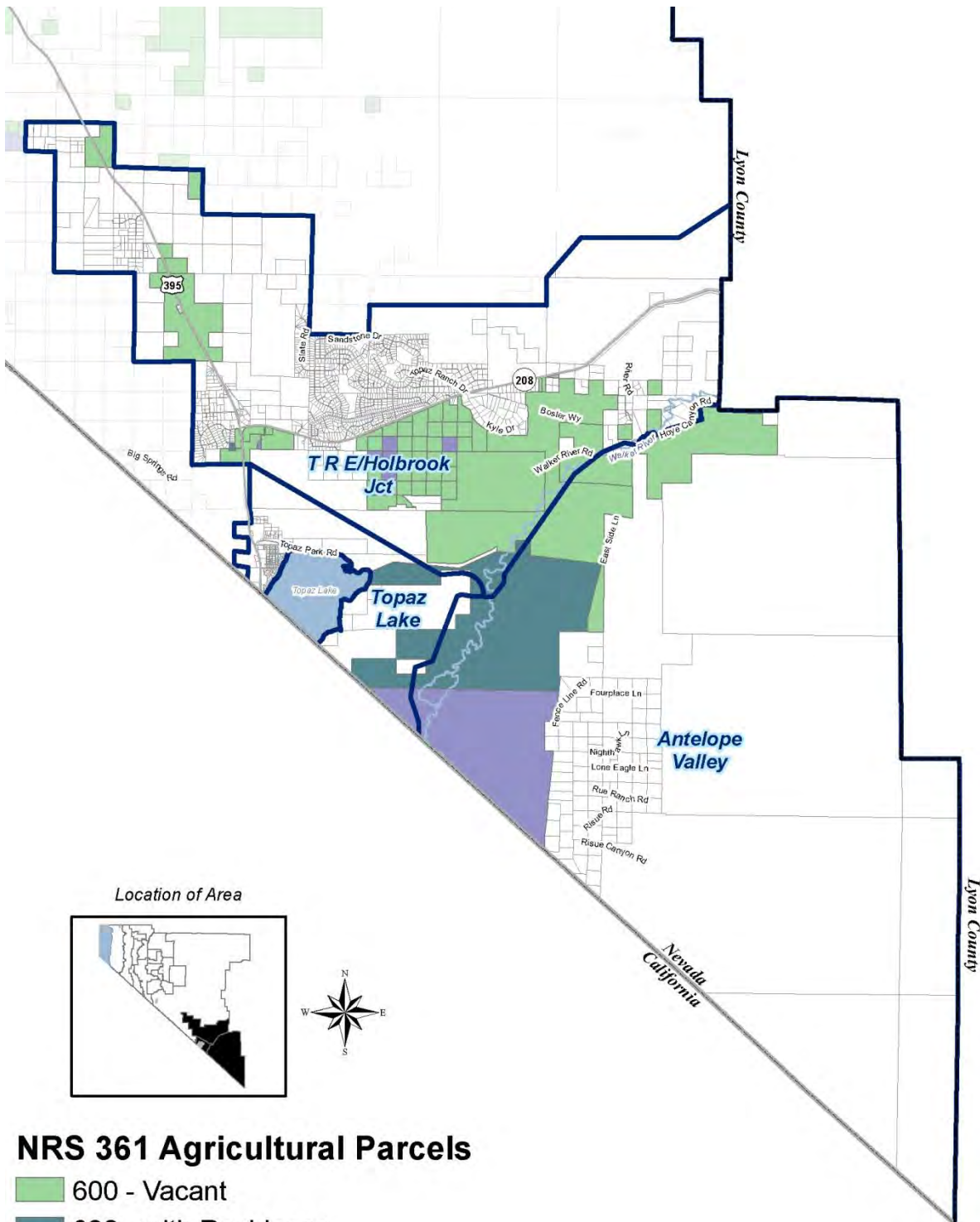


DIAGRAM A5 –NRS 361 AGRICULTURAL PARCELS IN SOUTHERN DOUGLAS COUNTY



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 are intended to 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 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 other monitoring station is operated by the Tahoe Regional Planning Agency (TRPA) for purposes of monitoring TRPA Thresholds and is located on Market Street in the Lake Tahoe Basin. The Aspen Park station is a special purpose-monitoring site (recognized by EPA since 2013, but in existence since 2006) which 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.

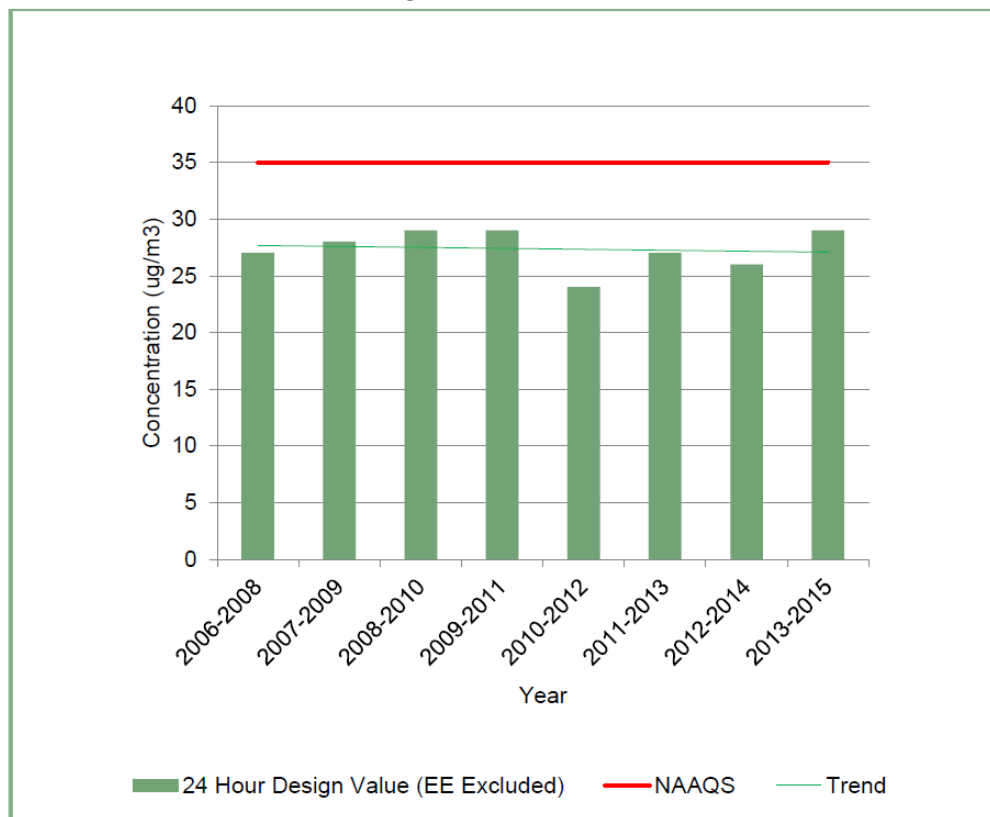
Major Sources of PM 2.5



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 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. 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 (EE) 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 seventeen (17) businesses in the County that operate with NDEP air quality permits, including Starbucks, Harrahs, 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
Harrahs 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 Bureau of Land Management (BLM) and the U.S. Forest Service (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 to preserve the scenic qualities of the County. Private open space lands can be protected from development through one of the following: fee simple purchase, purchase of development rights, or through 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 Transfer Development Rights (TDR) program and the Southern Nevada Public Lands Management Act (SNPLMA). The County's development regulations also help to 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.

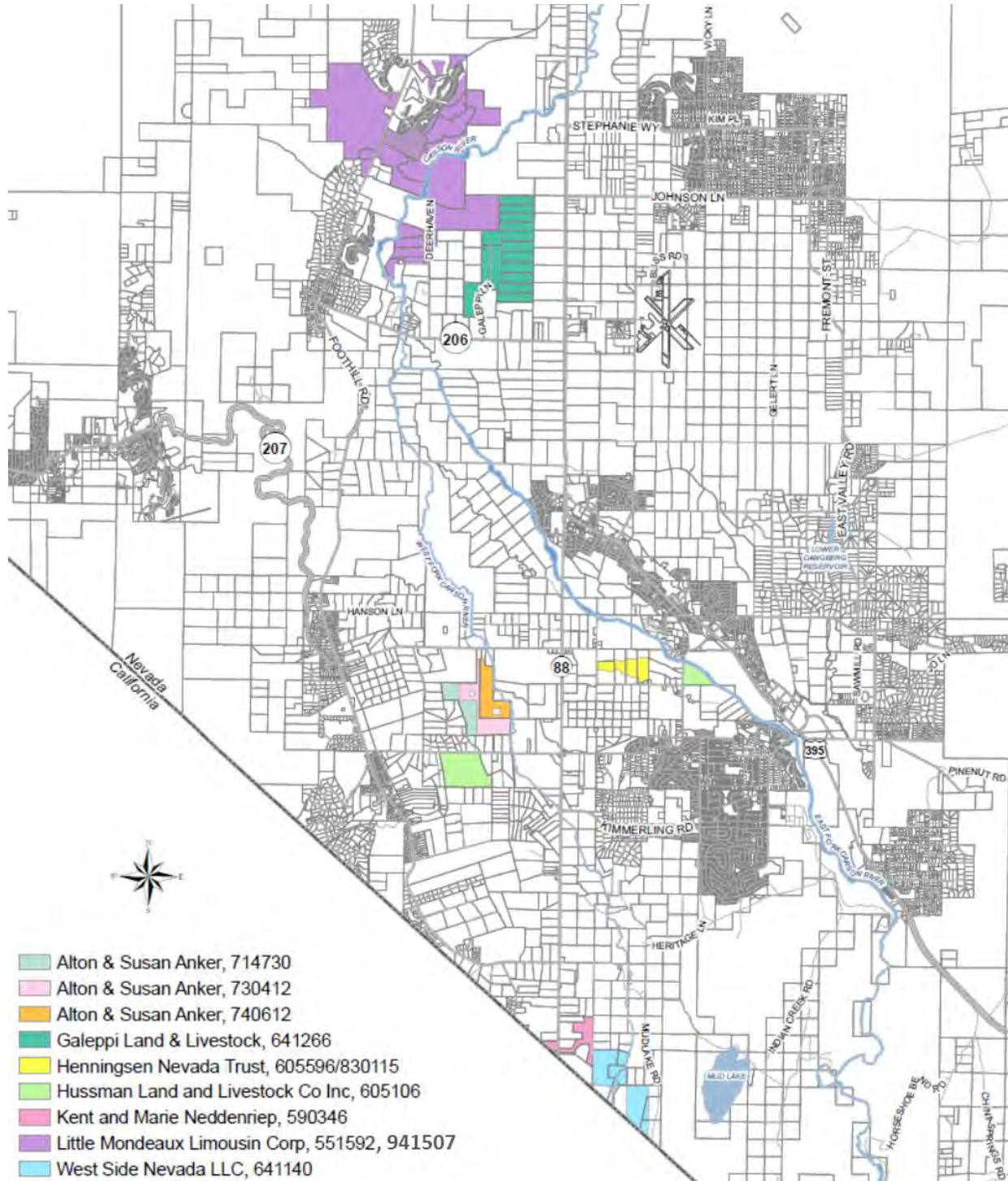
Table A5 – TDR Conservation Easements, 2002-2020

Property Owner	Conservation Easement (Acreage)
Alton and Susan Anker	375.77
Galeppi Land & Livestock	700.02
Henningesen Nevada Trust	100.48
Hussman Land & Livestock	260.74
Kent and Marie Neddenriep	100.42
Little Mondeaux Limousin 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 the Growth Management Element.

DIAGRAM A6 – TDR CONSERVATION EASEMENTS



Southern Nevada Public Lands Management Act

The Southern Nevada Public Lands Management Act (SNPLMA, Public Law 105-263) was passed in 1998 and allows the Bureau of Land Management (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 U.S. Forest Service 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 U.S. Forest Service 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 Search Engine (www.blm.gov/snplma)

Recently, land around the Dangberg Home Ranch was chosen for SNPLMA funding. With this latest project, 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.

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

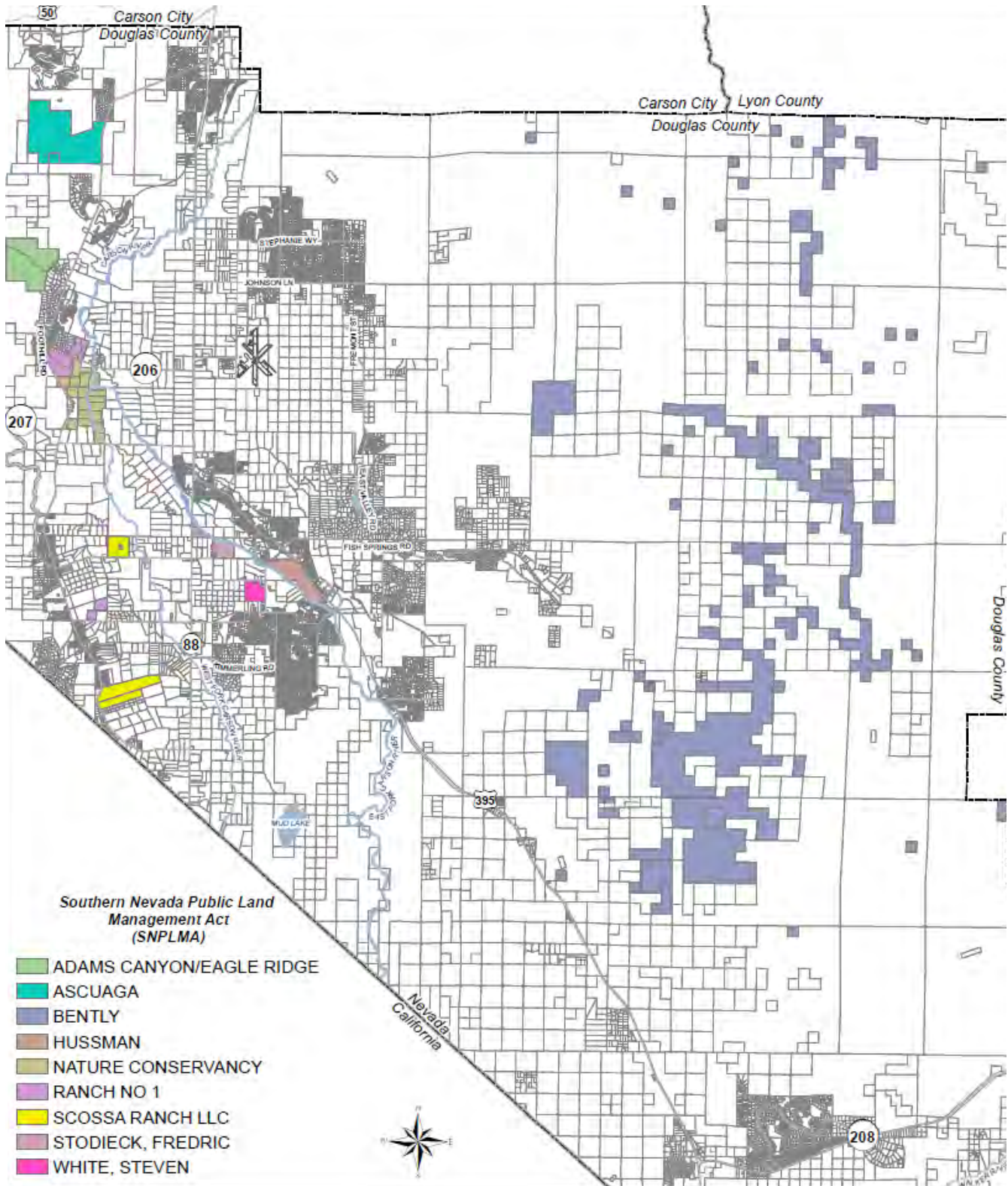
This project is currently in progress and not yet completed. Additionally, the BLM is currently in the process of acquiring approximately 14,522 acres of vacant land located in the Pine Nut Mountain range, to consolidate federal ownership and management for the protection of Bi-State Sage-grouse habitat, cultural resources, riparian areas, and other wildlife habitat, as well as for the 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 flood waters 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 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

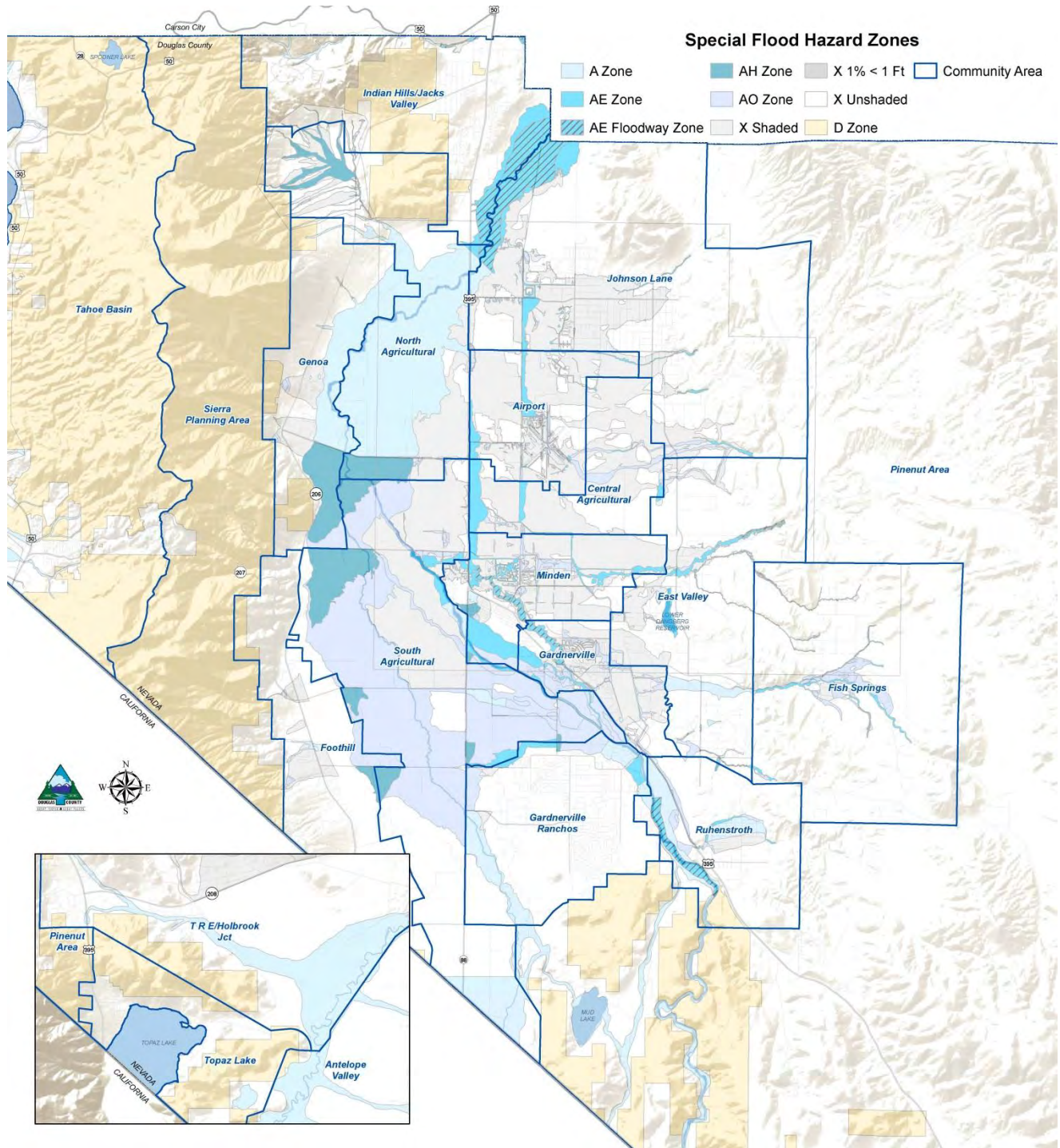
The majority of floodplain areas in Douglas County are located in the Carson Valley. Of the 31,582 acres of floodplain in the County, 24,653 acres, or 78 percent, are found in the Carson Valley.

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



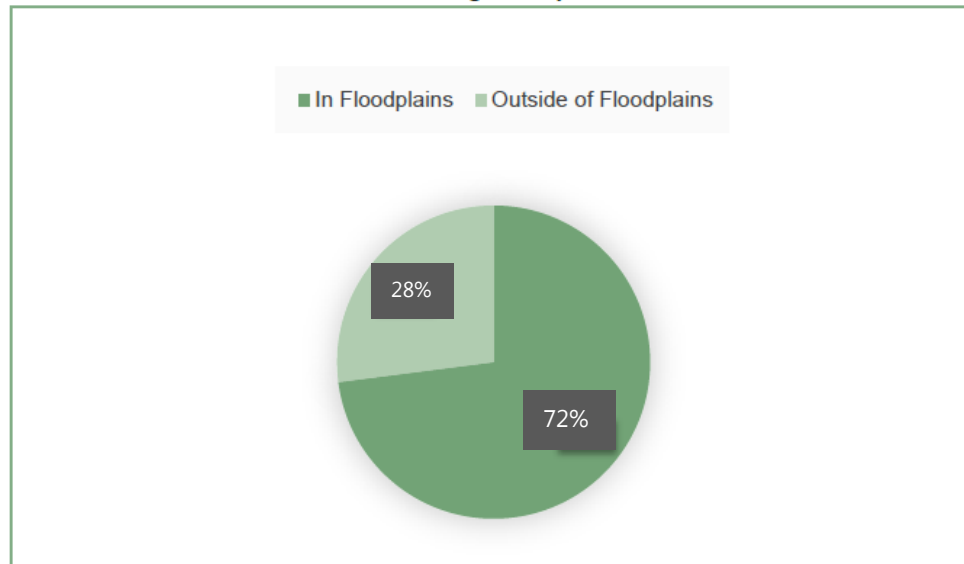
December 2015: Muller Lane

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 Transfer Development Rights (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 the Public Safety Element of the Master Plan.

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 (6) Direct Energy Assistance Loans (DEAL) 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 ten years to encourage the development of different types of renewable energy in the County. Douglas County adopted wind energy regulations in 2007. Douglas County adopted solar regulations in 2016 that limits 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 below.

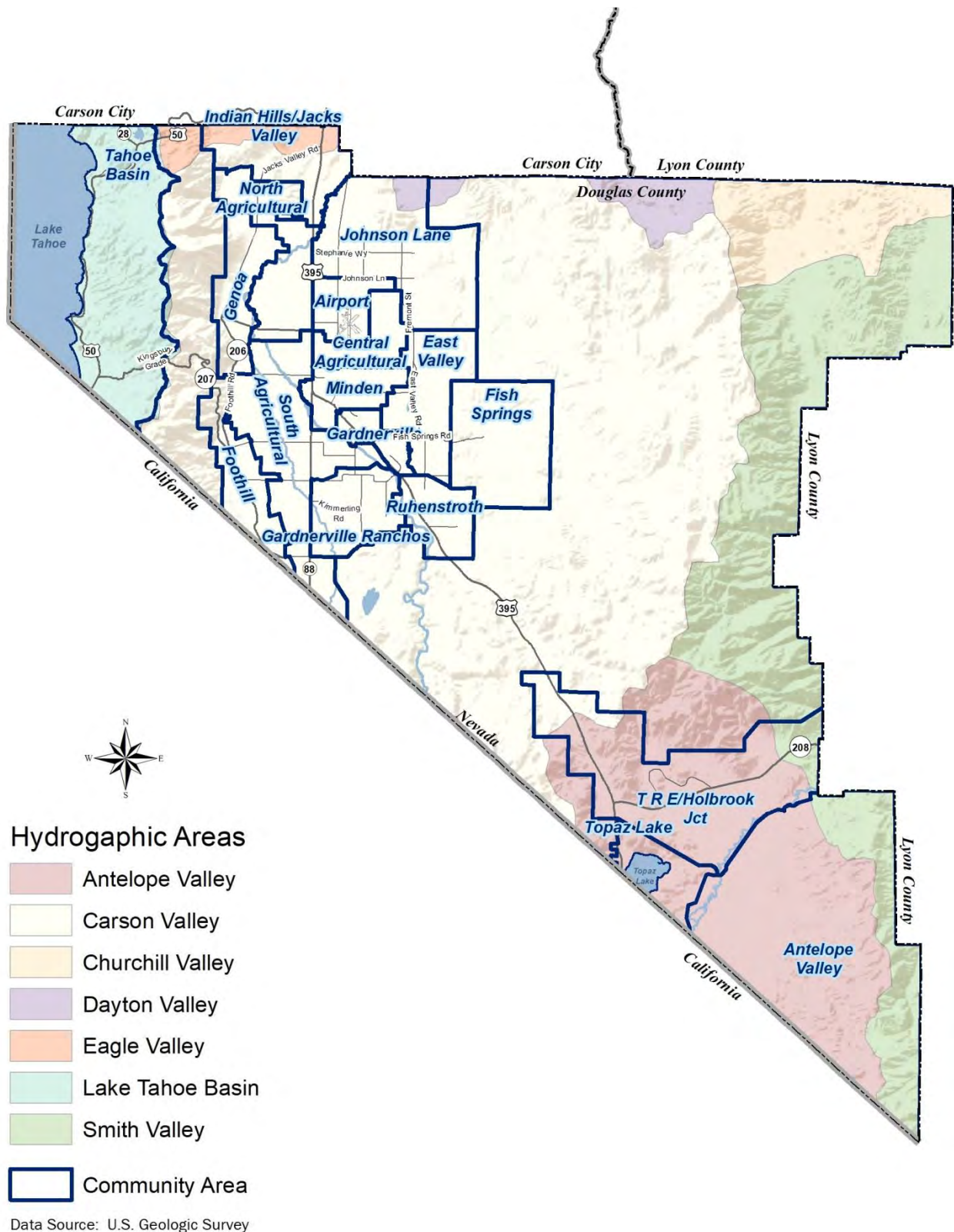
Water Basins in Douglas County

Most significant water basins are: 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.



Photo by Alicia Jensen. Topaz Lake.

DIAGRAM A9 – HYDROGRAPHIC BASINS IN DOUGLAS COUNTY



Water Supply

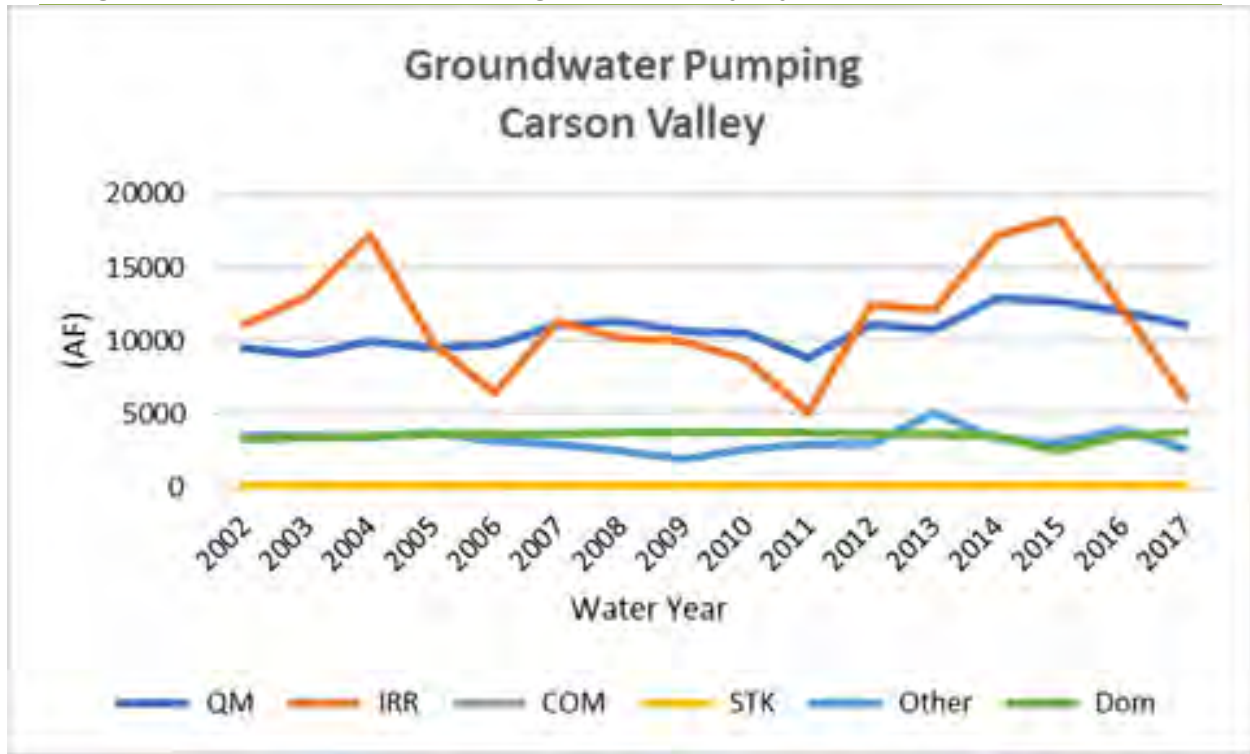
The State of Nevada is responsible for protecting this critical resource by monitoring pumpage in the water basins and approving or denying applications for new water withdrawals, including transbasin diversions. Each groundwater reservoir provides a perennial yield. According to the State, “withdrawals 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 a variety of uses, including farm irrigation, recreation, industrial, and domestic uses. Douglas County residents obtain drinking water either through individual wells or through public water purveyors. Additional information on water purveyors is provided in the Public Facilities and Services Element of the Master Plan.

Property owners are allowed to drill wells for domestic water without obtaining a permit from the State Engineer if they pump less than 2-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 discussion of water resources and services can be found in the Public Facilities, Services, and Recreation Element.

Figure A2 – Groundwater Pumping Carson Valley by Manner of Use (in acre feet)

Water Quality

Clean water regulations for the entire country were established with the 1972 Federal Water Pollution Control Act, also known as the Clean Water Act. The Nevada Division of Environmental Protection (NDEP) is responsible for implementing the Clean Water Act with oversight from the U.S. Environmental Protection Agency (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](#) and it 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 those waters which 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 waterbody, such as irrigation, aquatic life, and recreation. TMDL plans establish pollution budgets for specific pollutants. The Carson River has TMDL plans approved in 2005 for phosphorus and 2007 for total suspended solids and turbidity. The Lake Tahoe TMDL Plan for Nevada was approved by EPA on August 16, 2011.

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

There is no discharge of treated wastewater allowed into Lake Tahoe or the Carson River. 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 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. It is expected that the new MS4 permit will 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. The 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 are known to create potential contaminants for public drinking water, such as gasoline stations. 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 the Public Facilities and Services Element.

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 Incline Village General Improvement District (IVGID). Wetlands are generally defined as areas that are

periodically inundated with water or areas that are 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, help to filter pollutants from stormwater runoff, and provide opportunities for passive recreation.

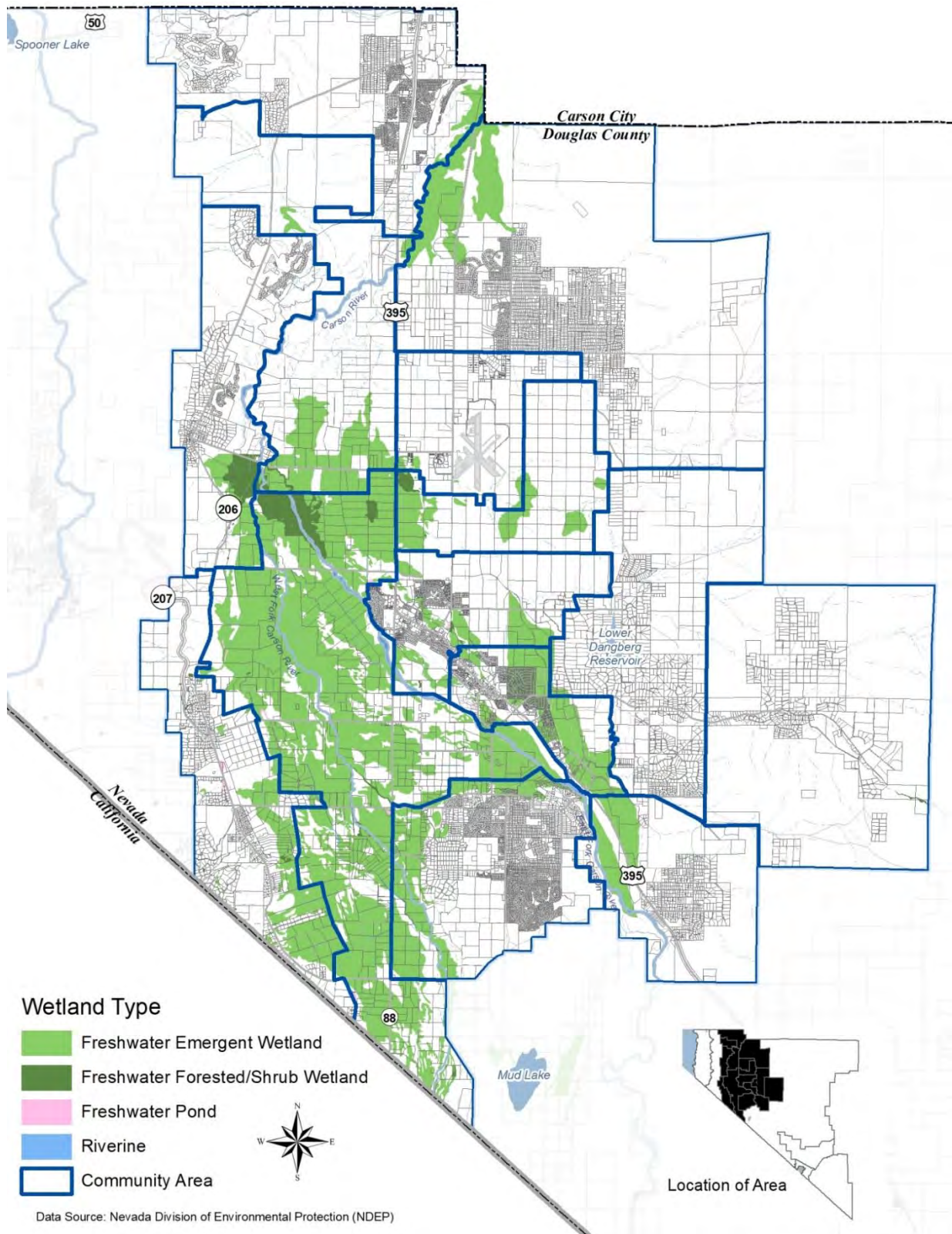


IVGID Wetlands Enhancement Facility

Source: Incline Village General Improvement District

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

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 Ivesia. 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

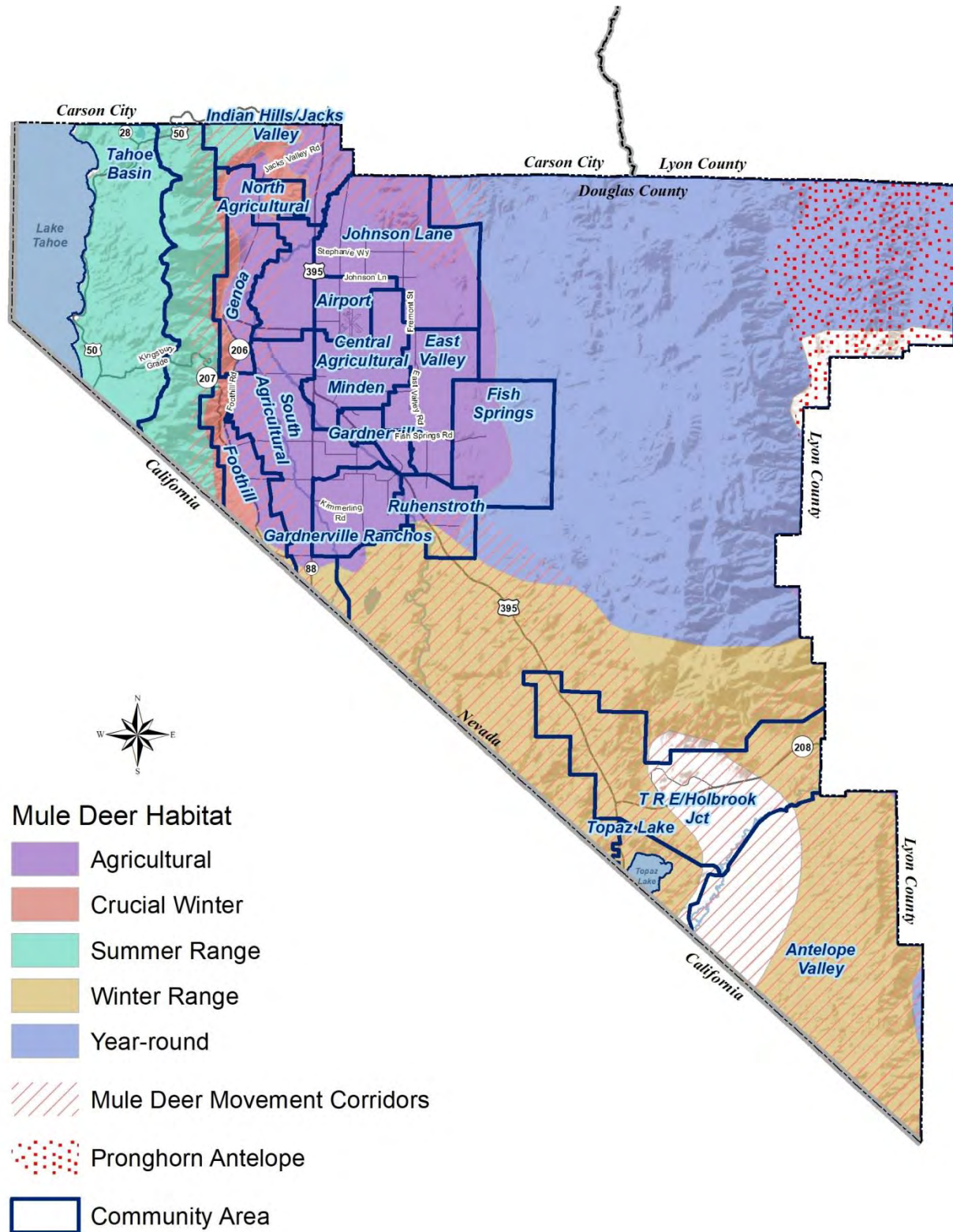
Species	Endangered	Threatened	Threats
Amphibians	Sierra Nevada Yellow-Legged Frog	None	Habitat destruction, disease
Fishes	Cui-ui	Lahontan Cutthroat Trout	Isolation, non-native species
Flowering Plants	None	Webber Ivesia	Urban development, OHVs and recreation use, livestock grazing and trampling, wildfire 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 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. The U.S. Fish and Wildlife Service withdrew the Bi-State Sage-Grouse 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 pinyon and juniper woodland. The U.S. Fish and Wildlife Service operates the Lahontan National Fish Hatchery. The Hatchery is located south of Gardnerville and manages the recovery of the Cui-ui and the Lahontan Cutthroat Trout.

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

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



LOOKING TO THE FUTURE

Conservation of Open Space & Protecting Ag Lands

There are several tools available to protect key agriculture land and the conservation of prime open space. These tools include the Transfer of Development Rights program (further discussed in the Land Use Element), Open Space Acquisition, Regulatory Exemptions and Incentives, and the Livestock Overlay Zoning District. These tools already in place are designed to promote conservation of natural resources and agriculture within Douglas County.

- Transfer Development Rights (TDR) (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 property 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). A strategy that is used in many jurisdictions, and would help jump start the TDR program, is the establishment of a TDR bank. TDR banks allow the local government to purchase TDRs and hold them for sale to developers.

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.
- Open Space Acquisition** – County Residents value the open spaces of Douglas County. To preserve these open 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. To date no program has been created, as there has been no funding mechanism. If the county wants to actively acquire open space, a funding mechanism will need to be identified. In 2000 and 2020, Douglas County voters rejected a quarter-cent sales tax to fund the purchasing 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 in Douglas County Development Code, adopted for the purpose of preserving agricultural lands and open space, requires at least 70% 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 the property owner creates a conservation easement of at least 100 acres of irrigated agricultural land. The agricultural 2-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** in Douglas County Development Code was adopted in 2013 to allow property owners with historic properties to use the properties 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 with a minimum 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. There may be an opportunity to protect the County's agricultural heritage with developments which preserve existing farm structures. More information on this approach is provided in the Historic Preservation Element.

■ **Livestock Overlay Zoning District –**

Many local communities around the country are loosening their residential zoning regulations to allow more agricultural activities, such as allowing 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 on residential parcels less than one acre. Livestock, such as horses and goats, are permitted 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 in size. 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 1 acre by right.

At the current time, 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 & 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

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 in the Tahoe Basin. The majority of the farmers in the Carson Valley rely on the surface water rights 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 legislative session, the Nevada Legislature allowed for emergency drilling of stock water wells for counties under a declaration of drought, or contiguous to counties under a drought declaration. The emergency drilling permit is 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. There are many successful strategies that can be employed to reduce the pollutants that enter surface waters from agricultural properties. Protecting surface and ground water from pollution requires controlling nonpoint sources of pollution.

- **Low-impact development (LID) or best management practices (BMPs)** can help filter storm water 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 Low Impact Development practices; however, the County does not require LID practices at the current time. The Carson Water Subconservancy District (CWSD) prepared a new report in 2015 on Low Impact Development ([Low Impact Development in the Carson River Watershed](#)). The main goal of LID, according to this report, 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 install LID practices as part of the TRPA Best Management Practices Program. Both Reno and Washoe County 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 best management practices (BMPs)** are to 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 and will help restore aquatic life in the river and 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 Natural Resources Conservation Service (NRCS) watershed initiatives. The Carson River Watershed Stewardship Plan was prepared by the Carson Water Subconservancy District (CWSD) in 2007 and updated in 2017. Completion of an updated Stewardship Plan will allow CWSD jurisdictions to have 100% 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**, as 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 to 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 to 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 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 for lands outside of the Lake Tahoe Basin, similar to [Truckee Meadows Tomorrow](#). TRPA has adopted environment threshold carrying capacities for air, water, soil and other environmental features.

Environmental Review

Nevada does not require any 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 either 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.





3. ECONOMIC DEVELOPMENT



PURPOSE

The purpose of the Economic Development Element is to establish goals, policies and actions 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 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 the creation of our unique identity and the development of vibrant centers for our economic prosperity.



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



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

POLICIES



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



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



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



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



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



Downtowns and neighborhood centers should 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.



Seek infrastructure improvements that support economic development efforts.



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



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



Support environmental remediation to improve the built environment.



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.



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



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



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.



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



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



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



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, Douglas County has transitioned from an agrarian based community to a more diverse economy that includes manufacturing, professional services, tourism and retail as well as agri-business. Similarly, the County's employment base has also expanded and diversified over time. The first wave of expansion after World War II was the result of 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. In order 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 2020

Overall, economic conditions are improving in the County, with the County's unemployment rate continuing to trend lower. The September 2020 rate was 6.8%, as compared with 3.4% in September of 2019 which saw the lowest unemployment in Douglas County history. This 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%. This compares to national and state unemployment rates for September of 7.9% and 12.6% respectively.

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

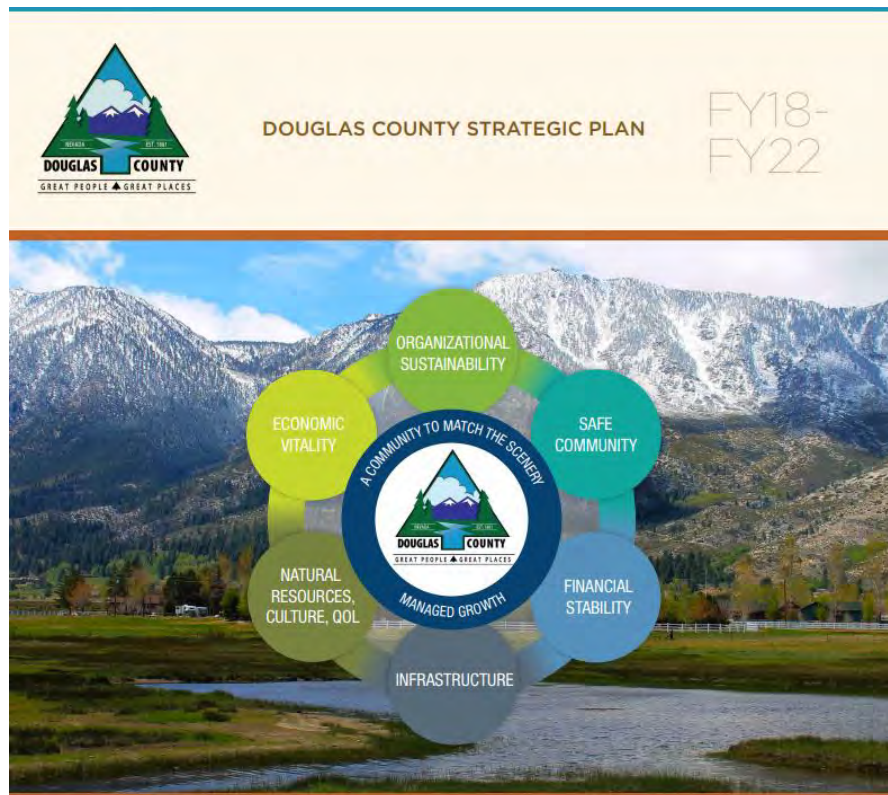
assessed property value within the County increased 7% from the prior year, for a total value of \$3,355,755,404.

Additional housing and employment data can be found in the executive summary of the Master Plan, and additional Douglas County financial information may be found 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 presents information on all of the County's asset, liabilities and deferred inflows and outflows of resources. It is a snapshot of accounts balances as of June 30, 2020. 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 improving quality of Life. These efforts are focused 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 from the five guiding principles, the County's economic development efforts are centered on three focus areas: Develop Distinctive Downtowns, Capitalize on Outdoor Recreation and Lifestyle, and Develop a Thriving Climate for Business & 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 located within the county, hiking and biking trails (both improved and unimproved trails) surrounding and connecting communities, and access to federal lands, residents and visitors have a variety of recreation opportunities too numerous to count at every turn. 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 US News and World Report “Best Small Towns to Visit in USA” (2019).

Develop a Thriving Climate for Business & 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. Over time a number of studies have been completed to identify new employment opportunities and target centers in Douglas County including but not limited to the Douglas County Valley Vision Plan (2013), and the Minden Gardnerville Plan for Prosperity (2018). A 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, towns of Minden and Gardnerville and industrial areas of Airport, Minden, Gardnerville, and Gardnerville Ranchos are the employment centers for the County and the towns. The commercial core of 395 through Minden and Gardnerville needs to be a defined area for expansion of the commercial use. The North Valley areas have many vacant units and are in need of re purposing. Economic strengths also include a successful downtown (Southlake Town Square) and a primarily affluent population with livability advantages that attract an educated population and talent. 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 currently only two parcels in the entire County that are zoned GI and 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 the 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 supporting commercial and retail uses. This zoning district is more commonly found in the Gardnerville, Gardnerville Ranchos, and Minden Community Plans. The Community Development Department initiated amendments to the light industrial and service industrial zoning districts in 2013 for the purpose of allowing more recreational and

retail/personal services in both zoning districts and eliminating the screening requirements for accessory solar energy systems. These amendments were approved by the Board of Commissioners on April 4, 2013.

Table E2- Commercial and Industrial Future Land Use by Community Area

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%

Diagrams E1-E4 display the location of commercial and industrial zoning in Douglas County and whether the acreage is developed or vacant. Diagram E1 includes the location of business parks in the Airport and East Valley Community Plans. Diagram E2 displays the location of service industrial parcels in Gardnerville and Minden while Diagram E3 displays 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**

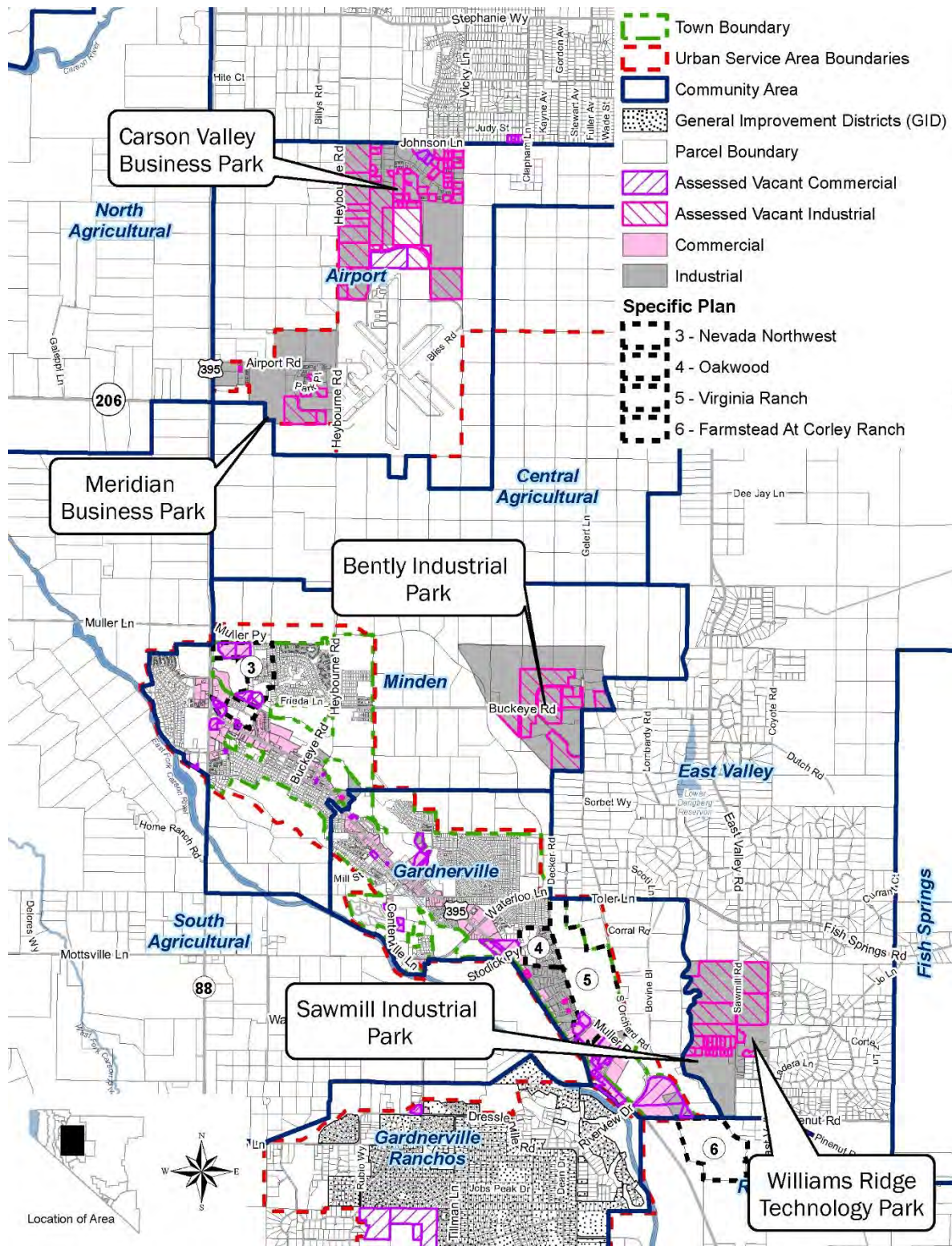




DIAGRAM E3 – INDUSTRIAL & COMMERCIAL ZONING IN GARDNERVILLE RANCHOS COMMUNITY PLAN

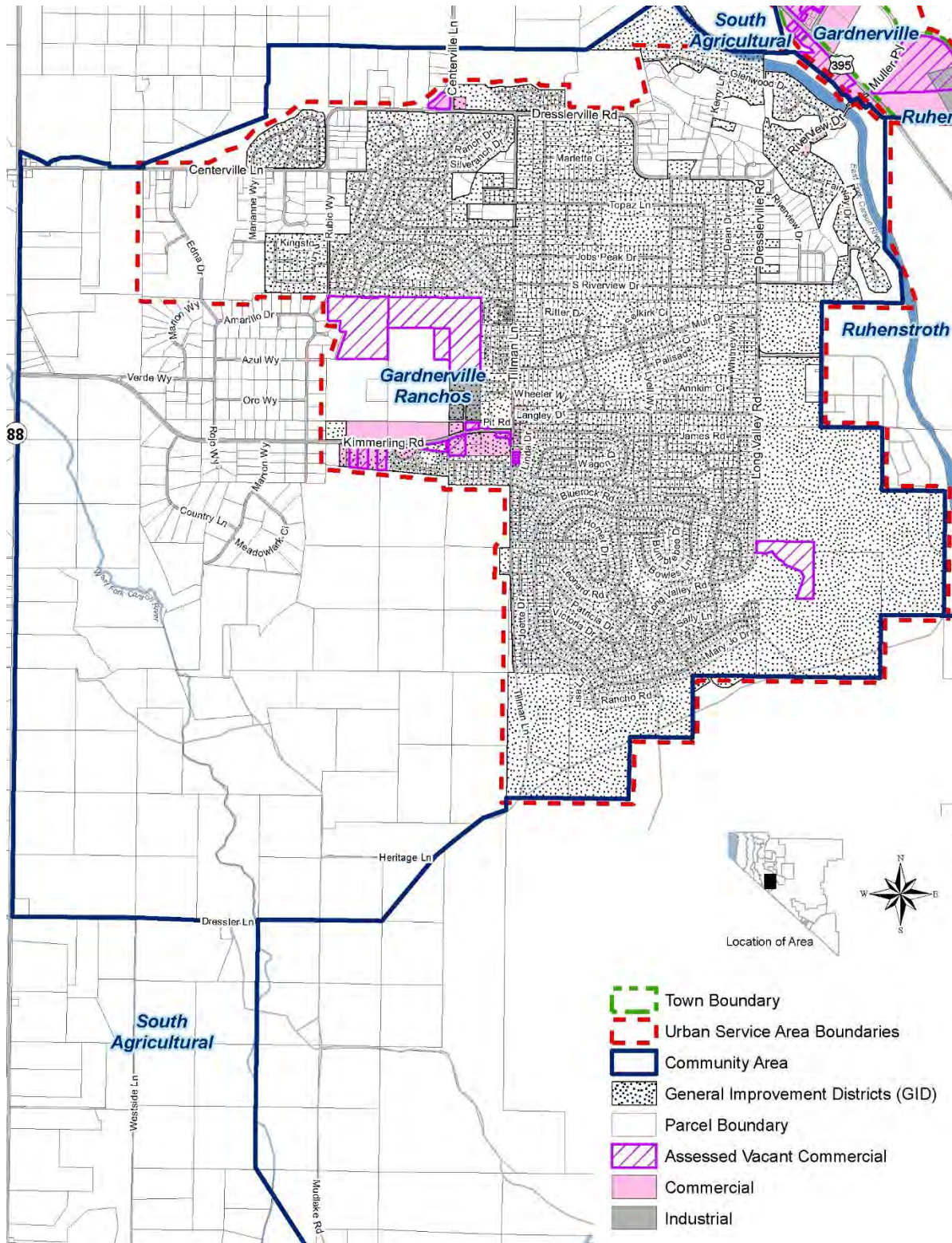
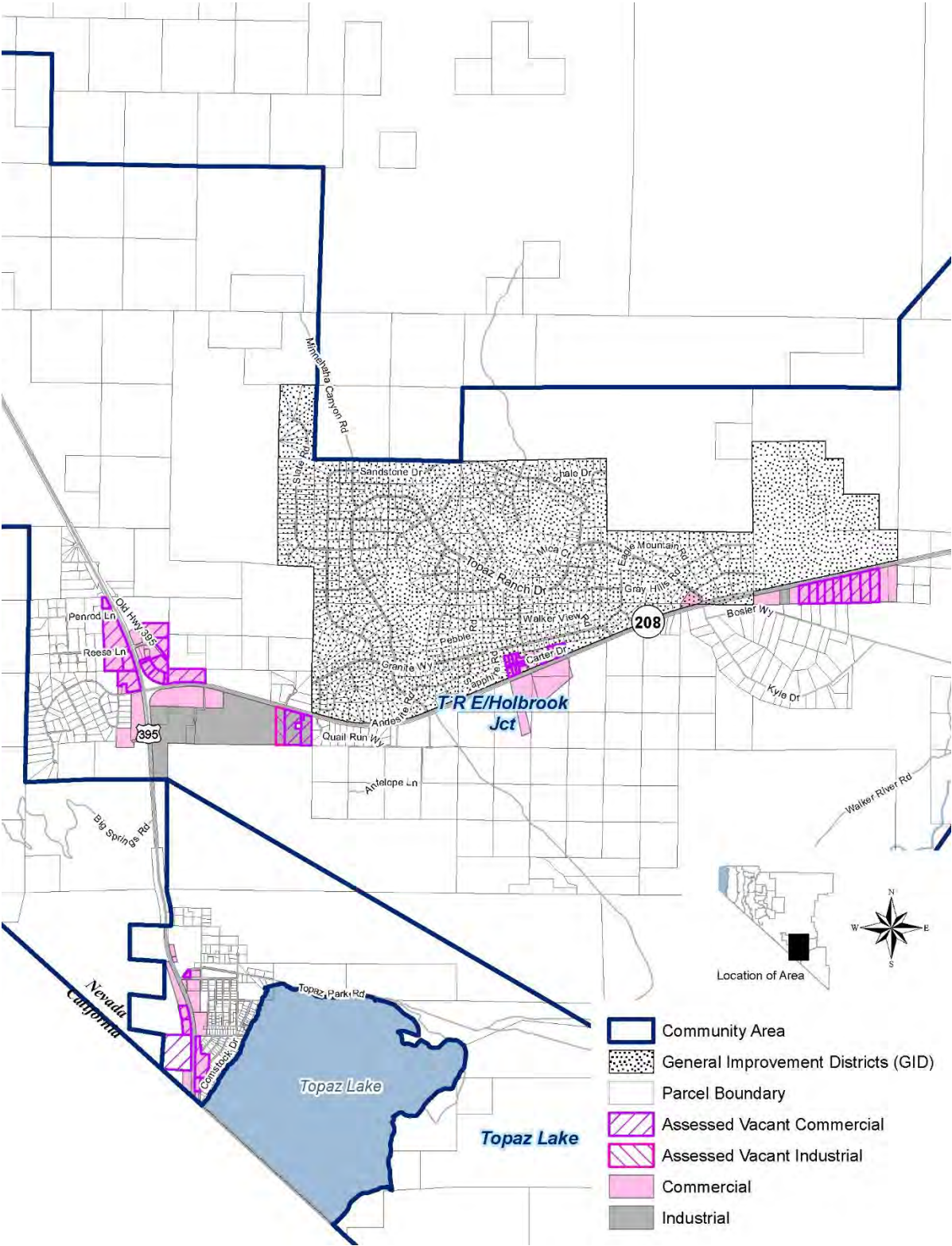


DIAGRAM E4 – INDUSTRIAL & COMMERCIAL ZONING IN TOPAZ RANCH ESTATES/HOLBROOK JUNCTION COMMUNITY PLAN



LOOKING TO THE FUTURE

CRITICAL ISSUES CONFERENCE SURVEY

At the 2019 Critical Issues Conference, the conference 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 they were planning to invest in new capital or equipment.

Employers were also asked if they planned to add new positions during the next three years. Again, the majority of respondents, or 69 percent, stated they did plan to add new positions.

Survey respondents were also asked about employee housing. When asked “regarding housing stock to serve your employees, how does the situation compare to this time last year?” 69 percent of the survey respondents 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 the Housing Element.



TARGET INDUSTRY OPPORTUNITIES

In 2012, the Western Nevada Development District assisted the County with funding to analyze opportunities around the Advanced Manufacturing Sector. More than just a look at manufacturing, the study determined the County has a robust Technology Sector (advanced manufacturing, clean technology and research and development companies). It represented 141 technology companies with 1800 plus employees and accounted for \$111 million in annual wages. The average annual wage for the technology sector was \$61,666 in the 1st quarter of 2012 compared to the average County wage of \$39,297 in that 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 manufacturing sector has increased by 13.8% in the number of companies. While job numbers remain relatively flat over that period, outreach visits to

local companies indicate 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, represent 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 from a reliance on tourism and leisure jobs. Two strategies are in place to make this happen.

First is working with the Northern Nevada Development Authority and property owners to certify sites under the Nevada Certified Site Program. A Certified Site designation serves as a pre-qualification, indicating that a property's title is clear, that it possesses sufficient utilities and other infrastructure for commercial use and that it is properly zoned and has adequate transportation access for such uses; among other criteria. 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, consisting 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.



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

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 wave 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. This combined with investments at the

Minden-Tahoe Airport to expand utilities to the east side, allowing for more private hangar and business space, makes the area ripe for attraction of additional aviation businesses, aircraft, and jobs in the aeronautical fields.



ATTRACTING REMOTE, CONTRACT AND INDEPENDENT WORKERS

The recently completed Tahoe Prosperity Center Economic Forecasting and Resilience Analysis (Aug. 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 both on a county and regional level could be explored.



EDUCATION AND WORKFORCE

Nevada is expected to have a shortage of 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 at the 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 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. 15 students participated in the pilot project. Future opportunities include post-pandemic expansion and a sustainable funding source for the program.



DOWNTOWN REVITALIZATION & 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 area and Carson Valley area should evolve over the next 20-30 years.

Progress was made in the implementation of the South Shore Vision Plan. The South Shore Vision Plan influenced the update of the Tahoe Regional Planning Agency Regional Plan Amendment that was completed 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 Tahoe Regional Planning Agency (TRPA) Governing Board approved the Tahoe Transportation District's (TTD) 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 1 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's 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, increase room revenues and increase 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, 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 evaluating development code amendments to reduce or waive off-street parking requirements in the downtowns.

PUBLIC ART & CULTURE



"Transforming the Copeland building into a Regional Arts Center reactivates the area and creates the opportunity for an arts district along US 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 in Douglas County and continue to grow 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 within the community. Including arts and culture as central to revitalization plans may help to 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 on-going 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 Receiving Area and contains 178.45 acres. The gravel operation may end in the near future and presents a significant development opportunity for Douglas County. It may be appropriate for the County to begin discussions with the owner and community residents before the next Master Plan update about potential redevelopment options for area.

REGIONAL ECONOMIC DEVELOPMENT EFFORTS

Three specific economic development projects have been identified in the Western Nevada Development District's new five-year Comprehensive Economic Development Strategy for 2020 through 2025 including the 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. The Western Nevada Development District, as part of its new five-year Comprehensive Economic Development Strategy, has also identified 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 as additional region-wide economic development goals for the next five years.

Members of the Western Nevada Development District include Carson City, Churchill County, Douglas County, Mineral County, Pershing County, Storey County, and Washoe County and the individual municipalities of Fallon, Fernley, Lovelock, Reno, and Sparks. Continued emphasis of 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 for the improvement of the region's overall transportation network and infrastructure while also encouraging additional job and business creation, attraction, retention, and expansion efforts in existing population and employment centers as a way of improving regional income and the incomes of individuals who already live throughout Douglas County.





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 a review of the County's Building Permit Allocation, Growth Management Ordinance, Transfer Development Rights program and an overview of the housing sales and trends.

GOALS

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



Goal 1

To 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 homeownership opportunities available.



Offer lifestyle options and environments that people of all ages and families can enjoy.



Increase housing opportunities for households with special needs, including persons with physical and mental disabilities, the elderly, and at-risk children.

POLICIES



Continue to implement the Building Permit Allocation and Growth Management Ordinance and report to the Planning Commission and the Board of County Commissioners on the effectiveness and possible improvements on an annual basis.



Use the Land Use Element of this Master Plan to designate areas for distinct urban and rural communities. The designated development areas of these communities shall not include land which cannot be served with adequate services and facilities during the time frame of the Master Plan.



Limit extension of urban levels of public services to rural areas, except in cases where said extension is necessary for the provision of public health and safety.



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.



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.



New receiving areas will be prohibited 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 USDA first time homebuyer programs in Douglas County.



Policy G10

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



Policy G11

To 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 and shall 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

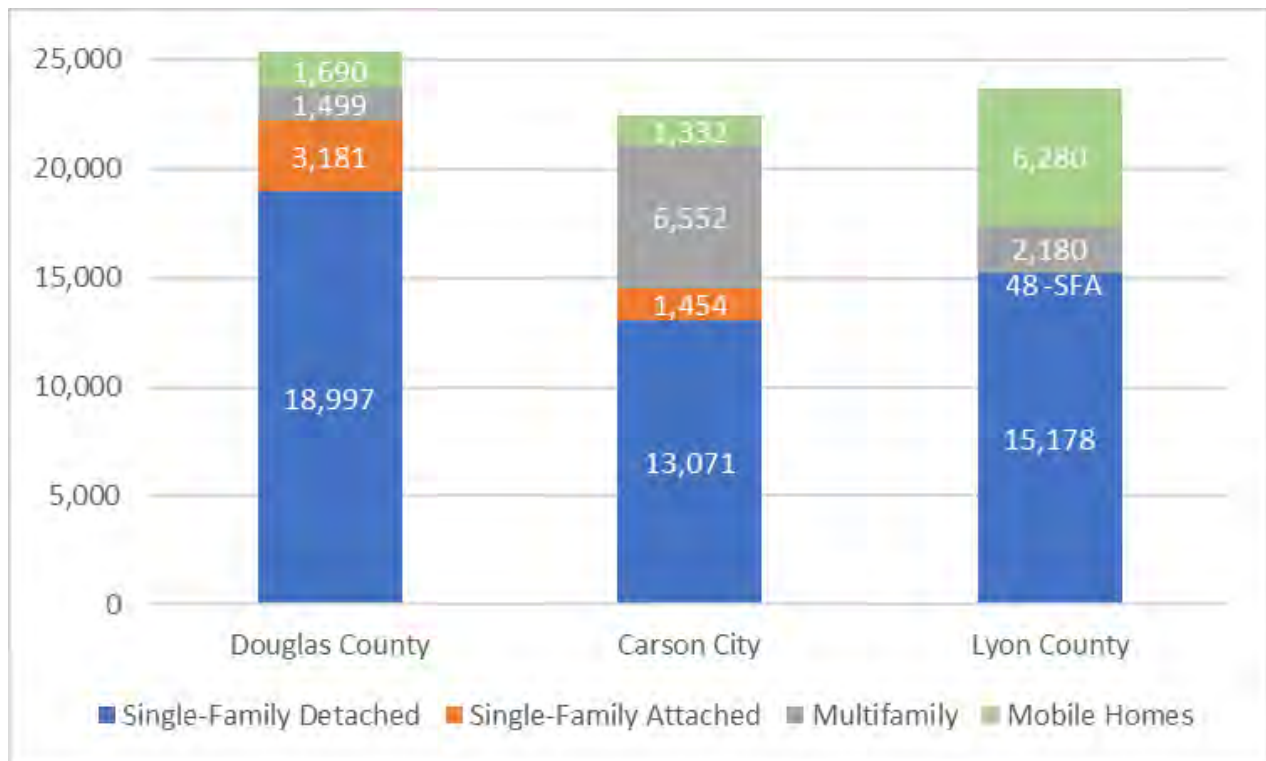
HOUSING INVENTORY AND MARKET SEGMENTS

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% of the current housing stock are single-family detached units, 12% are single-family attached, and 6% are multi-family residential units with another 7% manufactured type housing.

Figure G1 Housing Types

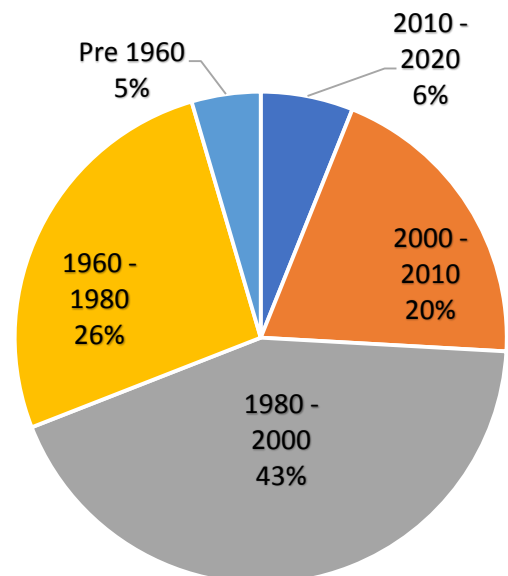
Single Family Detached	Single Family Attached	Multifamily
A free standing dwelling with one or more stories that shares no common wall with any other dwelling. Includes site-built, modular, and manufactured homes.	Two or more attached dwellings with one or more stories that share a common wall on at 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. The housing market in the Tahoe Township 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 ten years. The housing markets

Figure G3, Housing Inventory (2020)**AGING INVENTORY**

Most of Douglas County's housing units, upwards of 74%, were built prior to 2000. Only 6% of the housing units were built in the last ten years.

in both East Fork and Tahoe Townships have been experiencing rebounds after the Great Recession, with various areas experiencing sales price increases - 28% (Carson Valley) and 38% (Lake Tahoe).

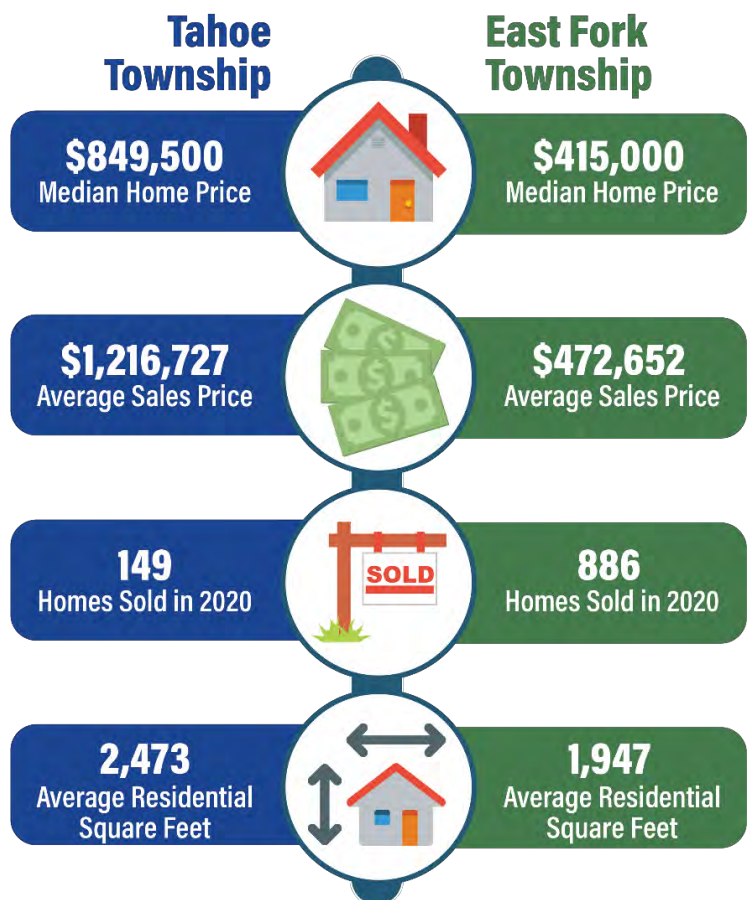
Home buying increase has also been fueled by historically low interest rates. Improved housing markets will result in improved employment numbers for construction and related industries, but will also affect housing affordability, especially if development of lower price-point products and/or rental 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% versus 47% and 42%, respectively.

WORKFORCE AND AFFORDABLE HOUSING

At the current time, services related to the housing in Douglas County are provided by the Douglas County Social Services (DCSS) and the 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 non-profit 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 which supports the development of affordable housing, rehabilitation of existing structures, and various affordable housing initiatives. One of the first steps outlined in the MOU is

Figure G4 – House Sales Information



Source: Douglas County Assessor, 2020

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 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 that is entitled to participating in assistance programs gets help. Under those conditions, a growing number are living one misstep or emergency away from eviction across the nation. Evictions are a dramatic experience for every person involved, especially the tenants that lose their home and that in most cases will have lifelong consequences for them and their families.

Employee Housing

The lack of affordable housing in Douglas County, 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 as a repeated comment from a variety of employers. Higher house pricing and a lack of housing type diversification leads employees to choose to live outside of Douglas County and commute to work. Similarly, broad amounts of 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 towards 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 and combination could minimize certain infrastructure costs, negative externalities, and ultimately increase the overall quality of life in the County. Developers should be encouraged to recognize this need in the planning process. The County should consider incentives during the permit process to encourage new developments to include these types of units within 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. At the current time, deed restricted affordable housing is exempted 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 accessory dwelling unit (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% where either: a) up to 20% of the units are affordable to households earning between 51 and 80% of the County's median income; or b) at least 15% of the units are affordable to households earning up to 50.9% of the median income. In 2001, the County amended this ordinance to also allow a density bonus if at least 20% of the units are owner-occupied single-family residences for households with incomes up to 110% 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. The 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% 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).

Applying the 110% 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 Douglas County Community Development 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 else 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 Indian Hills General Improvement District.



Photo: Arbor Gardens



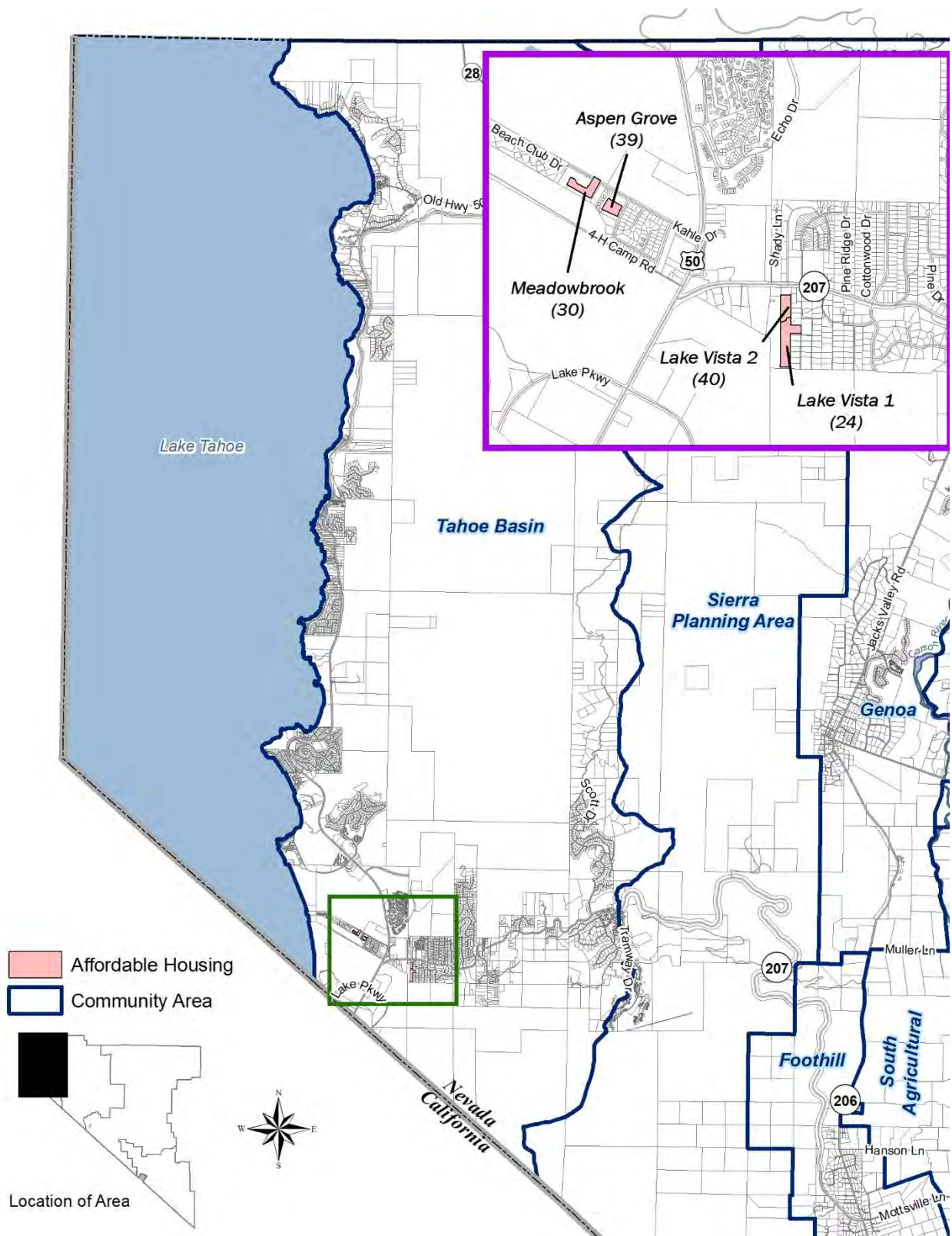
Photo: Summit Crest Apartments

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



Photo: Aspen Grove

DIAGRAM G2 – AFFORDABLE HOUSING IN TAHOE TOWNSHIP



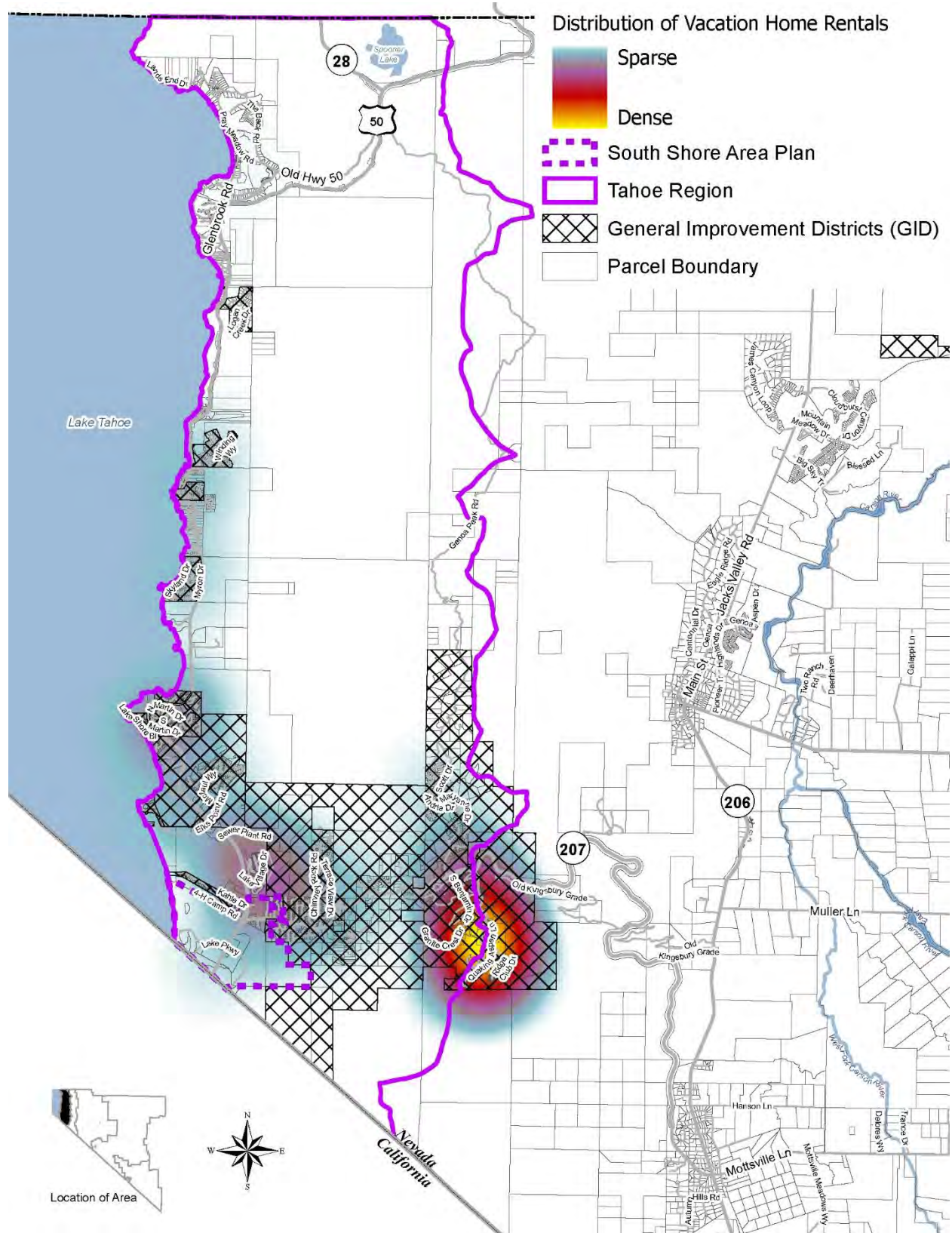
VACATION HOME RENTALS

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), review of VHR web sites indicates there are several VHR's operating in the Carson Valley. Douglas County is now considering amendments to the existing ordinance which may include stricter regulations as well as expansion of the VHR ordinance to the East Fork Township.

In 2019 the Board of County Commissioners (BOCC) gave direction to create a VHR Taskforce to make recommendations to the County Manager to consider in making recommendations to the BOCC. In 2020, a Task Force composed of 15 diverse stakeholders, 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 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](#).



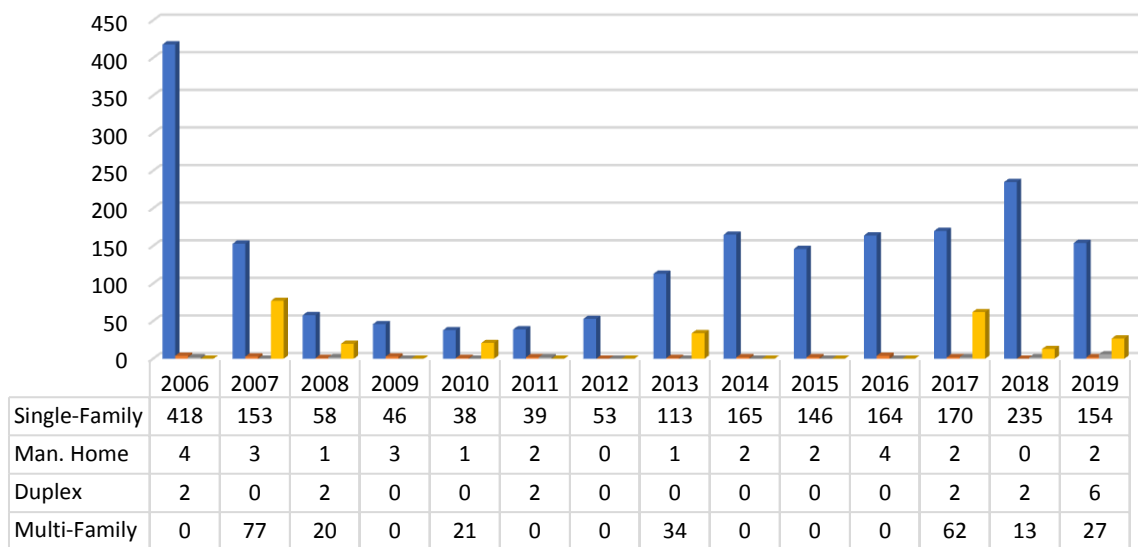
DIAGRAM G3 – VACATION HOME RENTALS IN THE TAHOE TOWNSHIP



GROWTH MANAGEMENT

Building permit activity in Douglas County has increased since the Great Recession period. In 2006, permits for new single-family homes totaled 418 but dropped to 38 permits in 2011. Permits for new single-family homes exceeded 100 in all calendar years following in 2013. Although the single-family market is improving, the multi-family market has remained lackluster. Since 2006, only 6 duplex units and 152 units of multi-family housing have been constructed in Douglas County. The 21 units of multi-family in 2010 was for the Mahogany Court affordable apartments in Minden while the 34 units in 2013 included 30 units for the Parkway Vista Affordable Senior development in Gardnerville. Building permits for new manufactured single-family homes have been consistently less than 4 per year.

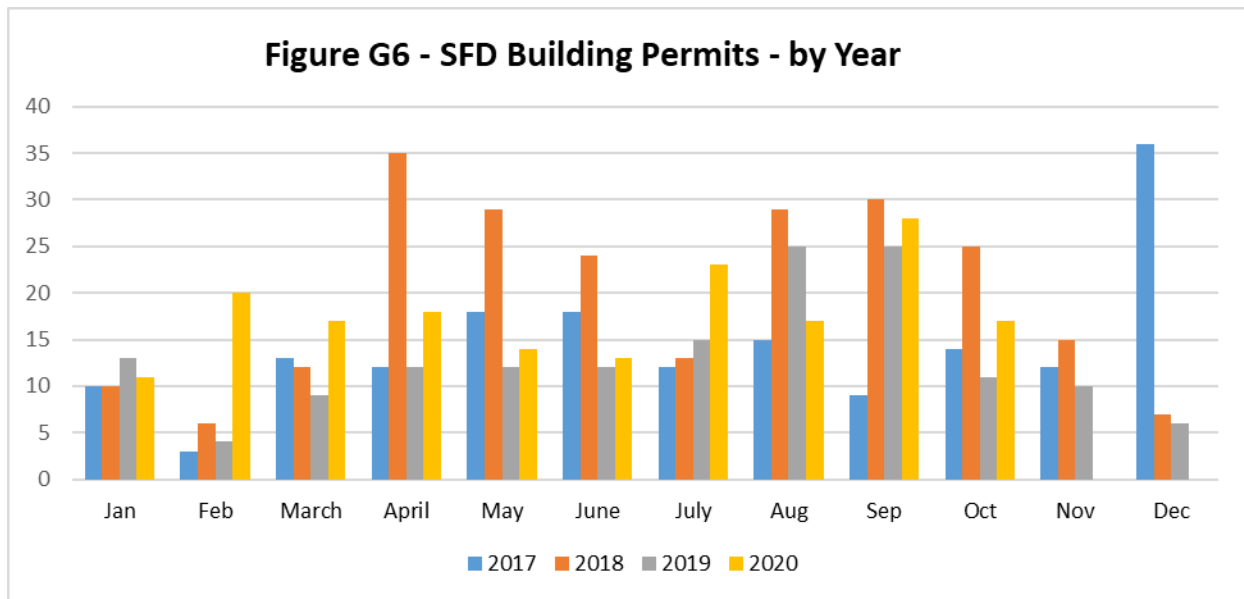
Figure G5 - Residential Building Permits by Structure Type



Source: Douglas County Building Department 2020

■ Multi-Family

Building permits issued for single family dwellings (SFD) within Douglas County are shown in Figure G6 to compare calendar years of 2016 through 2020, as issued through October 2020. Calendar year 2018 had a total of 235 SFD permits issued as compared to 2019's total of 154 SFD permits issued, a 35% reduction of permits issued. Calendar Year 2020 is on track to exceed 2019 permit totals at 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 different tools such as annual building permit caps and/or urban growth boundaries. Growth management seeks to balance the need for investment and reinvestment that is vital to the healthy renewal of revenue sources then 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 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 which seeks to remain mostly rural in nature 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, which 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% 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% compound growth rate. As it turns out, the annual growth rate for the entire County averaged 1.39 % between 2000 and 2010 and has averaged 0.3 % per year since 2010. The total number of annual residential allocations was set at 317 permits in 2007, for example, and gradually increases up 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 allocations are available for project (6,612) and individual (15,427) allocations.

All new residential buildings, including accessory dwelling units, 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' part of a "vested" project or a development agreement with the County;
- 2) Residential units for a parcel created under the Ranch Heritage or Agriculture-2-acre parcels;
- 3) Residential units for an accessory dwelling unit on an A-19 parcel; or
- 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 Allocation*** (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 1344 allocation and the project pool contains 592 allocations.

Transfer of Development Rights Program (TDRs) and Receiving Areas

The TDRs 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 the Agriculture and Conservation Element.

Table G2 – Available Residential Allocations, by Category Status of TDR Program

Certified TDRs	TDRs Transferred	TDRs 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 future land use designation means that these areas are set up to receive TDRs 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 or [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%
T R E/Holbrook Jct	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
	Eagle Ridge PD (PD 04-001) (55 lots + 2 Open Sp)	2004	57	57	23	34
Genoa	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 (aproved 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	Hathoot/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
	Chapel Crest (DP 19-0260) EXP 9-11-23	2019	8		0	8
Gardnerville Ranchos	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
	Schneider Ranch Sub (Freedom) (LDA 17-022)	2017	16		8	8
Johnson Lane	Cormorant Holdings LLC (DP18-0296)(ex 1/23)	2019	7		0	7
	Parkhaven (Armil) 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

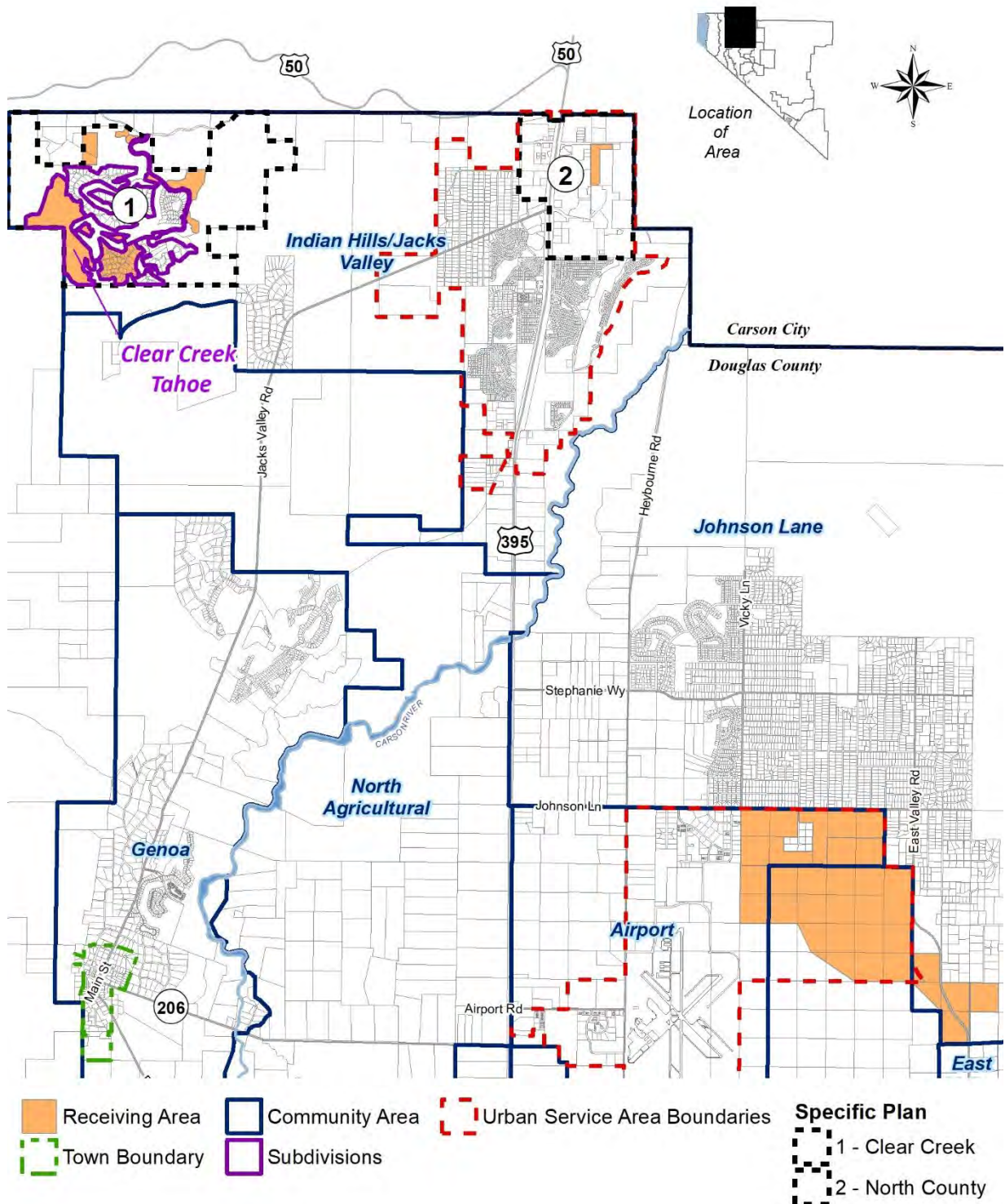


DIAGRAM G5 – RECEIVING AREAS IN AIRPORT AND AGRICULTURAL AREA

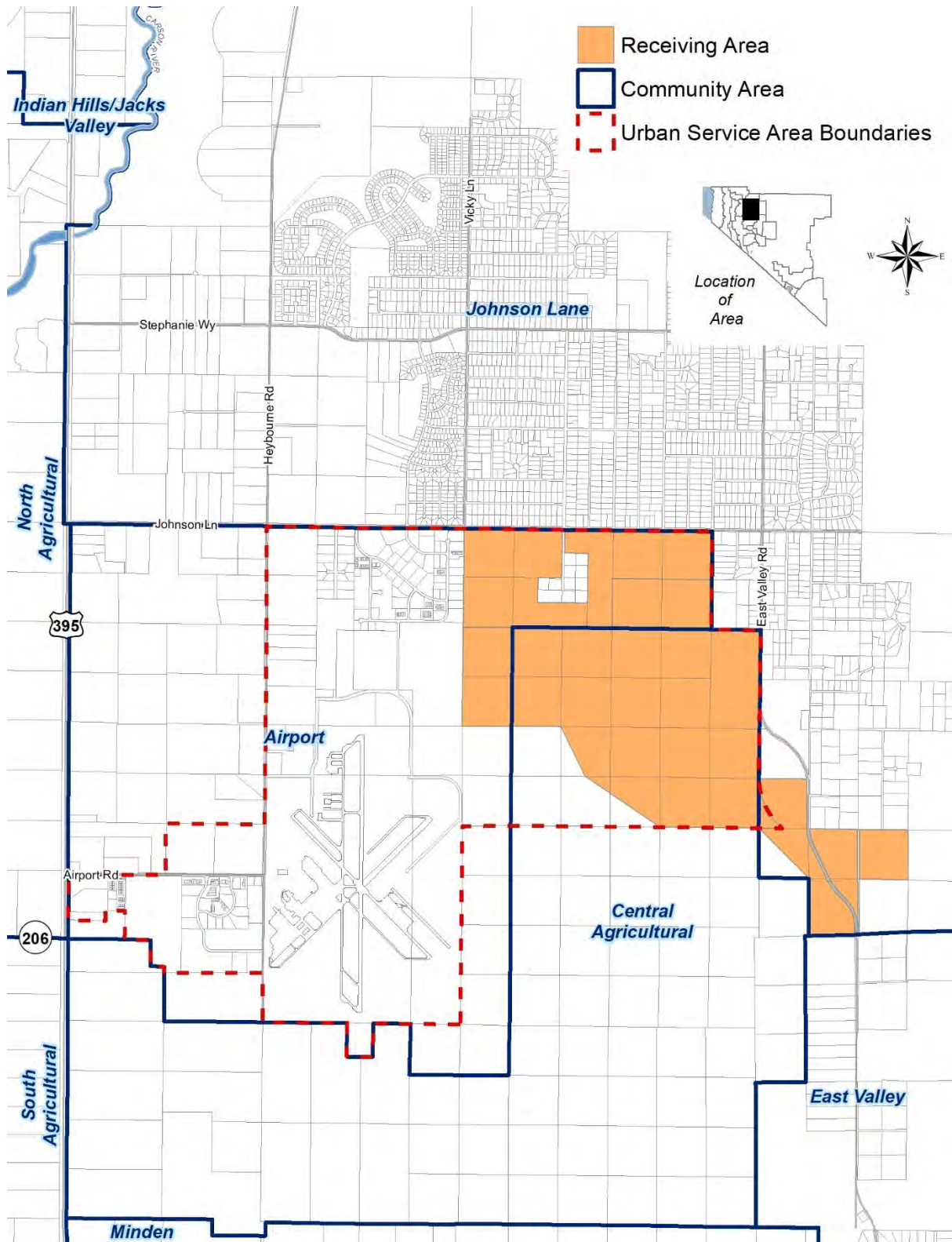


DIAGRAM G6 – RECEIVING AREAS IN GARDNERVILLE, GARDNERVILLE RANCHOS, MINDEN, AND RUHENSTROTH

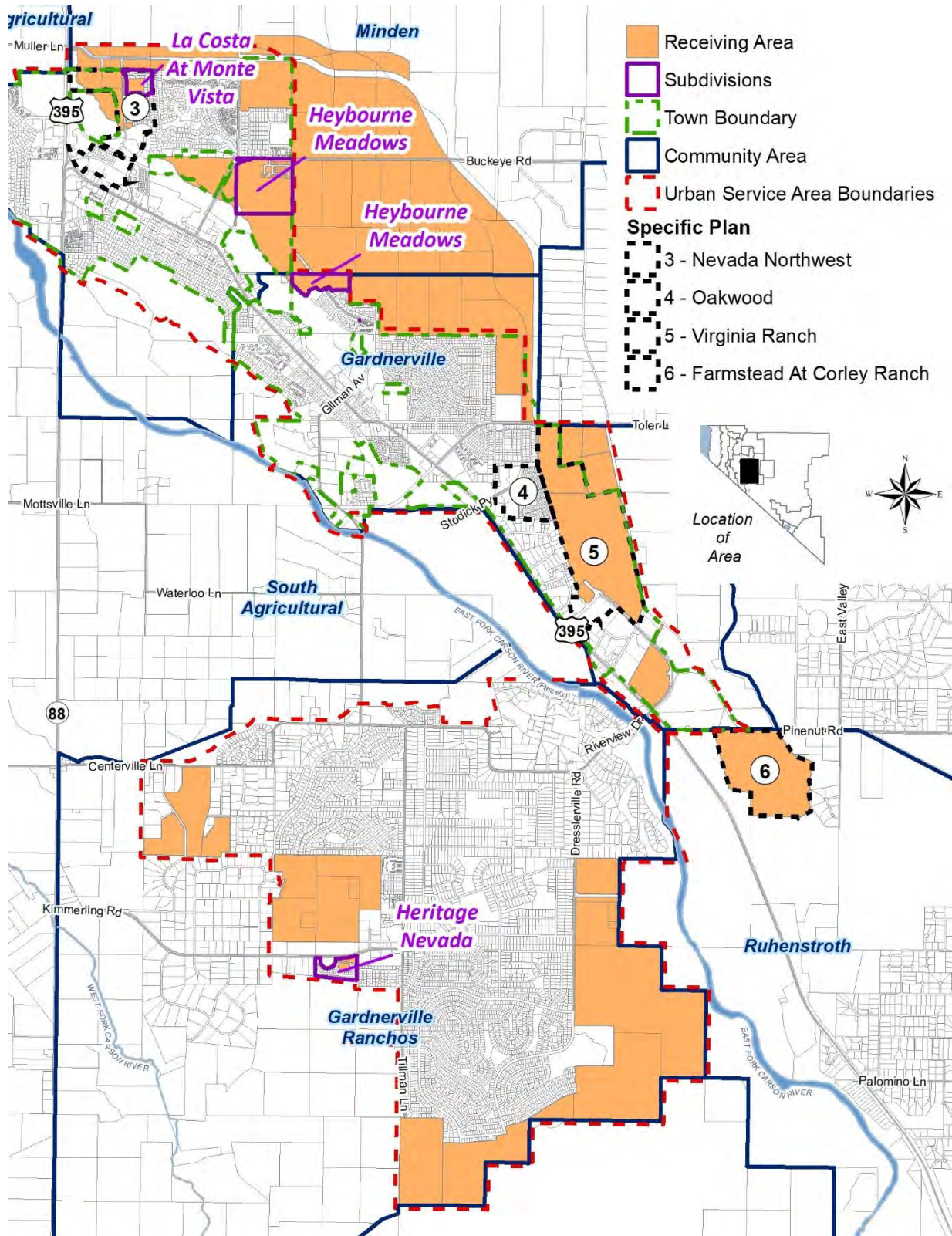
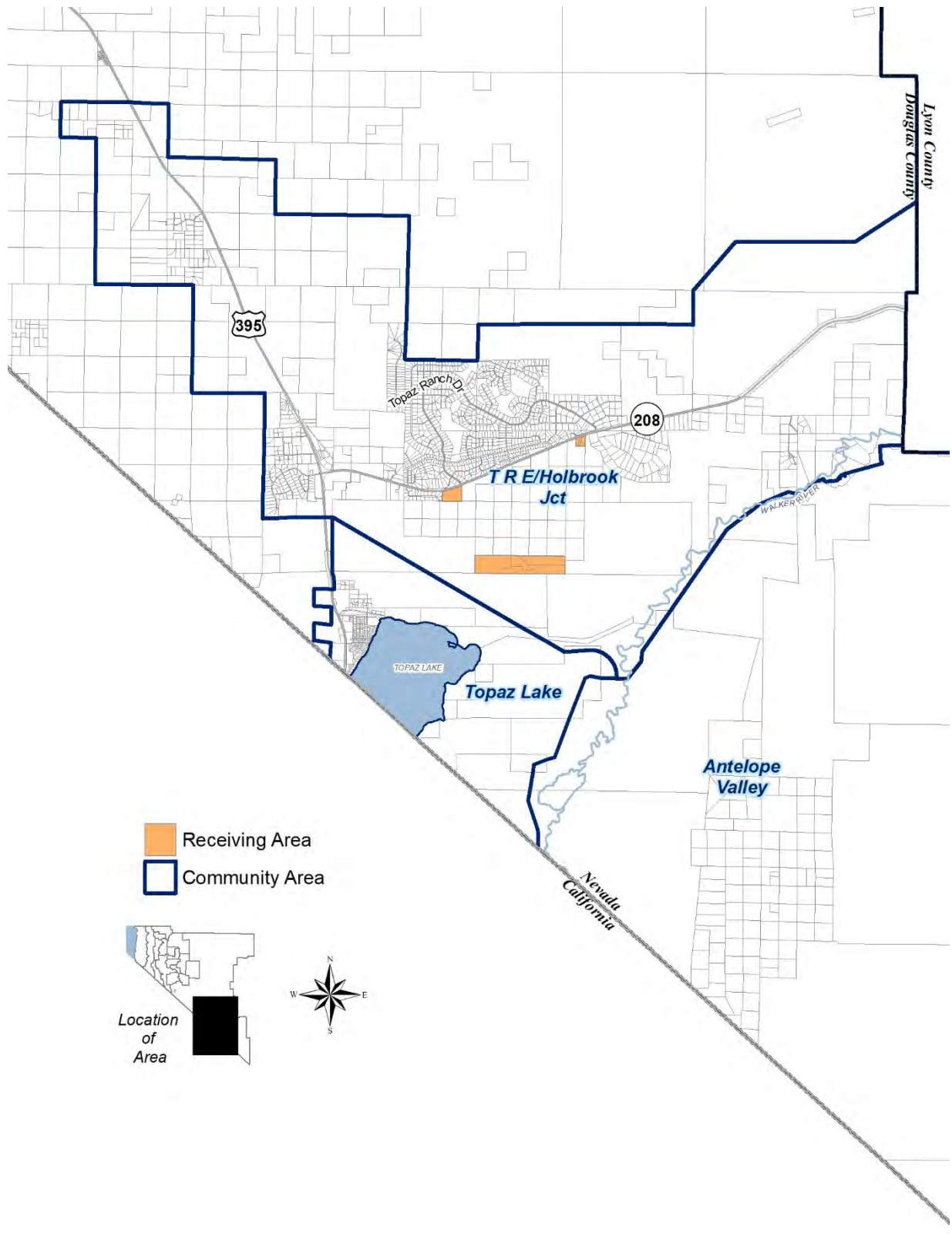


DIAGRAM G7 - RECEIVING AREAS IN THE TOPAZ REGION



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, as well as commercial and industrial development, to be located within these areas due to availability of infrastructure and established development patterns. Many of the Urban Service Areas have boundaries that are nearly similar to existing General Improvement Districts (GIDs) and town boundaries. The Urban Service Areas help to concentrate urban scale development in areas with public services and utilities. Urban Service Areas 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 for more density values per zoning district.

Residential Buildout 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 (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 2-5-acre in size.

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 2.38PPH)
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	1,378	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 projects land use zone. With every project, there is design inefficiencies with parcel layout being larger than the minimum parcel sizes, road rights of way, and parks or drainage facilities that make up an overall project. These inefficiencies reduce the actual dwelling unit per acre used for this estimate of potential growth. An assumed reduction of 25% is used for this exercise. The analysis shows the following:

A. Current Population

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

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 Built 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 does not include 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 are expiring in the next 36 years, ending in 2056. Development of vacant residential parcels outside of receiving areas may not happen for another forty to fifty years with the current trend in the county growth.

INCREASING HOUSING DIVERSITY

The housing stock in Douglas County continues to contain more than 70% single-family detached units. Although this inventory is marketable to many people, over the years, have chosen to commit to this particular product. There are two cases to make in favor of housing diversity:

- 1) Treating the housing portfolio as any other kind of investment would make it so that the larger the variety of housing inventory will make 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 with regards to their household configuration, design, and amenity types.

To encourage more housing diversity, as well as 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 underrepresented because technically not allowed or too costly, such as: tiny homes; modular units that can be assembled on-site; container homes; small footprint and low-density multi-family products, such as duplexes, and four-plex's. 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 (Multi-Family Residential) 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 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 and 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 to the Ordinance during the first review.

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 works by transferring 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 re-zoning 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. If a property owner wanted to rezone a vacant residential property in Gardnerville from SFR-12,000 to Multi-Family Residential, for example, the County could require TDRs as part of the re-zoning application. In some jurisdictions, such as in King County, Washington, there are no receiving area land use designations. The receiving areas in King County are specific zoning districts. 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 then 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 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 provides a good example of how this can work. There are several changes to the County's Density Bonus Ordinance that could be considered:

- 1) Remove the 2001 Amendment which raised the income limit to 110% 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) Many landlords and apartment complexes do not accept Housing Choice Vouchers, which can mean that the supply of housing available for voucher holders is restricted. The County may want to explore incentives for landlords to accept vouchers.







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 within Douglas County and to properly plan for and mitigate the impact of growth on those facilities and services.

GOALS

The following are 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 (GIDs), Towns, the State, and other jurisdictions.**
- Goal 2**  **Maintain service delivery standards that are consistent with County values and 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 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, but not limited to: 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, the General Improvement Districts, Towns, 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.



The County and Towns shall seek to expand recycling efforts and implement additional waste diversion programs.



Policy PF9

Neither new development nor the expansion of service areas should be 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

Policy PF12

Identify barriers and develop strategies to meet service delivery goals.

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 alike 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 the 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, and 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 which 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 the Federal lands. Hiking, bicycling, and equestrian trails should be planned 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.



Cooperate with other service providers to coordinate the timing of capital projects, 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, multipurpose centers, classrooms, administrative offices and art storage facilities.

CURRENT TRENDS

Fundamental to the effective management of growth and development in a community is to properly plan and provide for services and facilities to support and mitigate the impact of the same. In Douglas County these services and facilities include those operated and maintained by the County and those operated and maintained by other public or private agencies. The services which 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 addressed separately. Floodplain management is addressed in the Public Safety Element. General government services, libraries, schools and parks and recreation are also discussed in this element.

GENERAL IMPROVEMENT DISTRICTS

General Improvement Districts (GIDs) are authorized under NRS Chapter 318 and are allowed to 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. GIDs can't be initiated by a governing body if they are proposed within 7 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 General Improvement Districts were approved by the Douglas County

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

Board of Commissioners to provide a mix of different urban services including streets, sidewalks, streetlights, drainage, water and/or 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 Carson Valley Region, the Topaz Region, and in 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>	<i>6,103</i>	<i>3,865.29</i>	<i>6,178</i>
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>	<i>4,791</i>	<i>6,104.54</i>	<i>4,417</i>
Topaz Region			
Topaz Ranch Estates GID	909	2,852.08	779
<i>Subtotal</i>	<i>909</i>	<i>2,852.08</i>	<i>779</i>
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

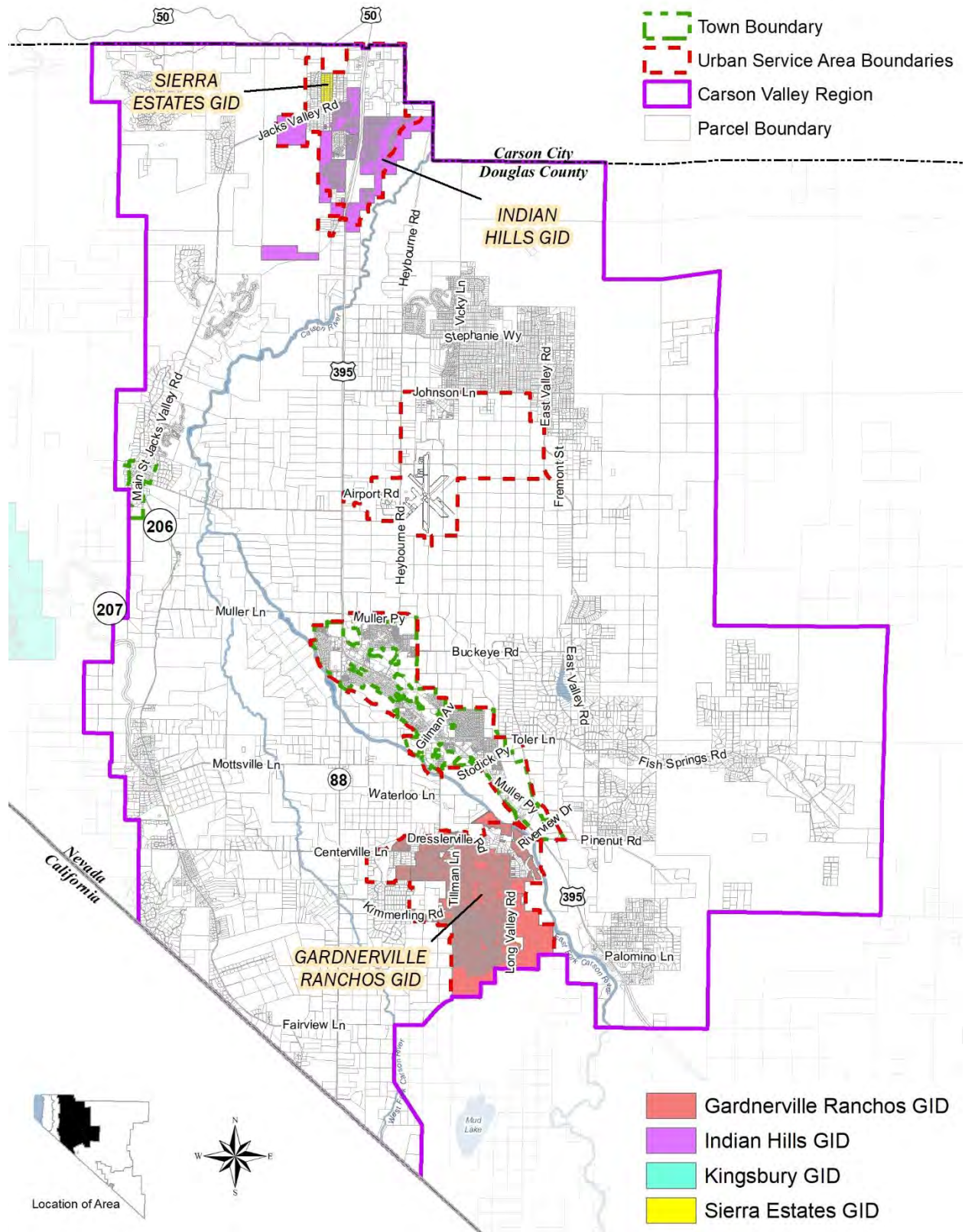


DIAGRAM PF2 – GIDs IN TOPAZ REGION

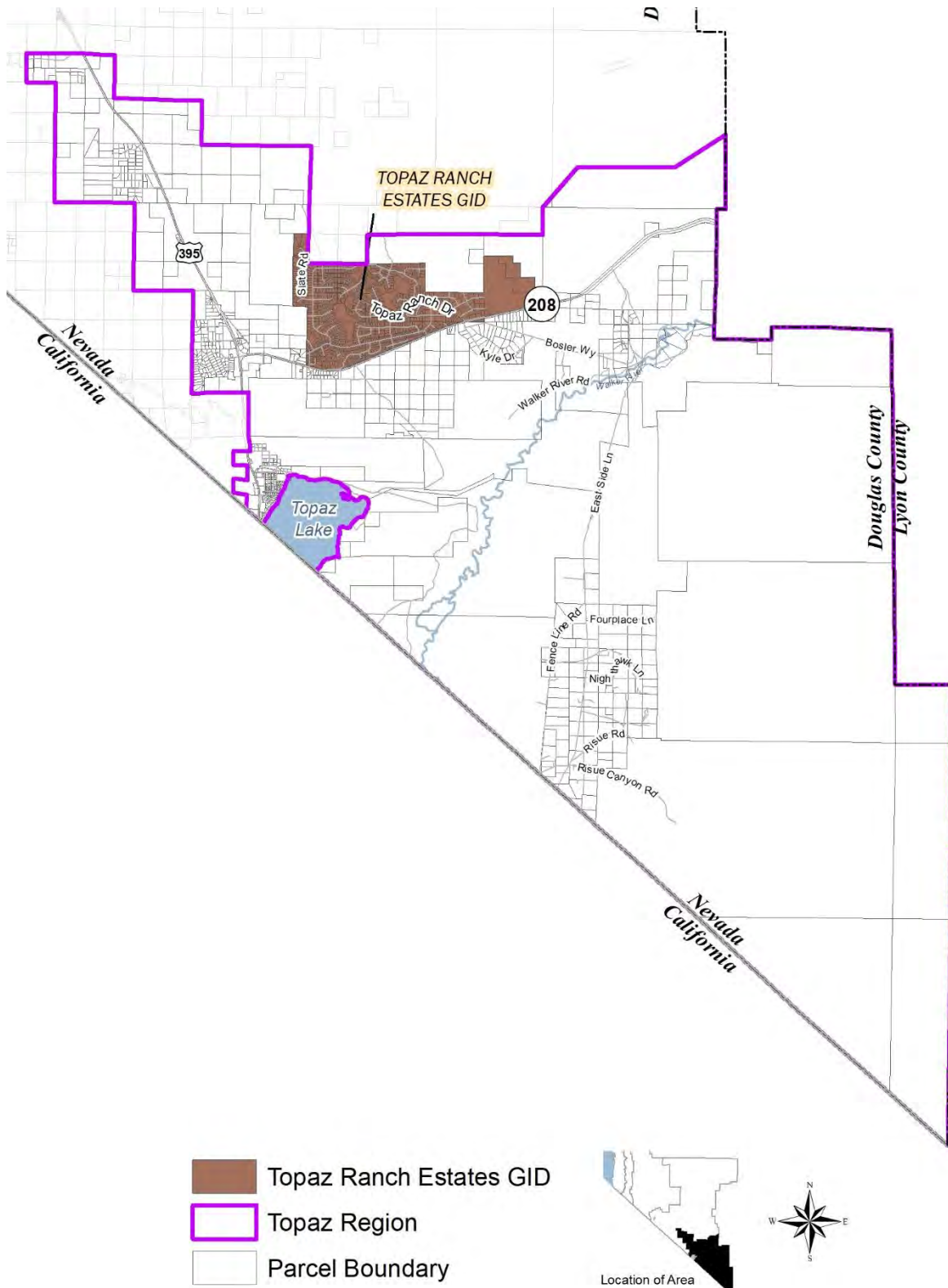
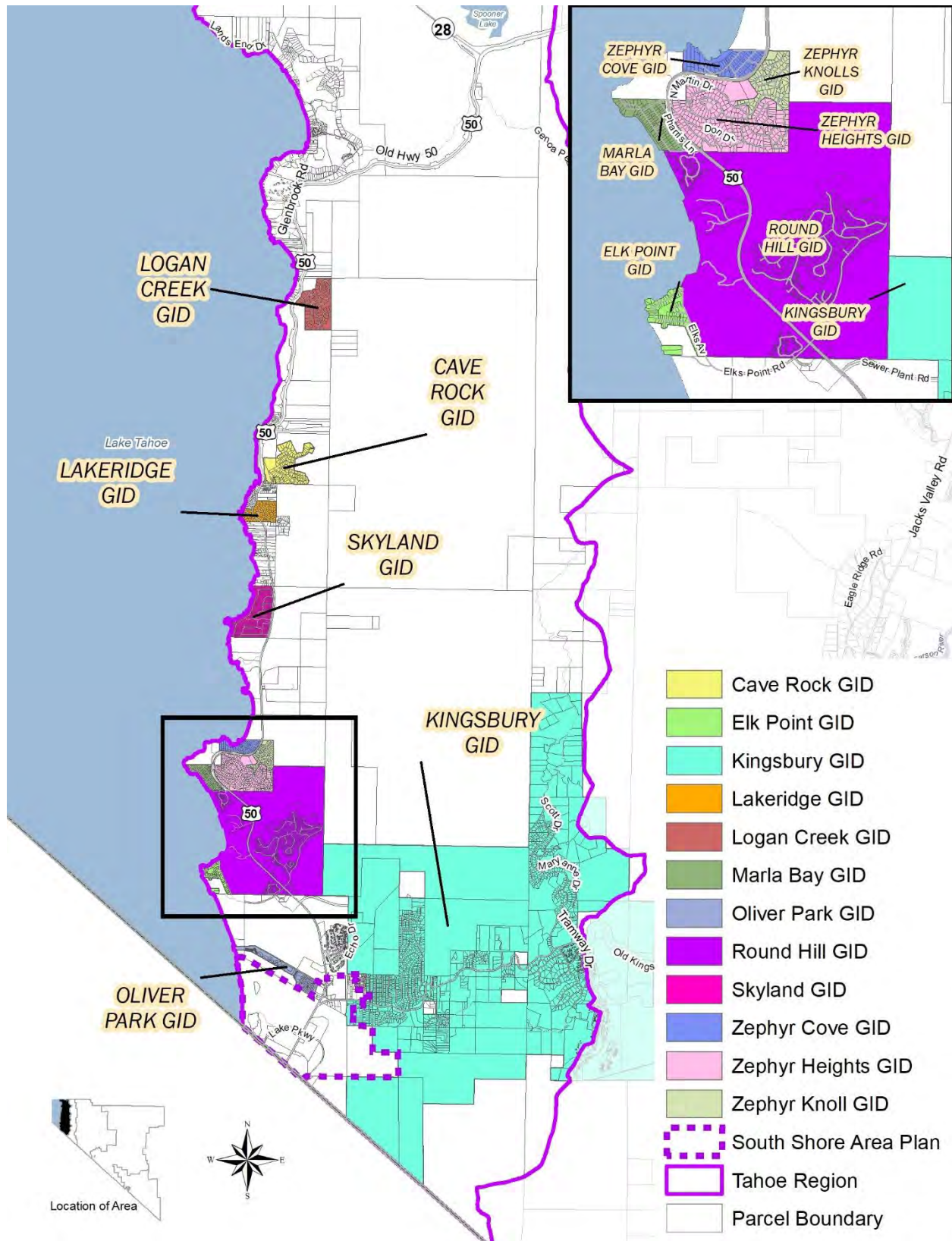


DIAGRAM PF3 – GIDs IN THE TAHOE BASIN



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 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.

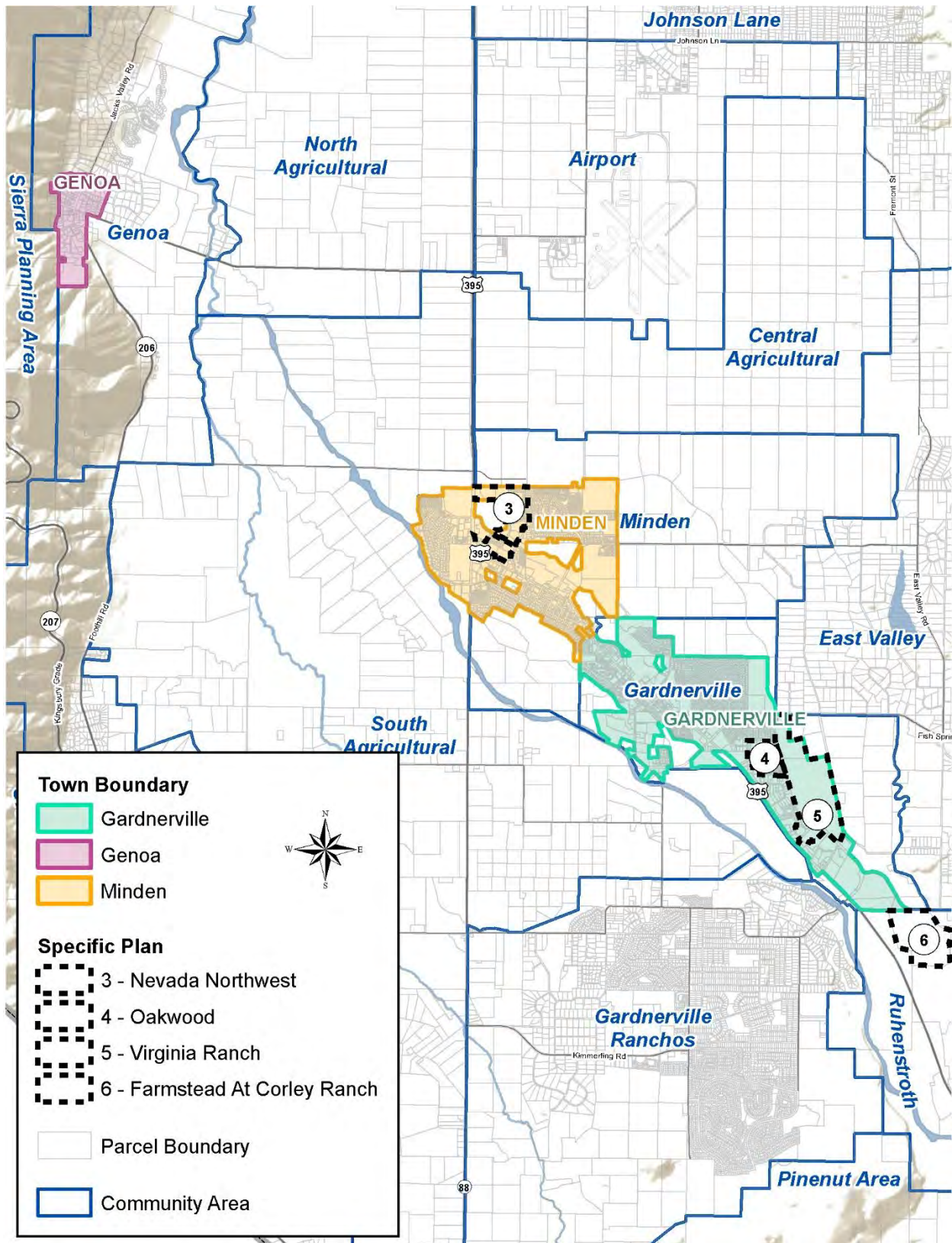


Table PF2 – Douglas County Unincorporated Towns

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 connecting 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 as well as the Clear Creek development south of US Highway 50 and serves developments along Foothill Road and the Douglas County Fairgrounds east of US Highway 395. The Gardnerville Water Company serves the Town of Gardnerville as well as adjacent areas and also provides water service to the Washoe Tribe Travel Plaza/Casino south of Pinenut Road. The Town of Minden provides water to portions of Douglas County, Indian Hills General Improvement District and Carson City as a result of the inter-tie project. The Gardnerville Ranchos General Improvement District provides residential and commercial water service to residents and businesses south of the Towns and west of US 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 General Improvement District, 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 which serves 14 connections also 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. The 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 display the service areas of public water systems in Douglas County.

Diagram PF6 displays the existing service area of the Gardnerville Water Company as well as 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.

Water purveyors in the Topaz Region are depicted on Diagram PF7. Besides 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

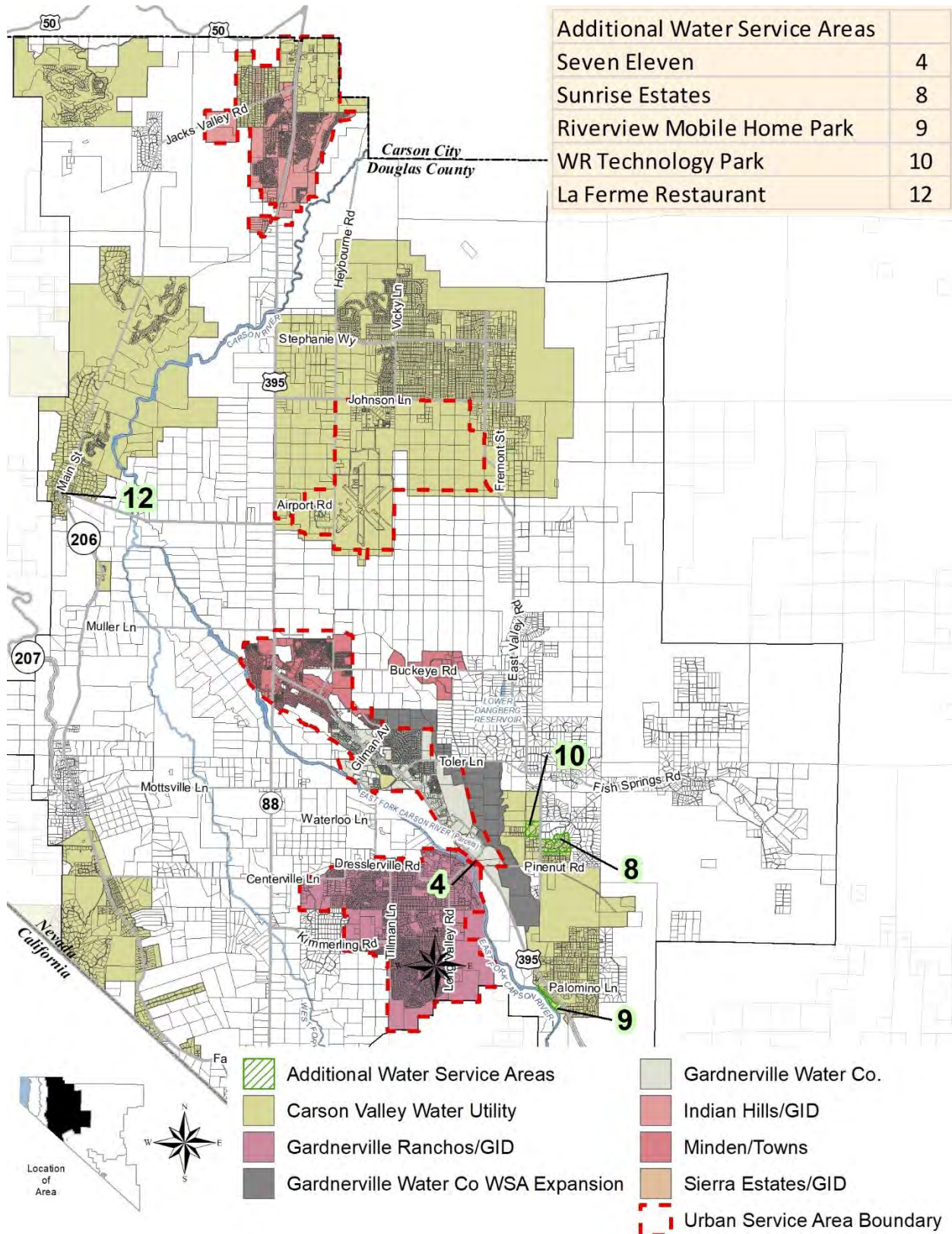


DIAGRAM PF6 – WATER SYSTEMS IN GARDNERVILLE

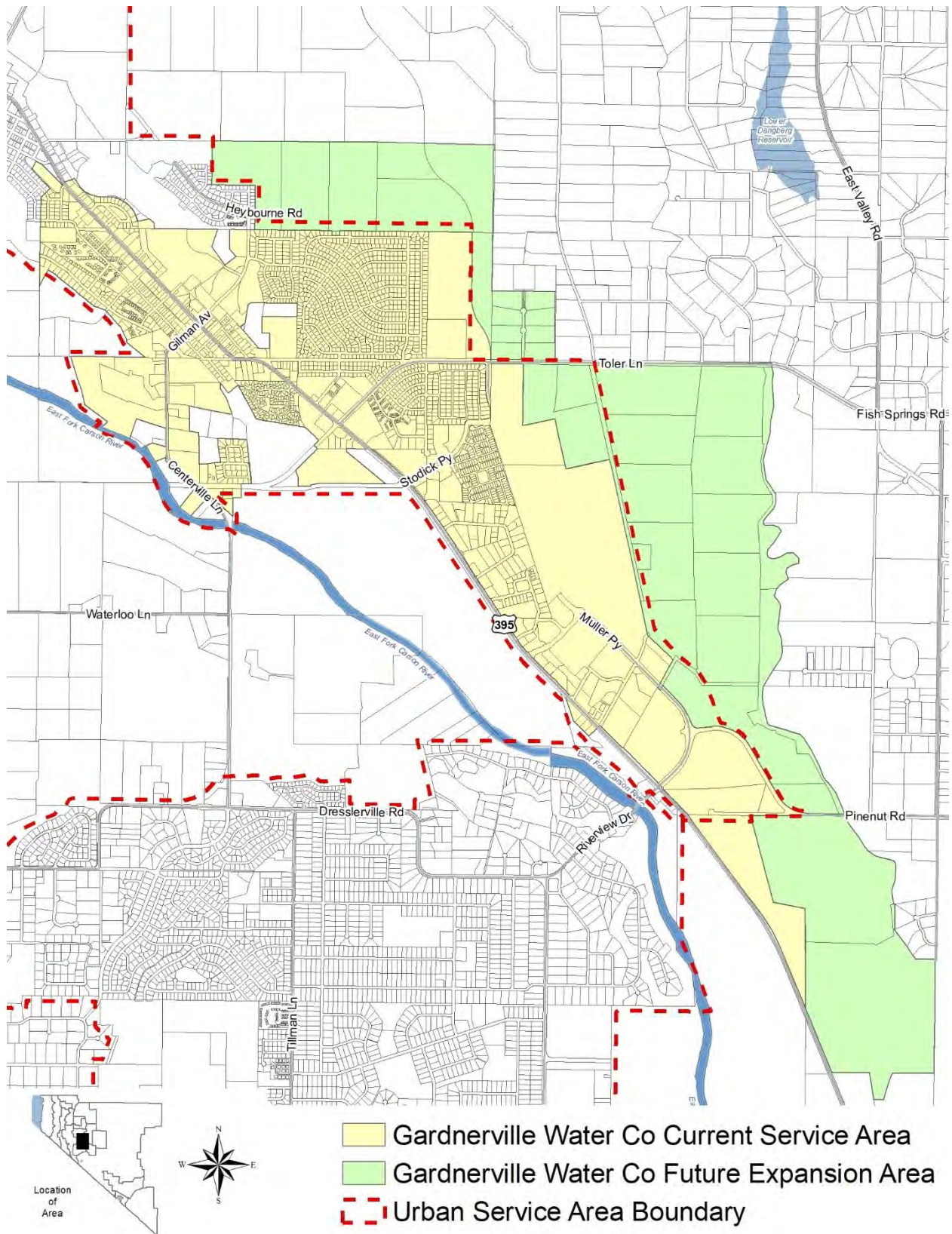


DIAGRAM PF7 – WATER SYSTEMS IN THE TOPAZ REGION

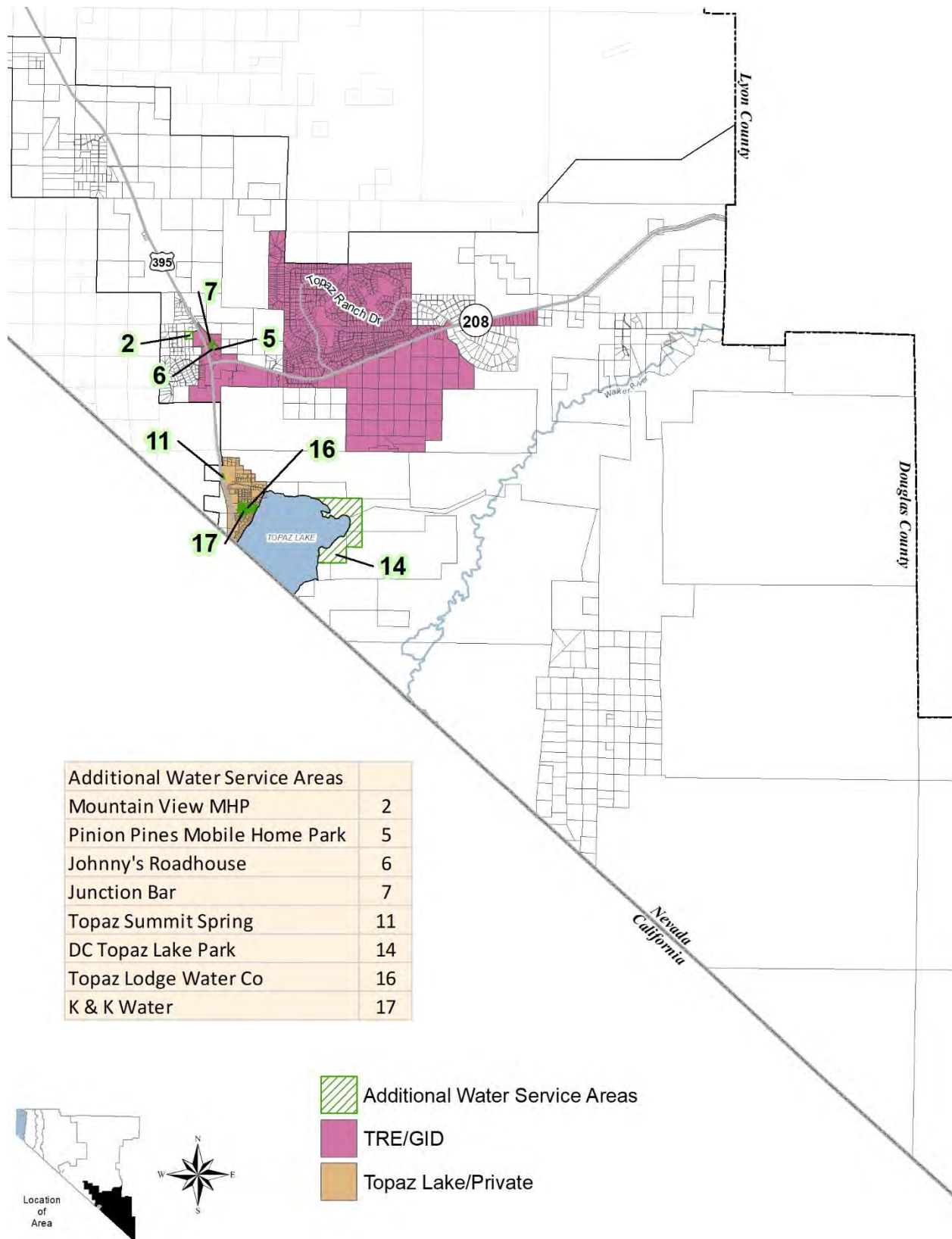
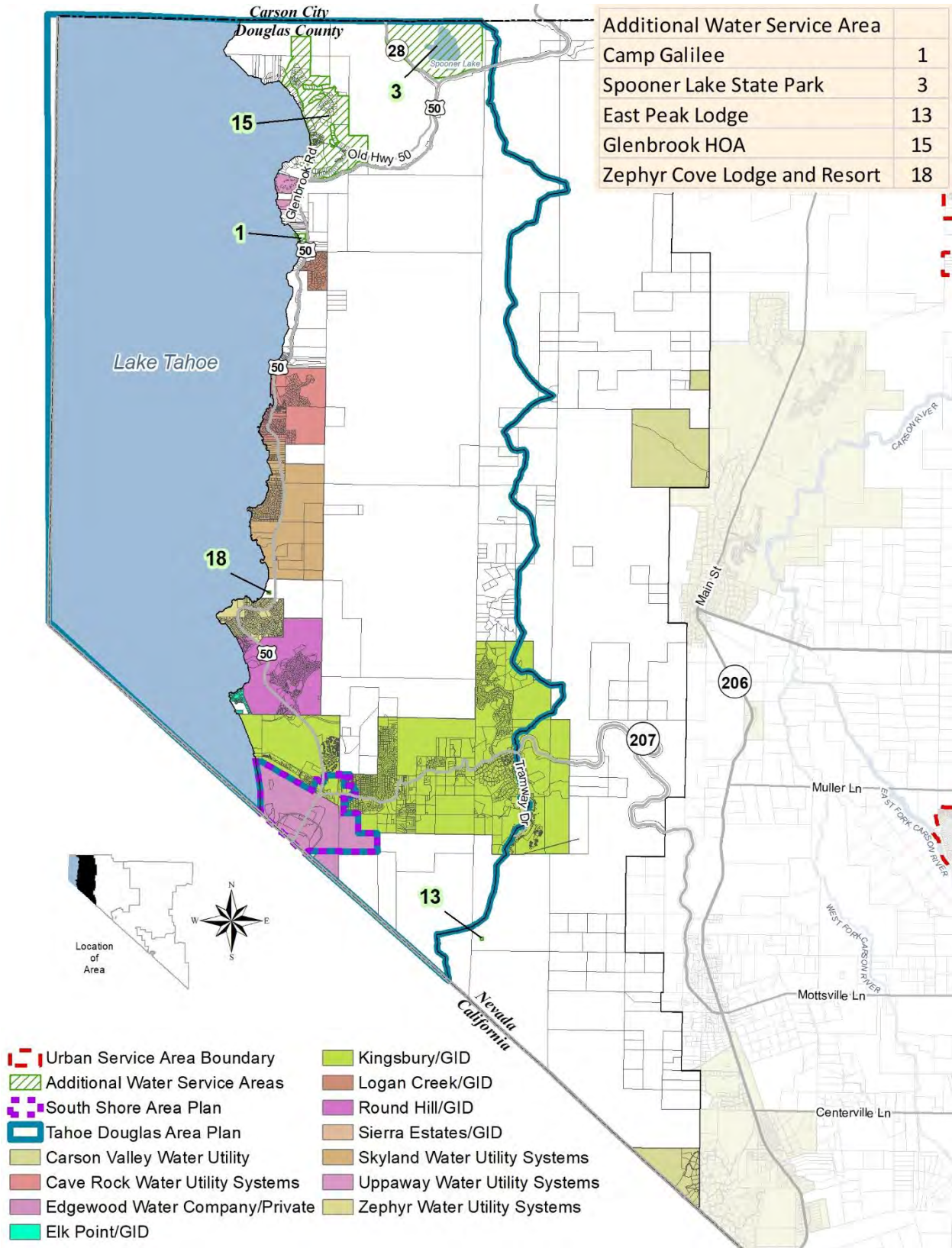


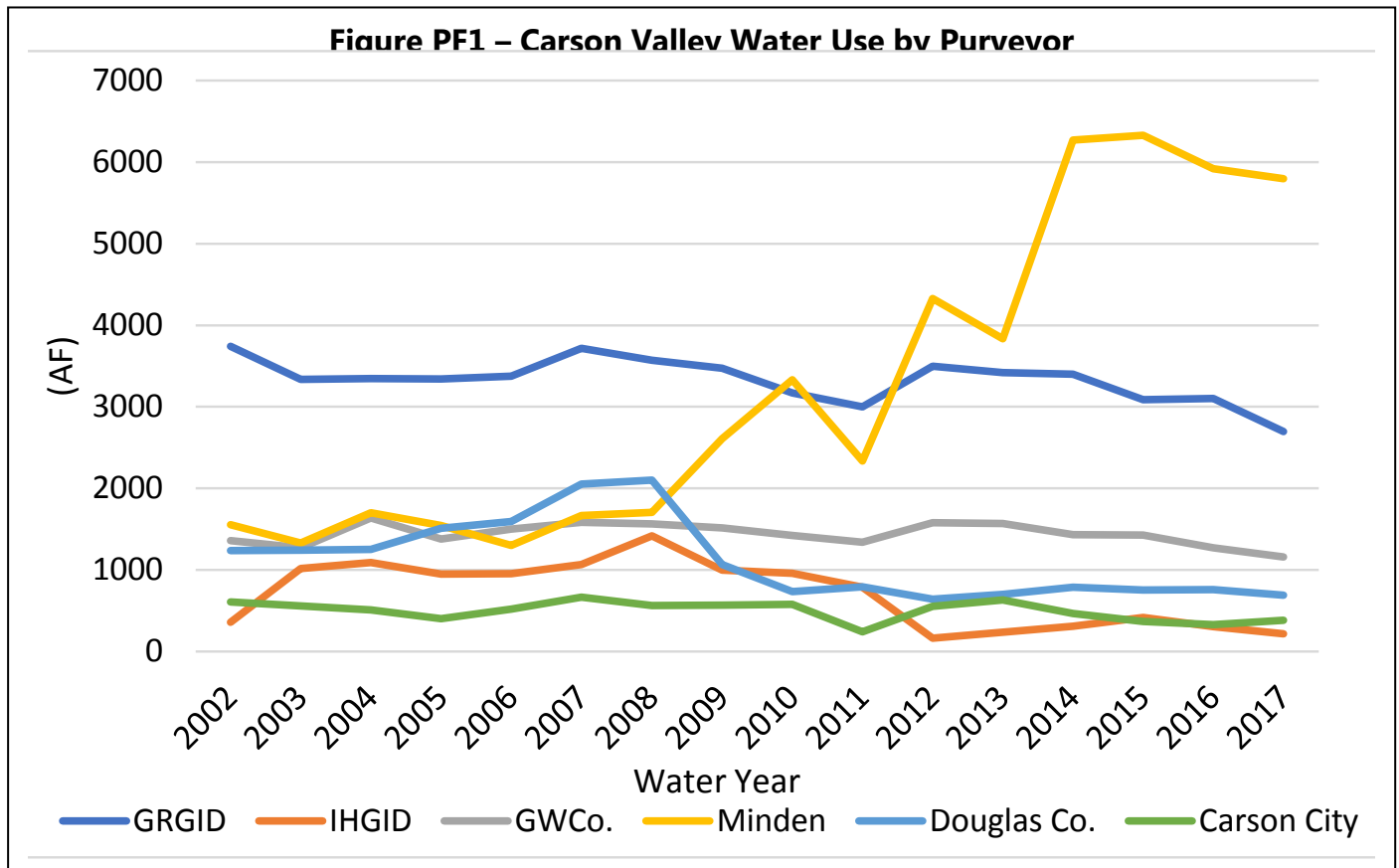
DIAGRAM PF8 – WATER SYSTEMS IN THE TAHOE BASIN



Water Service Planning

The water service areas expected to experience the most population growth in the County over the next 10 years are projected to include the Town of Gardnerville, the Town of Minden, the Gardnerville Ranchos General Improvement District and North Douglas County water services areas. 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 back-up systems, as required by 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 meeting and properly planning for future demand. Douglas County has acquired older water systems in the Tahoe Basin and in 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 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 preliminary 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 consolidated 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 "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 (June 2021) a Carson Valley Water Facilities Master Plan to 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."

Once complete, 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 which 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; and
- 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 related to 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 further to the south side of the Minden Tahoe Airport. Calculating 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 non-profit company owned by the property owners of Gardnerville. GWC is managed by a five-member board of directors, which are elected by the property owners of Gardnerville. GWC has approximately 2,400 water service connections currently, including residential, commercial, and irrigation. GWC has its own Master Plan, which is currently (2020) under contract with Resource Concepts, Inc. to be updated. This 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 buildout, including remaining receiving area, based on anticipated land use to be 4,400 additional residential dwelling units. The GRGID Board advises in a Water System Status and Outlook 2020 report that essential to future growth and water service planning for the GID, will be the development of a study/analysis of the Carson Valley watershed. 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:

- “To 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; currently set at \$4,431 per Equivalent Dwelling Unit (EDU) effective November 12, 2019 for newly created parcels. 1 EDU equals one single family home.”

WATER RESOURCE MANAGEMENT

In 2012 U.S. Geological Survey 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, 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).

The summary section of the report (page 69) advises the water model predicted increasing groundwater pumping to meet the maximum level of demand under the most extreme of the four different scenarios “would result in 40-60ft of water table decline on the west and east sides of the Carson Valley” and “would be offset primarily

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, 73 p.

by decreased flow in the Carson River by a loss of groundwater storage.” Under the most extreme scenario input in the model in the USGS report, the total amount of municipal water pumped would increase by four times what it was in 2005 for all of Carson Valley with 3,700 acres removed from irrigation. The USGS report stated that additional monitoring of water levels was 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 have this study and model updated. 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 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), established in 1969 under the Bi-State Tahoe Regional Planning Compact (Public Law 91-148) in order 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; it 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, the Tahoe Regional Planning Agency and the Nevada State Division of Water Resources.

WASTEWATER SERVICES

Wastewater services in the Carson Valley region of Douglas County is provided by three public wastewater systems and several private package systems. In the Lake Tahoe Basin region of Douglas County, wastewater services are provided by several General Improvement Districts (GIDs) and Sewer Improvement Districts (SIDs).

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 (ISDS). 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. The property owner must make provisions for connections to the system, however, including

installation of sewer laterals, dry sewer lines within the project or mandatory connection when located within 330 feet of an existing sewer line.

Carson Valley Region

There 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 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 (NVWTSA)

The NVWTSA currently encompasses the regions of East Valley / Johnson Lane, North County, Airport, Walley's, Genoa, Genoa Lakes and Canyon Creek / Montana area. The Douglas County 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 North Valley Treatment Plant has capacity to treat an additional 3500 EDUs.

Minden-Gardnerville Sanitation District (MGSD)

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 services to the Washoe Tribe which are not located within the annexed area of the district, but is within the service area of the district. 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: the Gallepi Ranch, former Dangberg Ranch, and Bently property, which are located north of the treatment facility. MGSD is currently treating approximately 1.2 million gallons per day (MGD) with a treatment capacity of 2.8 MGD. MGSD facility has capacity to treat an additional 10,000 EDUs.

Indian Hills General Improvement District (IHGID)

The IHGID Wastewater Treatment Facility is located in the southern portion of the district and serves the Indian Hills/Jacks Valley community as well as portions of the Genoa community. Effluent is stored in a series of storage ponds. Disposal of effluent 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, with filtration and chlorination. Effluent disposal is through a leach field. The rated capacity of the treatment plant is 0.025 MGD which, according to the “Topaz Lake Area Water & Wastewater Master Plan” can be reached on a busy weekend day. 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) 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 District; and 5) Round Hill GID. The Douglas County Lake Tahoe Sewer Authority has a rated treatment capacity of 3.75 million gallons per day (MGD). After treatment at their facility, the reclaimed effluent is pumped out of the Lake Tahoe Basin to the Carson Valley where it contracts with the other Tahoe Basin GIDs to treat the effluent and transport it outside of the basin to be used for agricultural irrigation purposes.

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.

Douglas County Lake Tahoe Sewer Authority (DC Sewer Improvement District No. 1)

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 3.75 million gallons of wastewater per day. 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 season crops (alfalfa) at the Bently Agro-dynamics Land Application Site. The Buckeye Creek effluent storage reservoir is currently off-line.

Tahoe Douglas Sewer Improvement District (TDSID)

TDSID is a sewer collection district on the east shore of Lake Tahoe. The District maintains 19 pump stations and 40 miles of sewer line.

Kingsbury General Improvement District (KGID)

KGID, a Tahoe-based system, collects wastewater from the portion of the Summit Village and Tahoe Village areas which extends 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 as well as the current district boundary. It should be noted that district boundary does not reflect areas where MGSD provides contracted services.

DIAGRAM PF9 – WASTEWATER SERVICE AREA IN THE CARSON VALLEY REGION

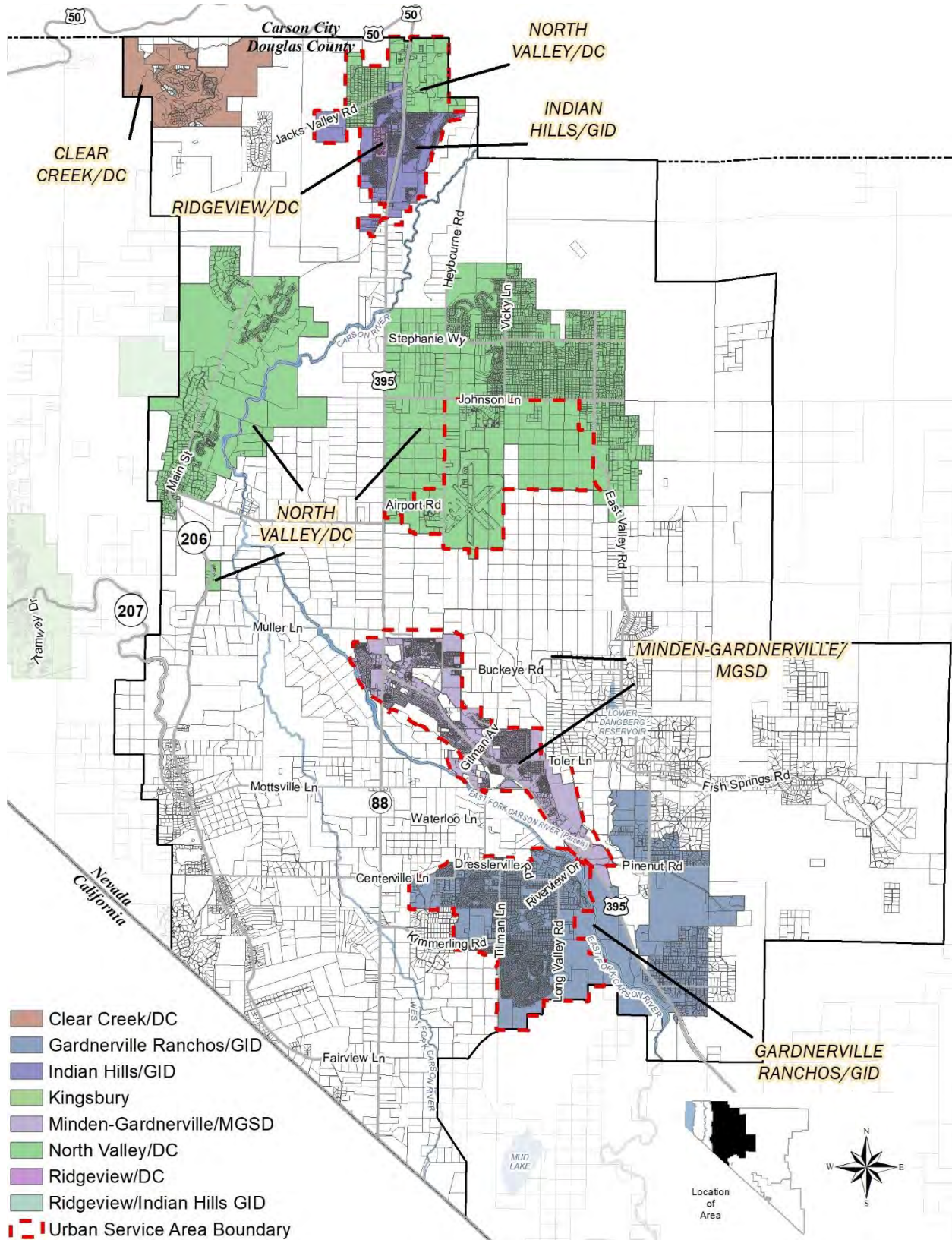


DIAGRAM PF10 – WASTEWATER SERVICE AREA, MINDEN-GARDNERVILLE SANITATION DISTRICT

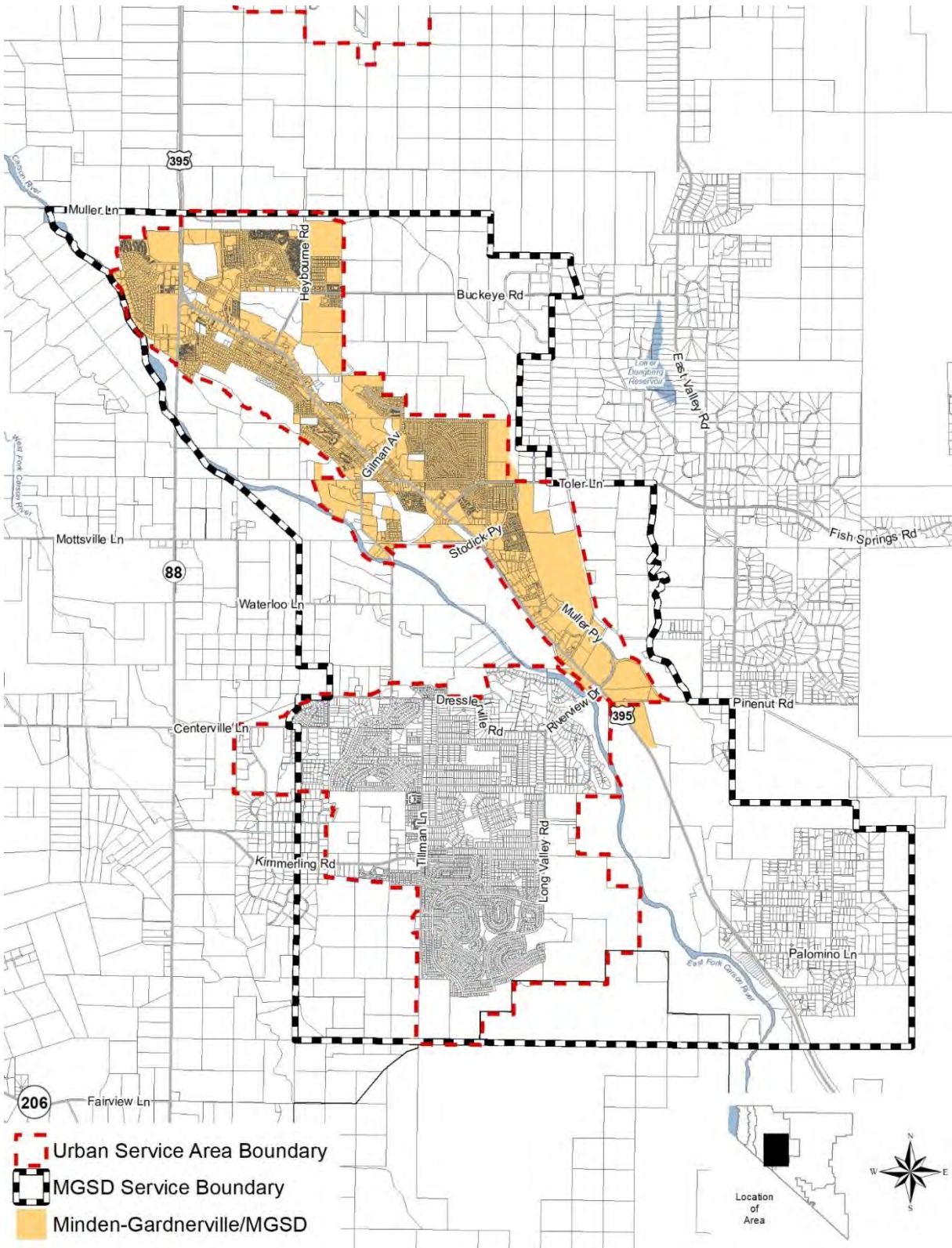
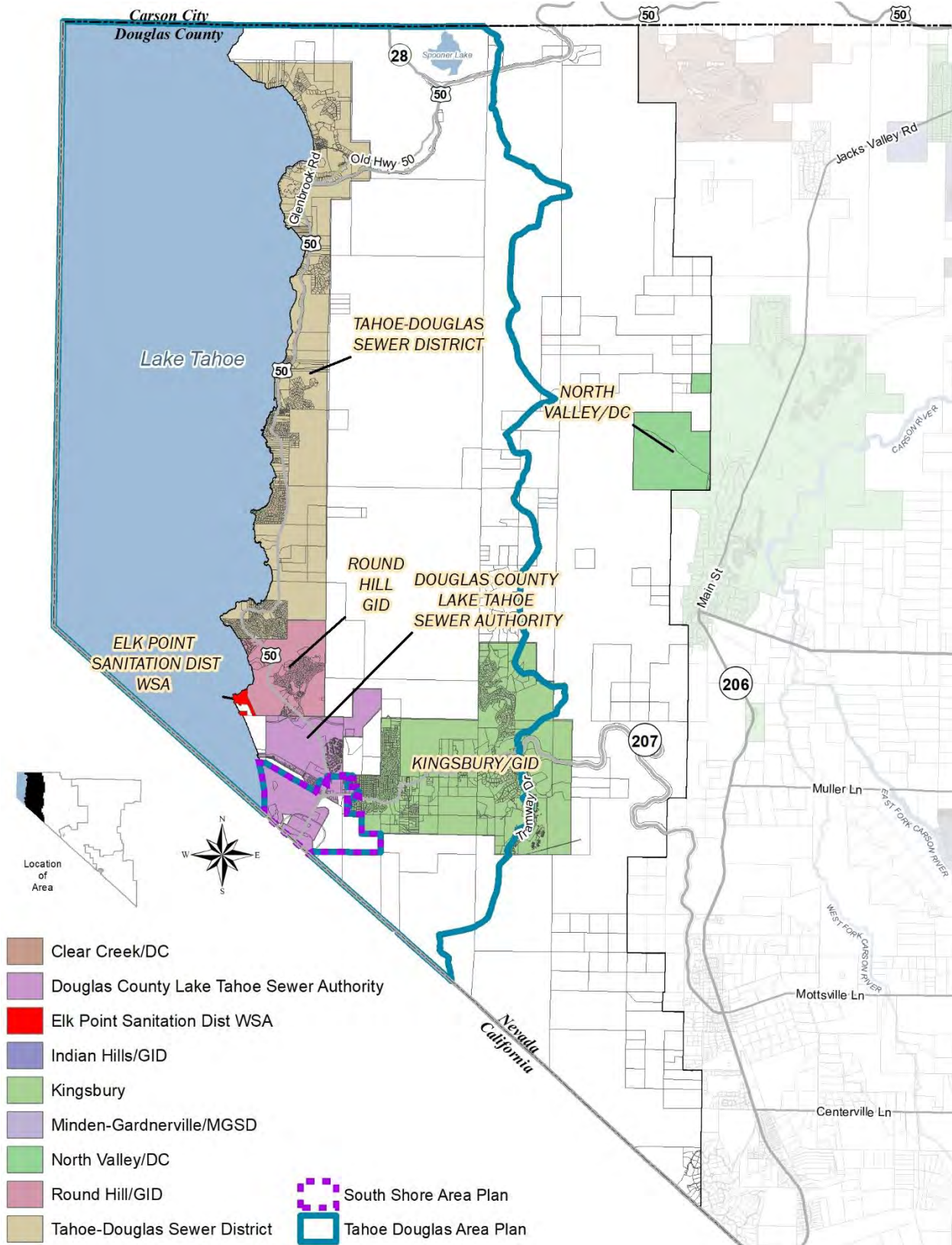


DIAGRAM PF11 – WASTEWATER SERVICE IN THE TAHOE BASIN REGION



INDIVIDUAL DISPOSAL SYSTEMS

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

In recent technical memos on the North Valley Wastewater Treatment Plant, 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), county capital improvement project (CIP) funds, and Community Development Block Grant (CDBG) funds.

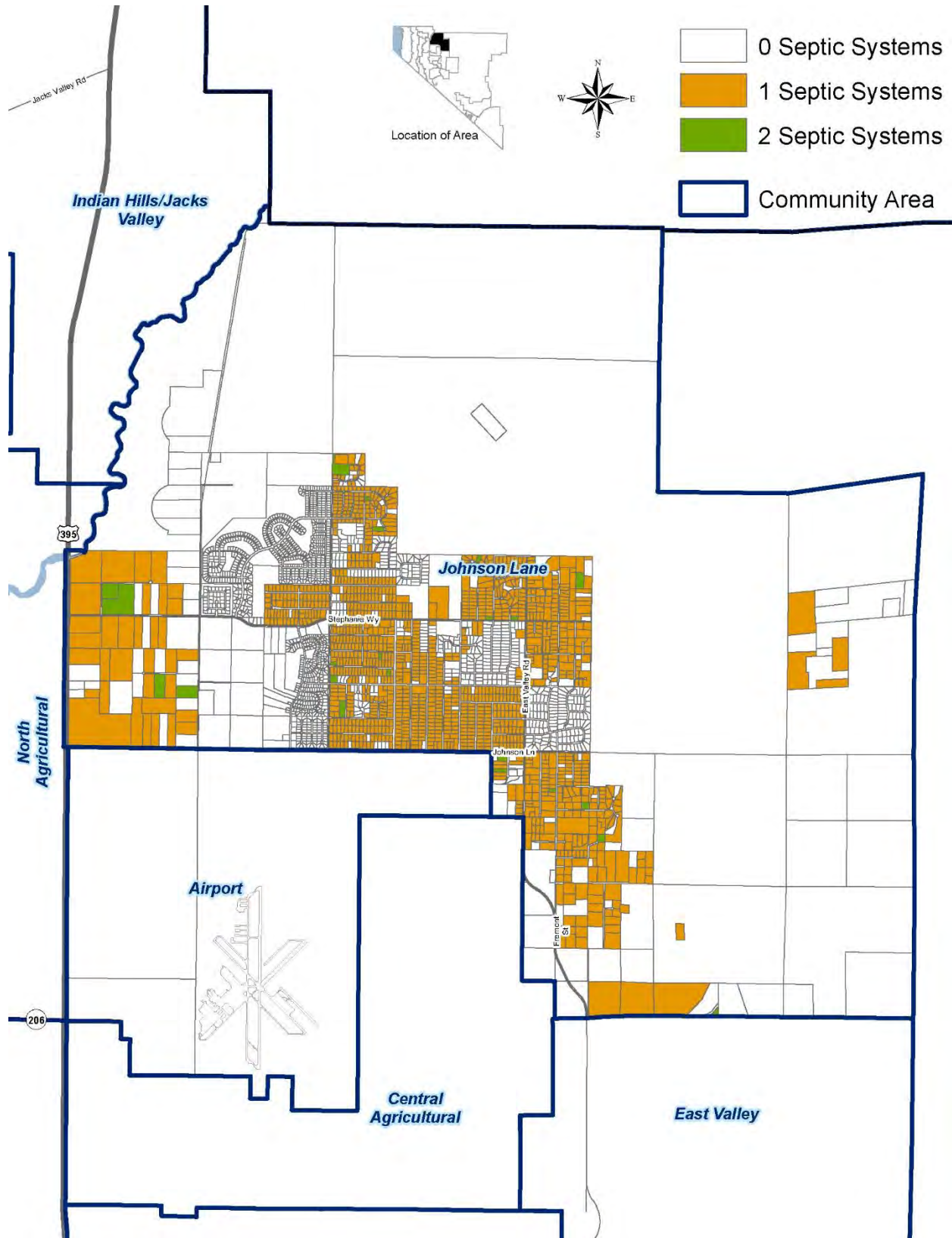
Wastewater system upgrades have been carried out for the Indian Hills GID, as shown in Table PF7 below. The USDA Rural Development Program provided a loan of \$1.5 million for sludge dewatering. The Pine View Estates south of Ruhenstroth has also obtained assistance from the USDA Rural Development program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

Table PF7 – USDA RD 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 SYSTEM IN THE JOHNSON LANE COMMUNITY PLAN



SOLID WASTE

Douglas County is required to submit a solid waste management plan to the Nevada Department of Environmental Protection (NDEP) every five years pursuant to Nevada Administrative Code 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 solid waste management 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 occurs within 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 some type of recycling and hazardous waste disposal program. 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 as well as 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 already even though both communities are below the 100,000-population threshold.



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

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 recycling goal is 25 percent and Douglas County has consistently exceeded this rate. Douglas County's recycling rate for 2013 through 2017 has averaged 55.3%. By comparison, the State of Nevada 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

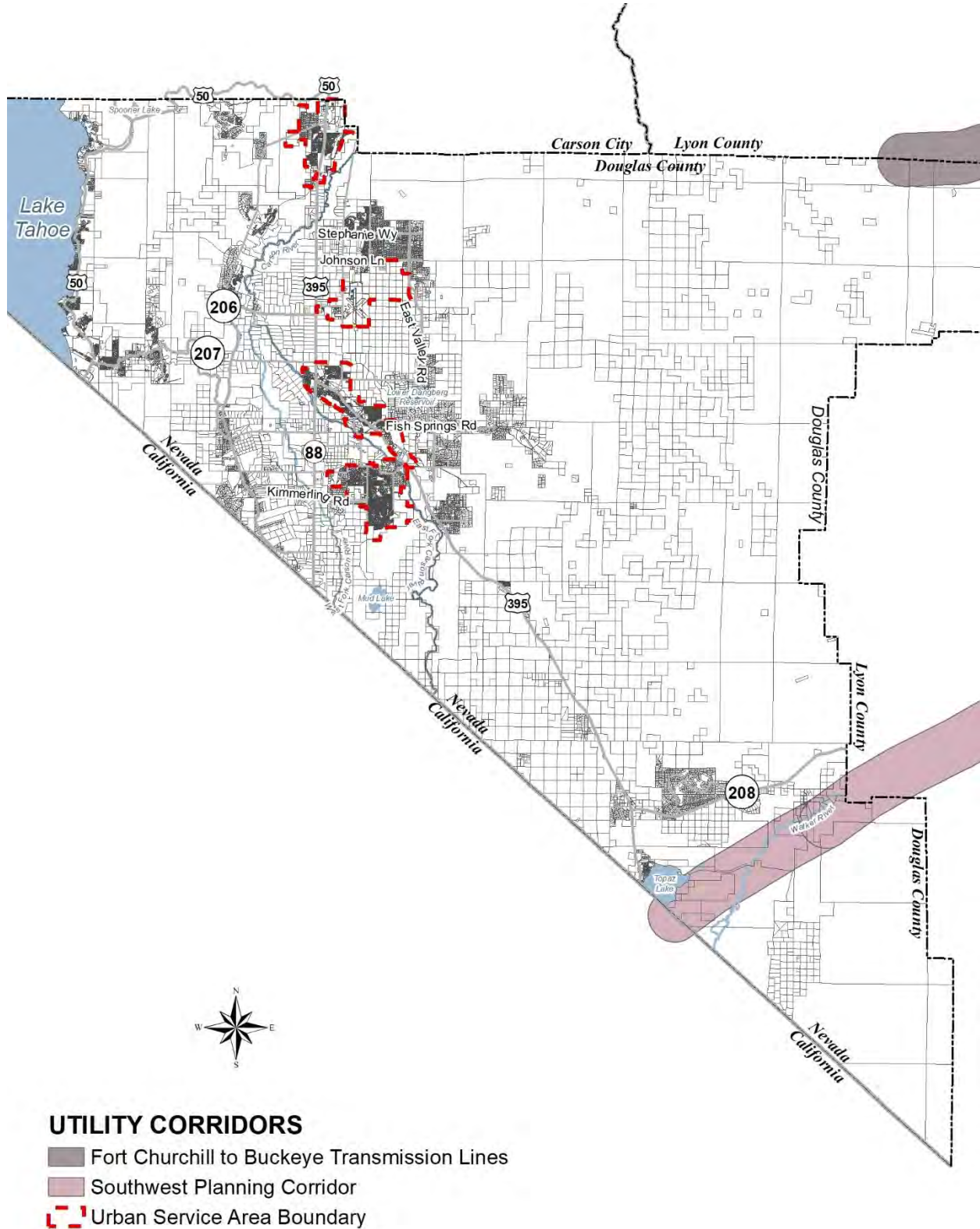
The County's high recycling rate is likely the result of two programs: 1) the Blue Bag program in the Tahoe Basin, and; 2) the composting and biofuel programs operated by private businesses, such as Bently Ranch and Full Circle Compost. Douglas Disposal commenced a six-month pilot curbside recycling 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. The Town's pilot program served 180 customers. Single stream recycling, which allows residents to place all recyclable 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 Nevada Revised Statutes were amended to require counties to adopt aboveground utility plans (NRS 278.165) within the Public Facilities Element. As a result, the Public Facilities Element of the Douglas County Master Plan was amended in March 2015 to incorporate such a plan.

In compliance with NRS, the County adopted, by reference, the Bureau of Land Management (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 twenty 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.

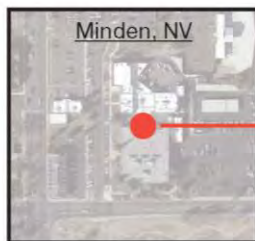
Douglas County Law Enforcement

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 for Douglas County June 2020.

The existing Douglas County Judicial and Law Enforcement Building was constructed in 1980, when the county population was approximately 19,400 residents. The building is a two-story building with concrete masonry exterior and metal framed interior partitions. The original facility included a large open lobby area, 3 sizable waiting areas, a 2-story sky lit atrium, and exercise area. All of these areas have been removed and converted to security functions and department offices in response to expanding needs.

The first floor is dedicated to the Sheriff's operations and includes the County Jail. The jail was expanded in 2011, solidifying 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, Constable, Court Administration, Court Computer, Justice and District Court Clerks, and Juvenile Probation. The Law Library, CASA and 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 county population has grown, the needs of the Center have grown. The facility has significant, immediate deficiencies in security, overcrowding and accessibility. These issues, which are a reflection of increased population and caseloads, prevent the current users and staff from operating in a safe and efficient facility.

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 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.
- Alternative sentencing has no secure waiting area, inadequate space and inadequate separation between offices and laboratory facilities.

- Building security has a design bottleneck at the entrance to the facility.
- The Constable's office has minimal and inadequate office space.
- An additional courtroom and space for associated support staff is needed at this time. 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 and child support enforcement and other quasi-judicial and administrative proceedings.
- Projected needs are included in the analysis for deliberate and efficient Capital Improvements Planning.

Steps have been taken to mitigate some of the concerns raised above. The County currently leases one building across the street from the JLEC facility for the majority of the Civil Division of the District Attorney's Office. This lease freed 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 at 1120 Airport Rd., Building F-2 Minden, NV 89423. 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 identified in the assessment is \$15.5 million.

Aerial View of Current Douglas County Public Works Facilities

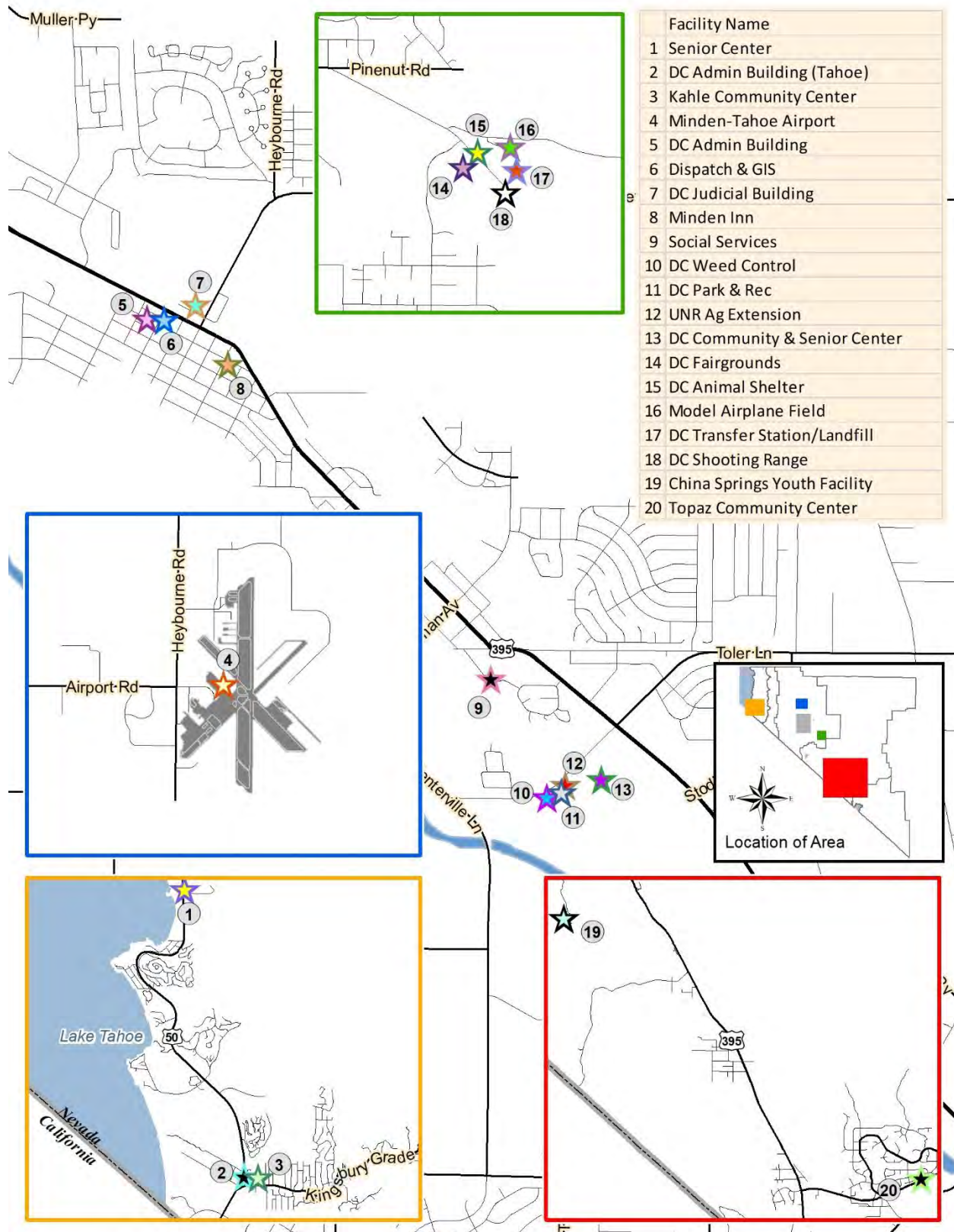


Source: Douglas County Public Works Facilities Master Plan, March 2019 prepared by TSK.

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

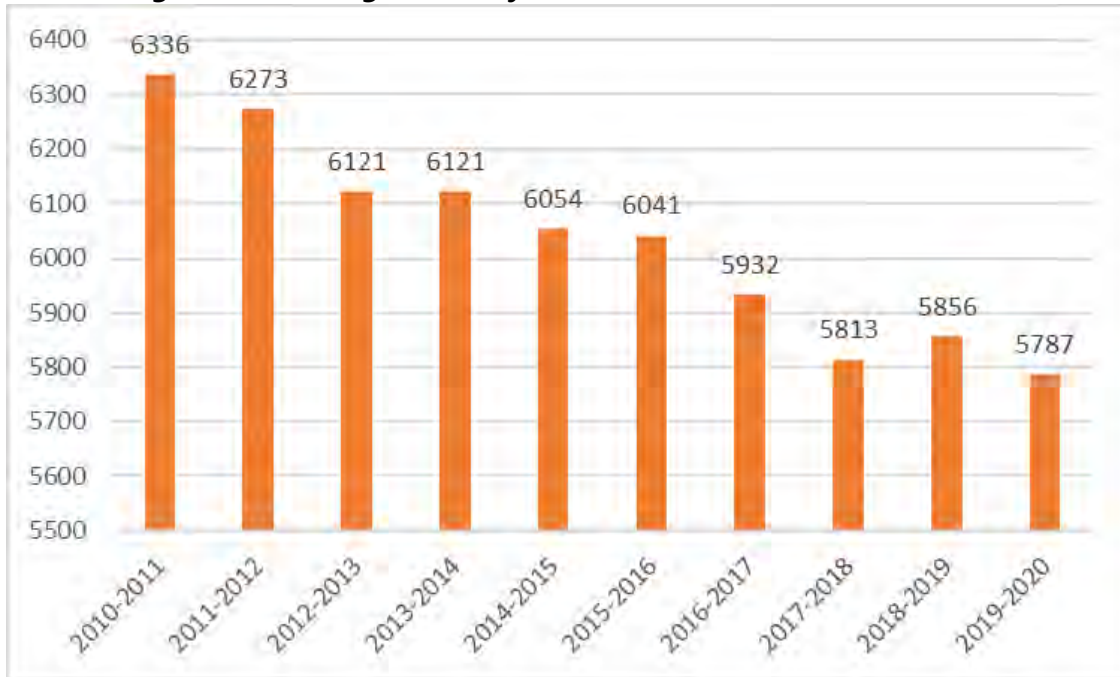
DIAGRAM PF14- DOUGLAS COUNTY FACILITIES



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. The 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 District indicates it may need to rezone existing school boundaries to accommodate increased demand. A review of school student capacity numbers provided by the Douglas County 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%
Pinon 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.

An analysis of the number of students enrolled by residential unit in each school zone boundary is contained in Table PF10 below. Monitoring enrollment by unit in each zone will help the County project anticipated enrollment numbers in certain areas of the County 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
Pinon 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

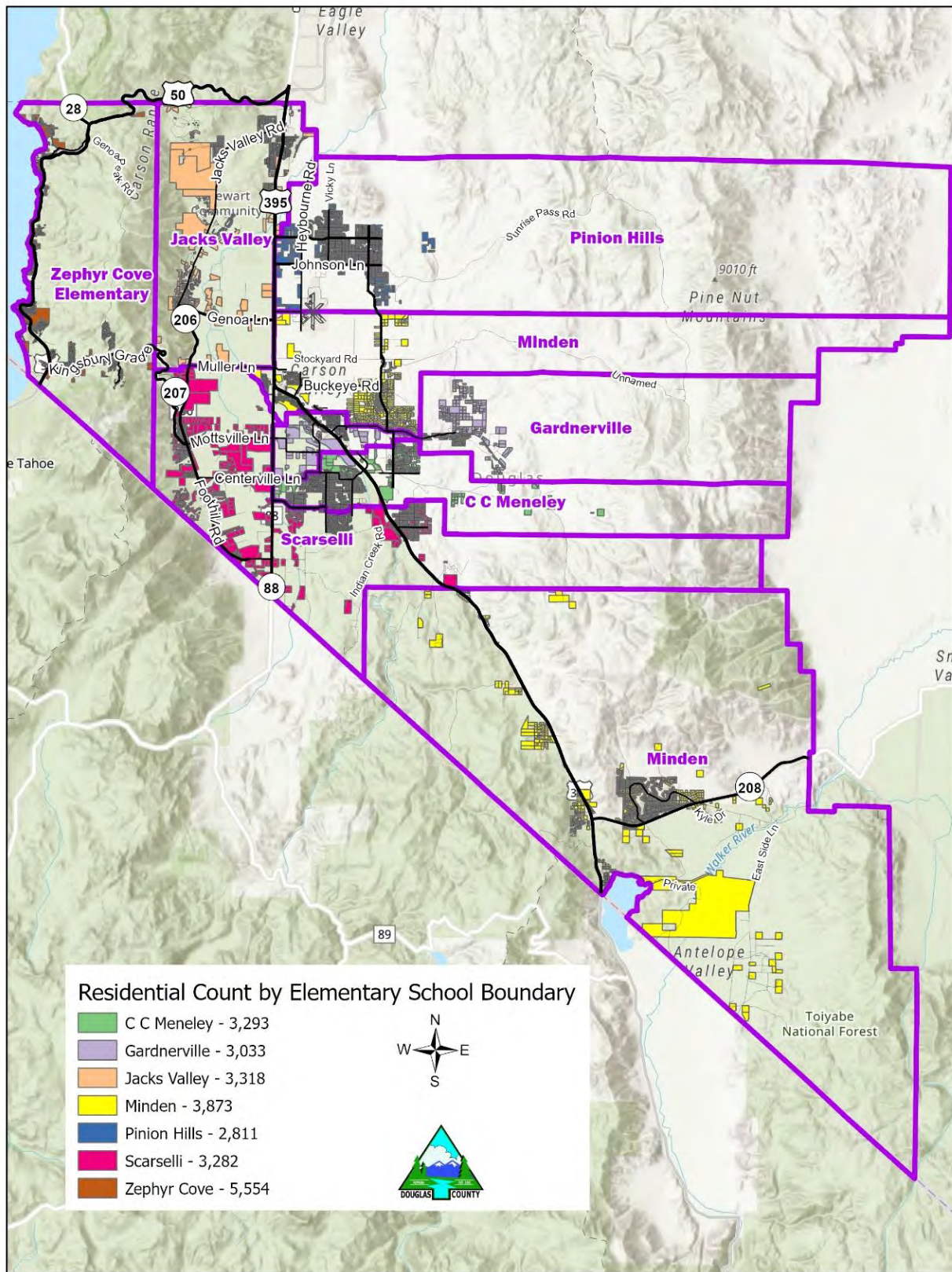


DIAGRAM PF16- RESIDENTIAL COUNT BY MIDDLE SCHOOL

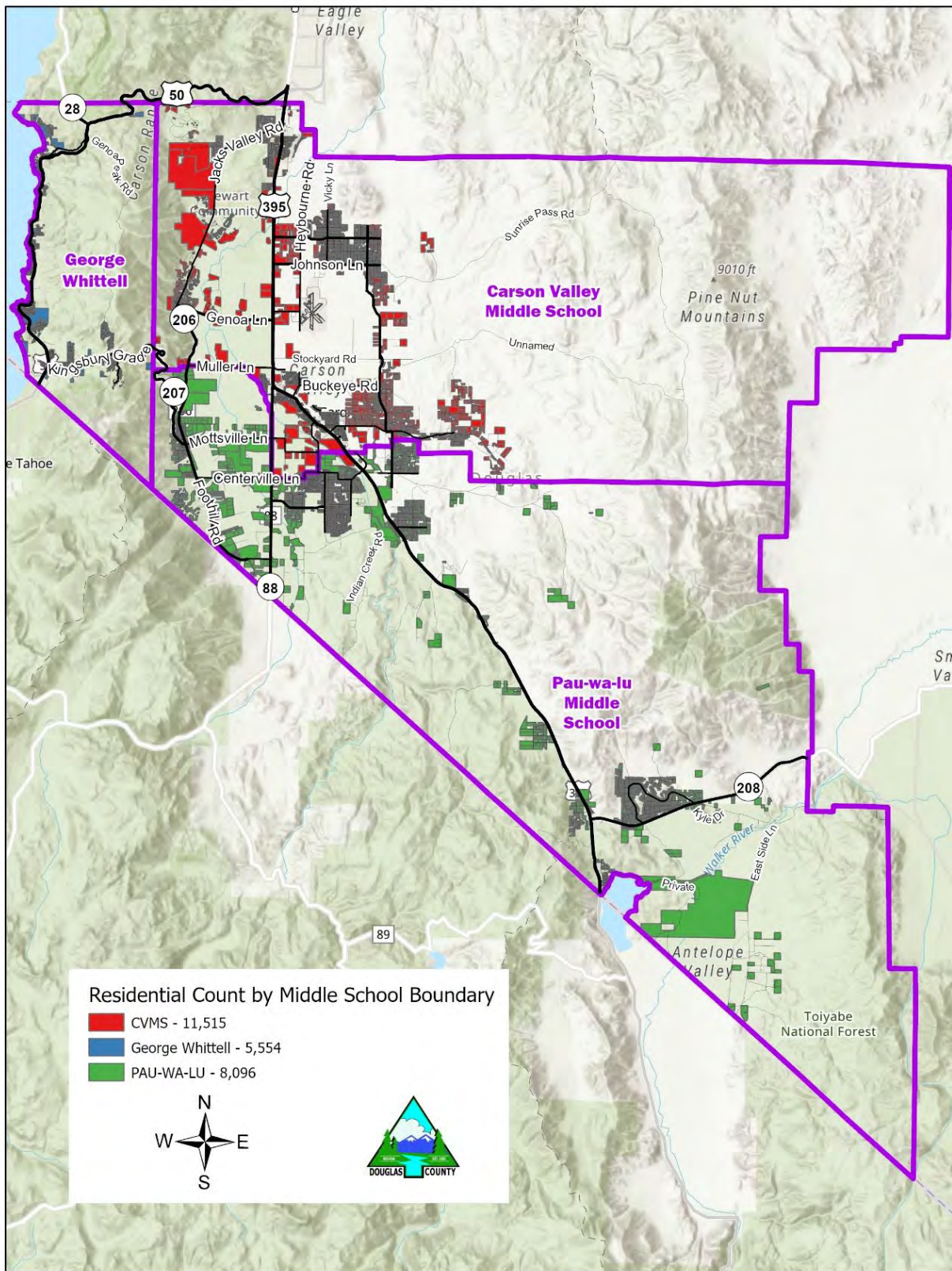
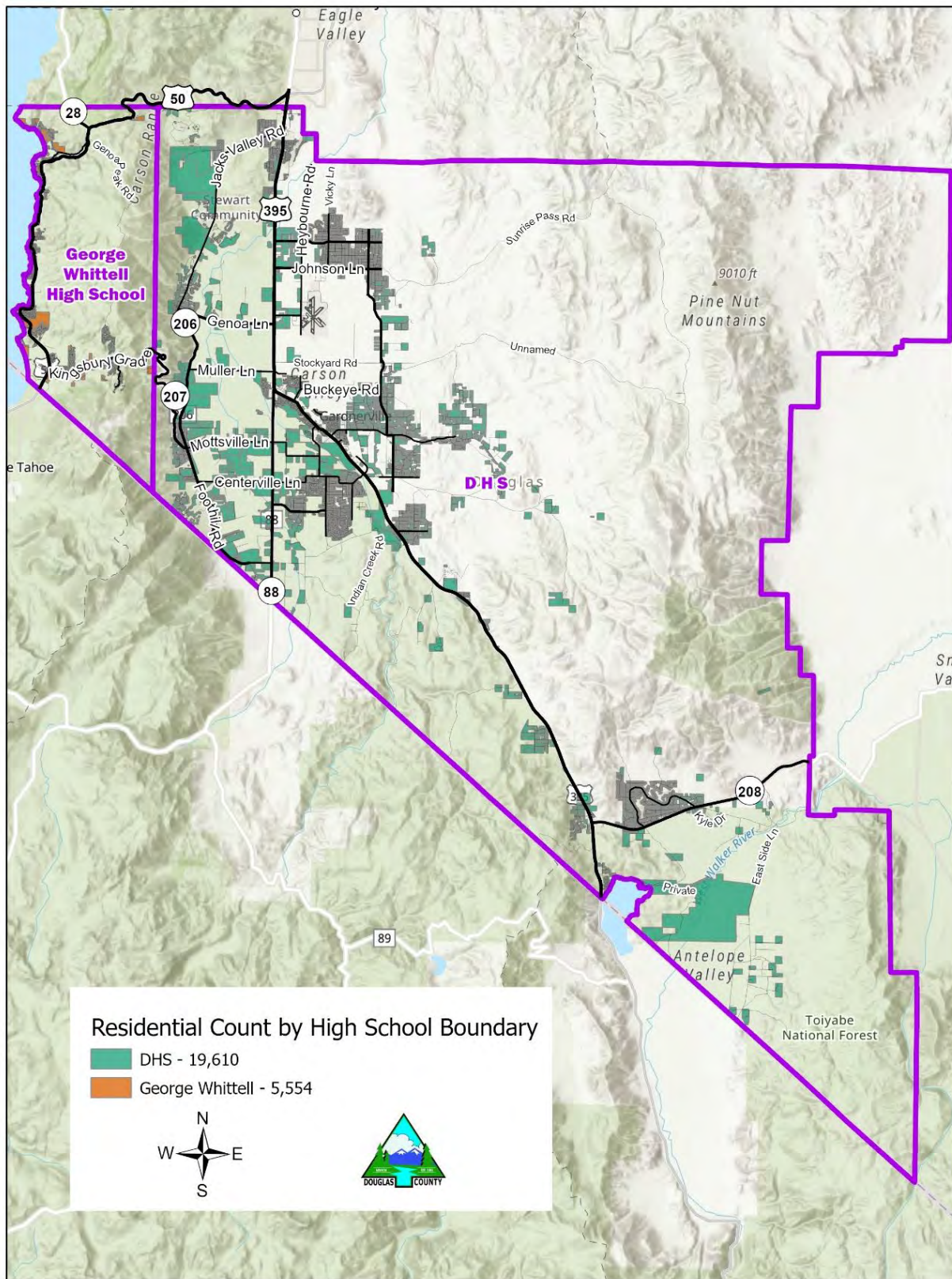


DIAGRAM PF17- RESIDENTIAL COUNT BY HIGH SCHOOL



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 materials not available locally; display space for community interests, art, and exhibits; orientation sessions for students and other youth groups. The Library 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 for implementation over the next 10 years. The Long-Range Plan guides the Library in achieving objectives and action plans. The plan 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 percent 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 provided below:

- The 5-year Capital Improvement Plan (CIP) identifies 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.
- 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 to 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

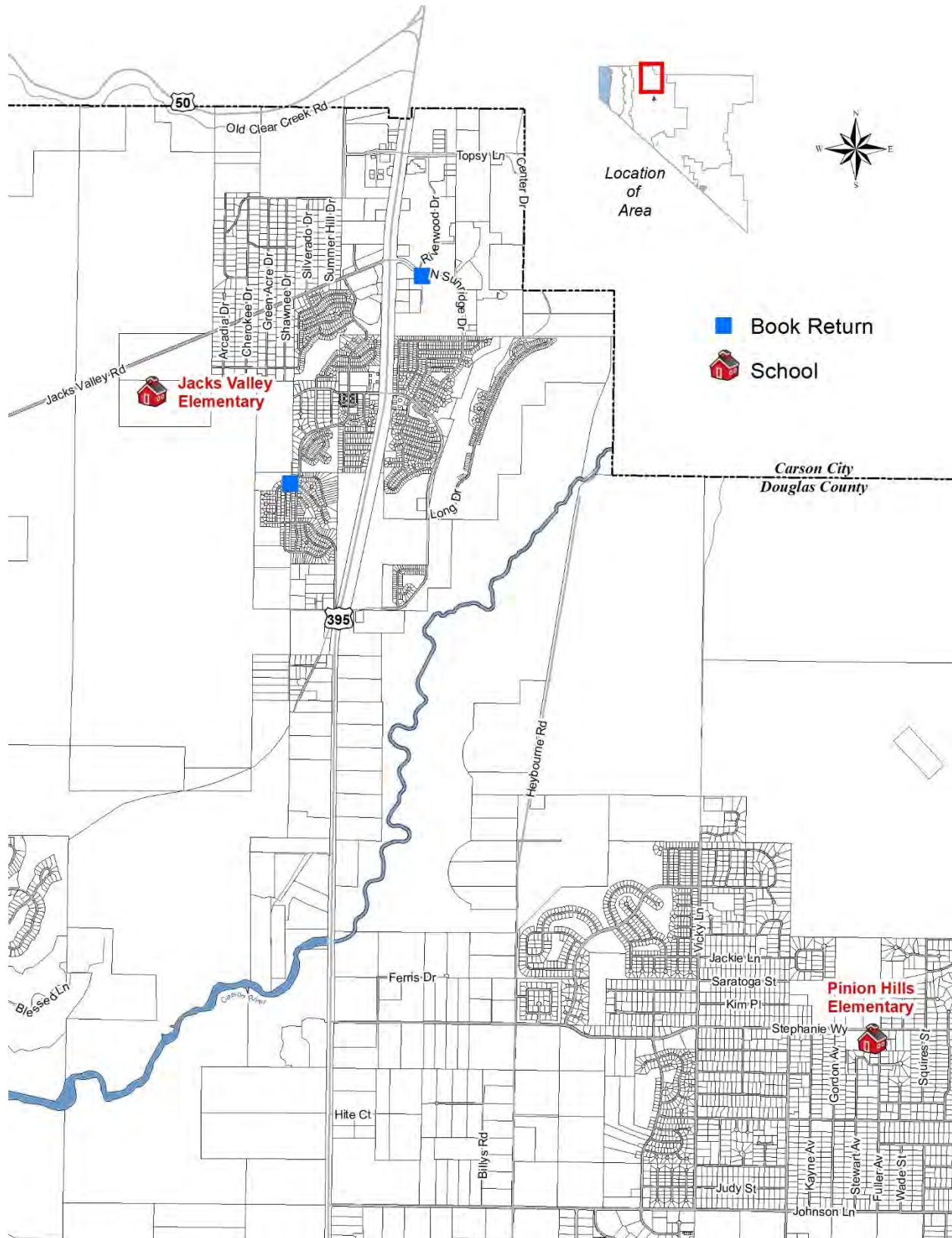


DIAGRAM PF19 – SCHOOL & LIBRARY FACILITIES IN THE CARSON VALLEY

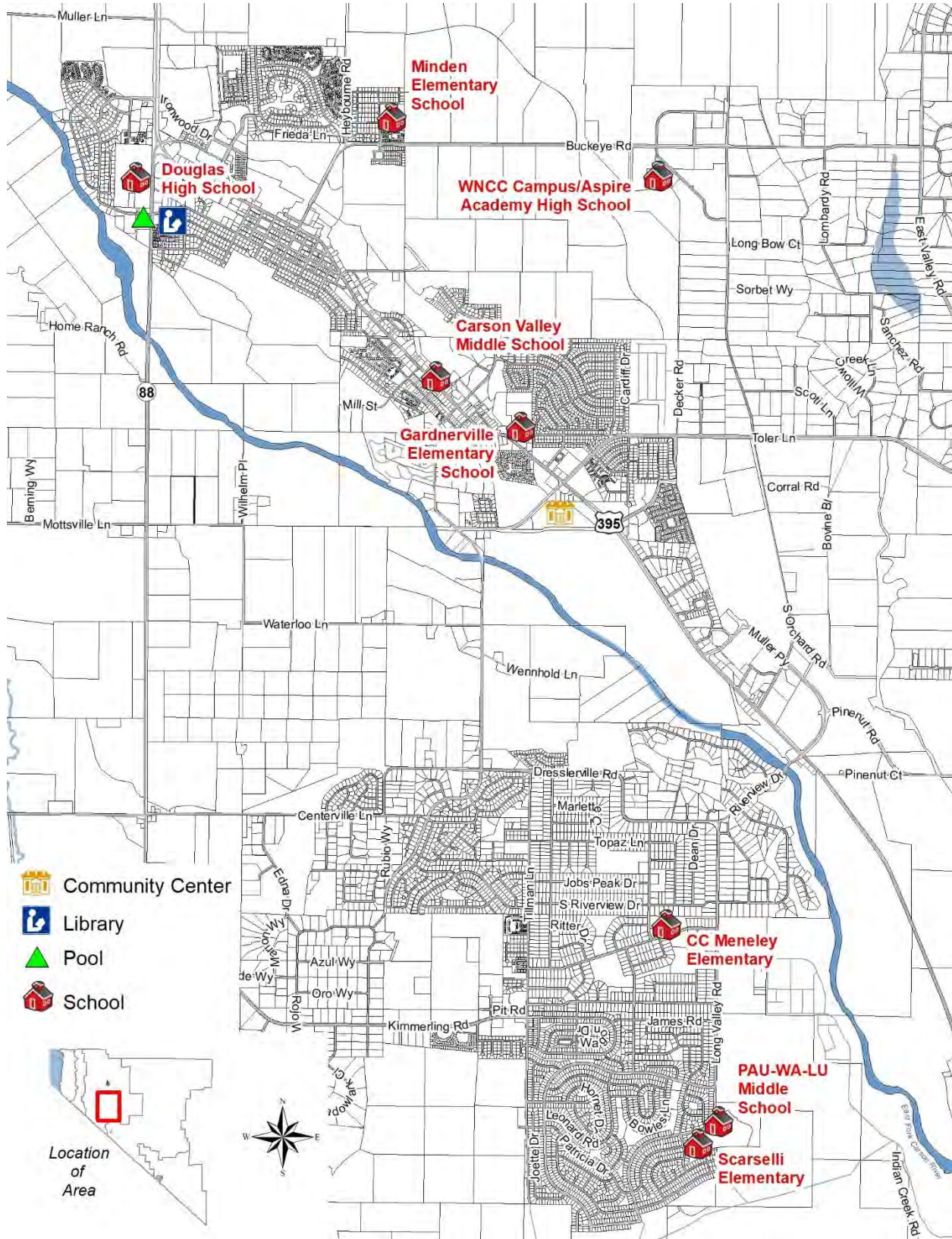


DIAGRAM PF20 – SCHOOL & LIBRARY FACILITIES IN THE PINENUT & TOPAZ REGIONS

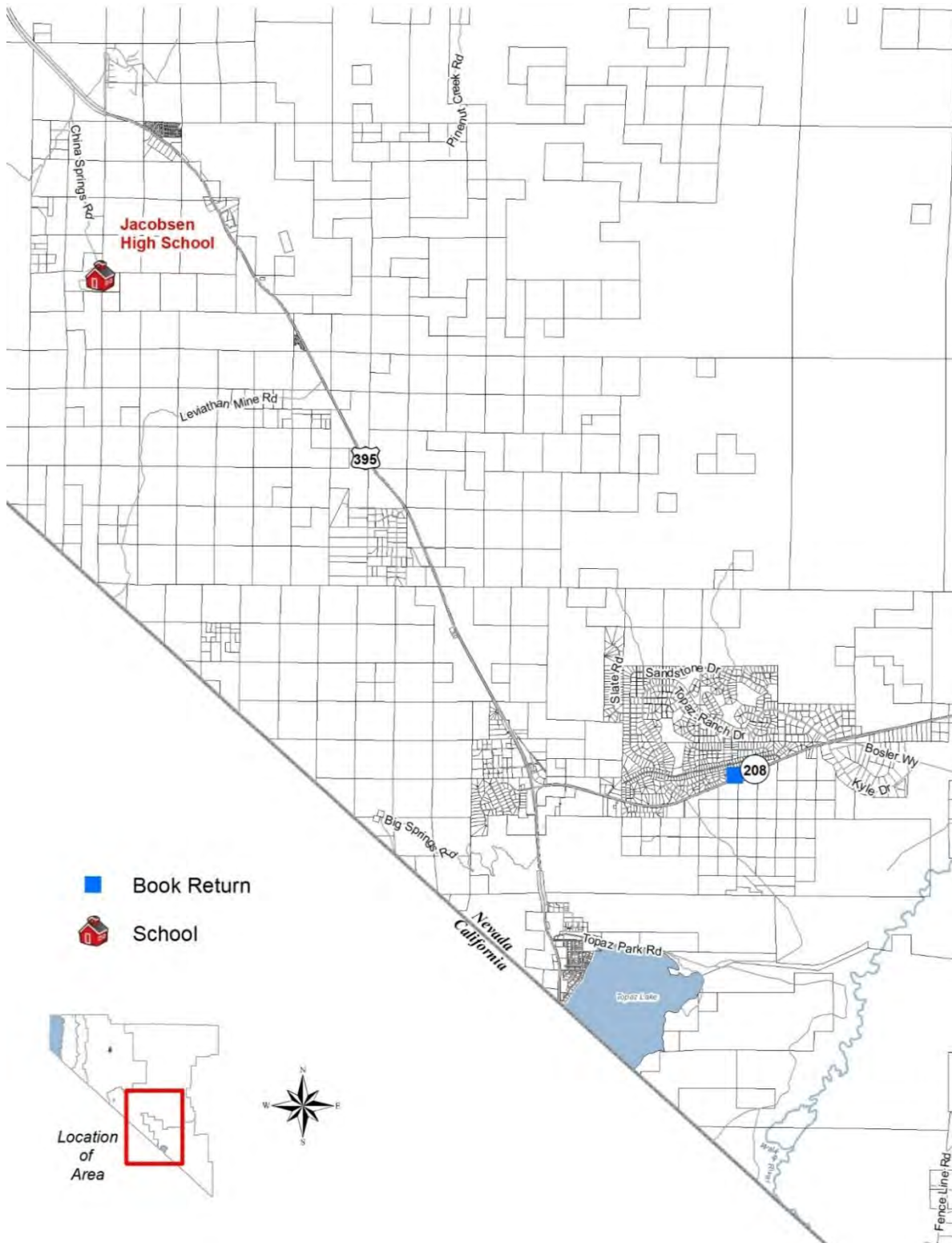


DIAGRAM PF21 – SCHOOL & LIBRARY FACILITIES IN THE TAHOE BASIN REGION



DOUGLAS COUNTY TRANSPORTATION MASTER PLAN

The *2017 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 which make up the chapters of the TMP. The overarching goals of the TMP are:

- GOAL 1: Provide and maintain an integrated transportation system for the safe, efficient movement of people and goods throughout Douglas County.
- GOAL 2: 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

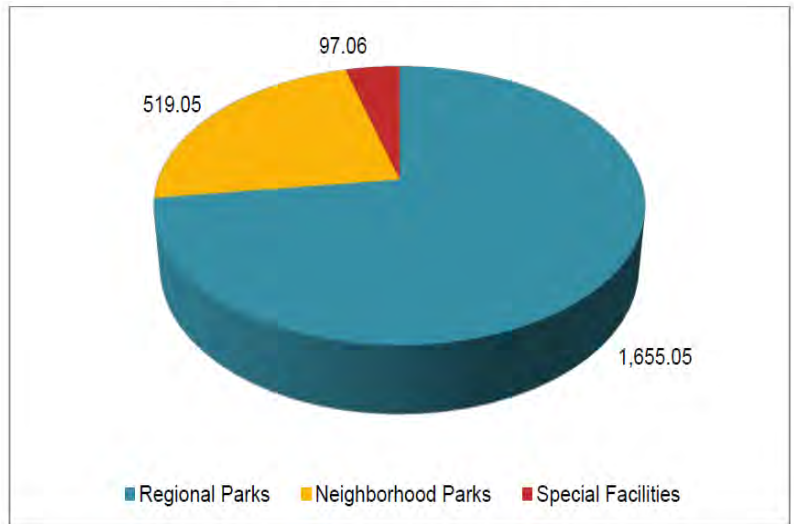
The Bicycle/Pedestrian/Trails Element of the TMP is comprised of two separate documents that are incorporated by reference: the *Douglas County Comprehensive Trails Plan* and the *Douglas County Bicycle Plan*. These documents identify bicycle and pedestrian facilities throughout the county, with the *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 & 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 $\frac{1}{4}$ 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 in no way 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 include regional, neighborhood, and special facilities located in all areas of the County. Figure 1 shows there are 1,655.05 acres of regional parks, 519.05 acres of neighborhood parks, and 97.06 acres of special facilities. Figure 2 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 includes public trails adjacent to the west fork of the Carson River.

Table PF13 – Regional Parks in Douglas County

Name of Facility	Acreage	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	Acreage	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

Table PF14 – Neighborhood/Community Parks in Douglas County

Name of Facility	Acreage	Owner	Status
Wildhorse Park	3.04	HOA	Developed
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) with 1,854 total memberships and 1,251 active annual memberships. The new Senior Center offers meals and activities and now offers 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

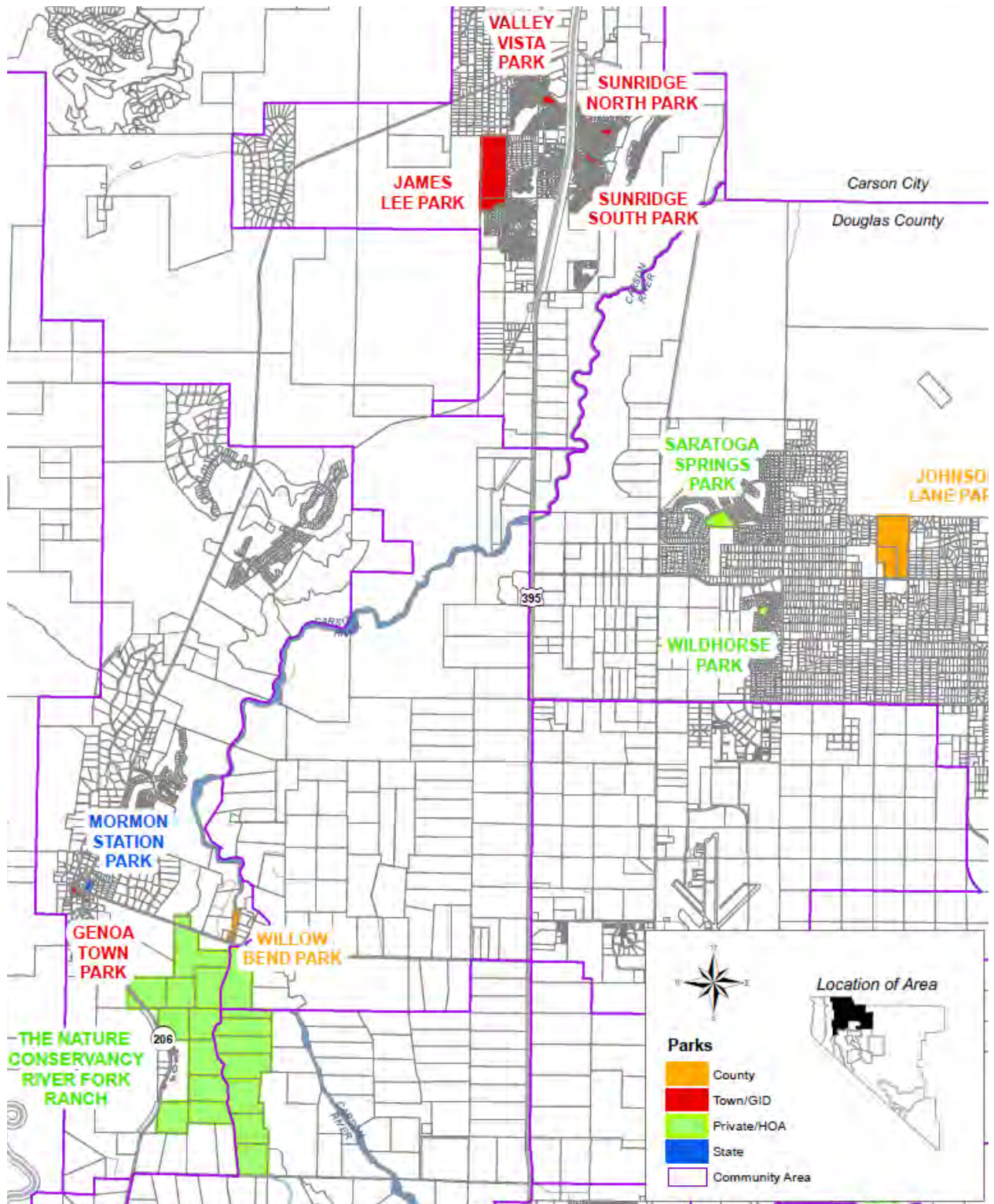


DIAGRAM PF23 – PARKS IN CENTRAL DOUGLAS COUNTY

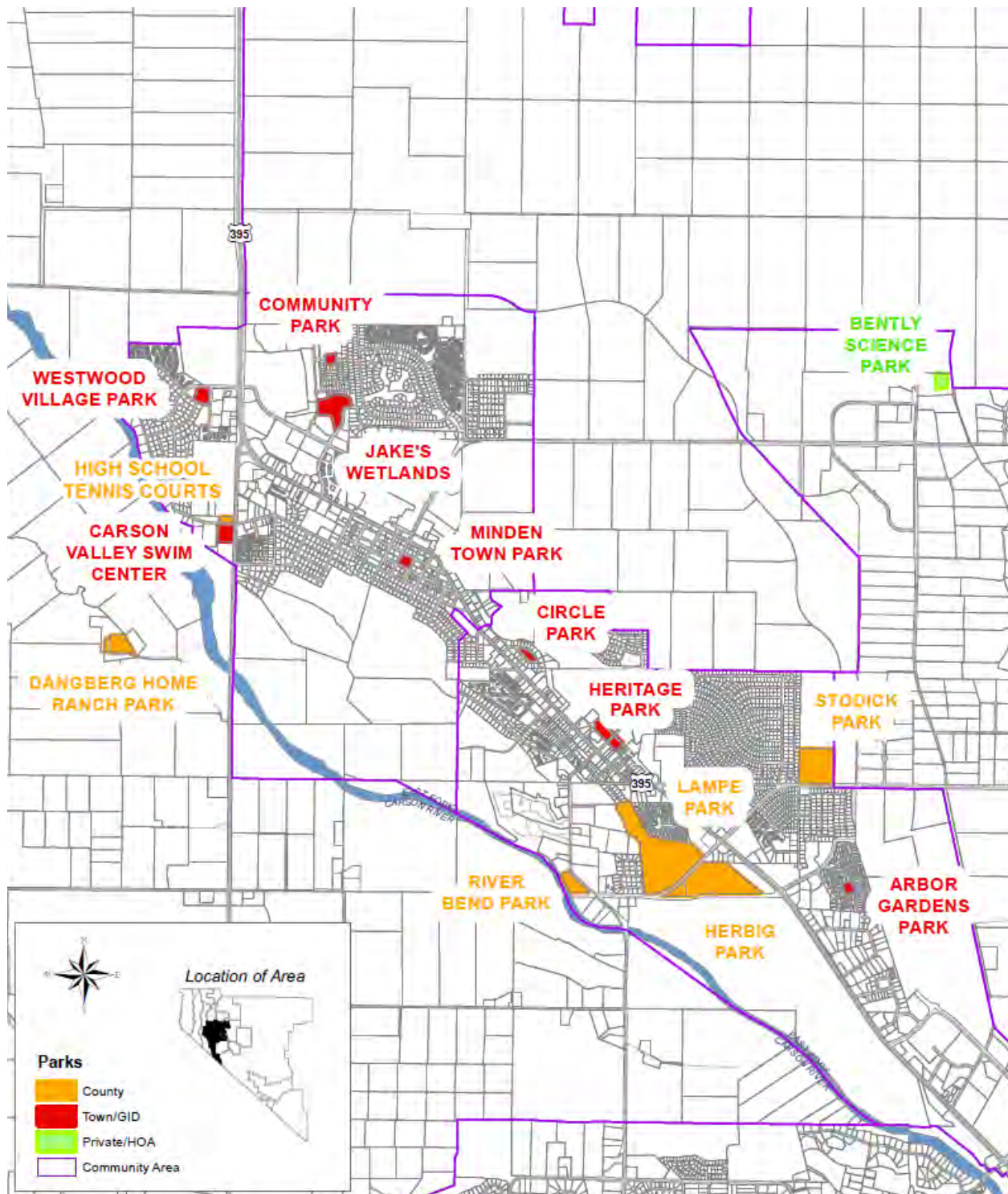


DIAGRAM PF24 – PARKS IN SOUTH DOUGLAS COUNTY

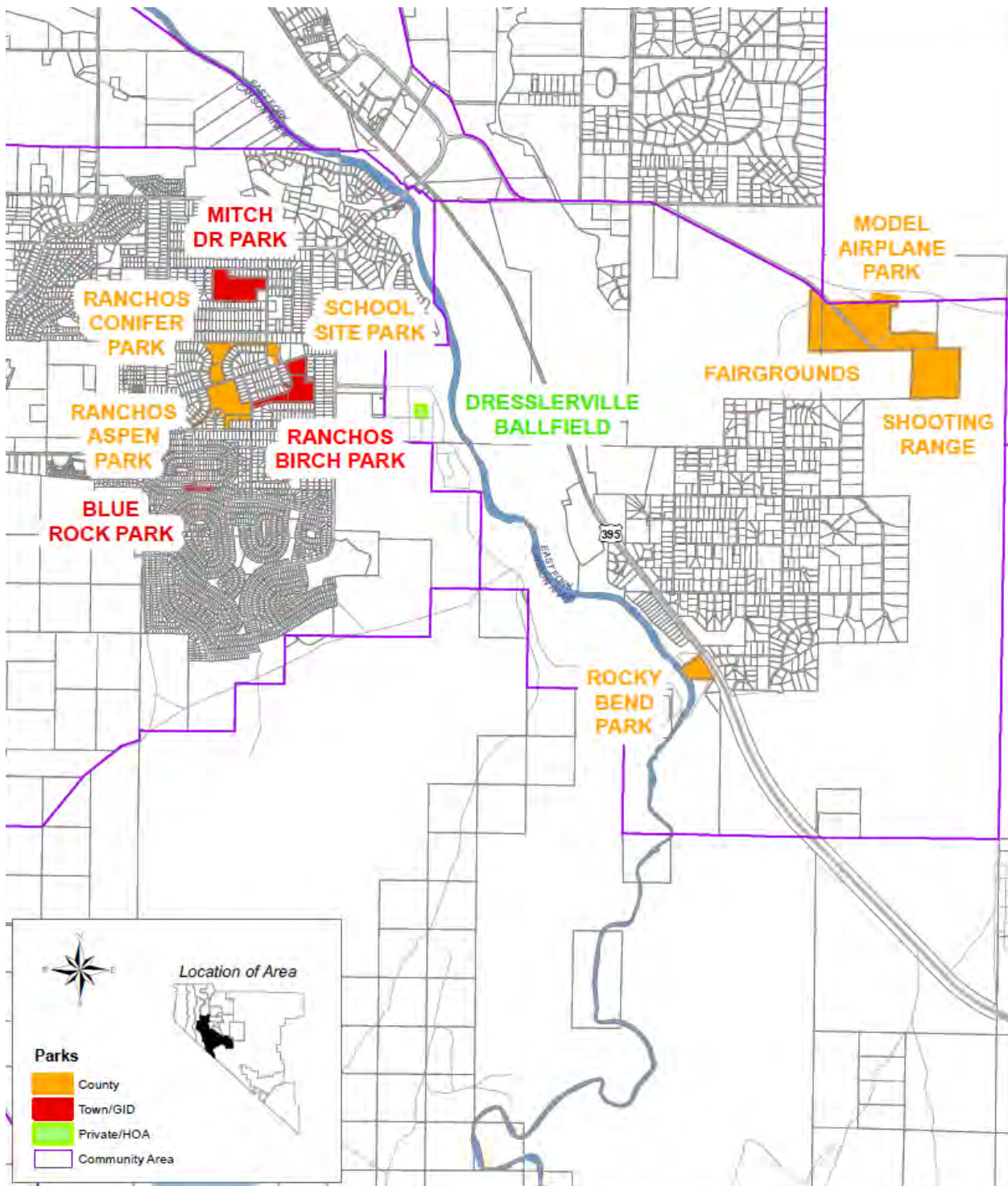


DIAGRAM PF25 – PARKS IN TOPAZ RANCH ESTATES/TOPAZ LAKE

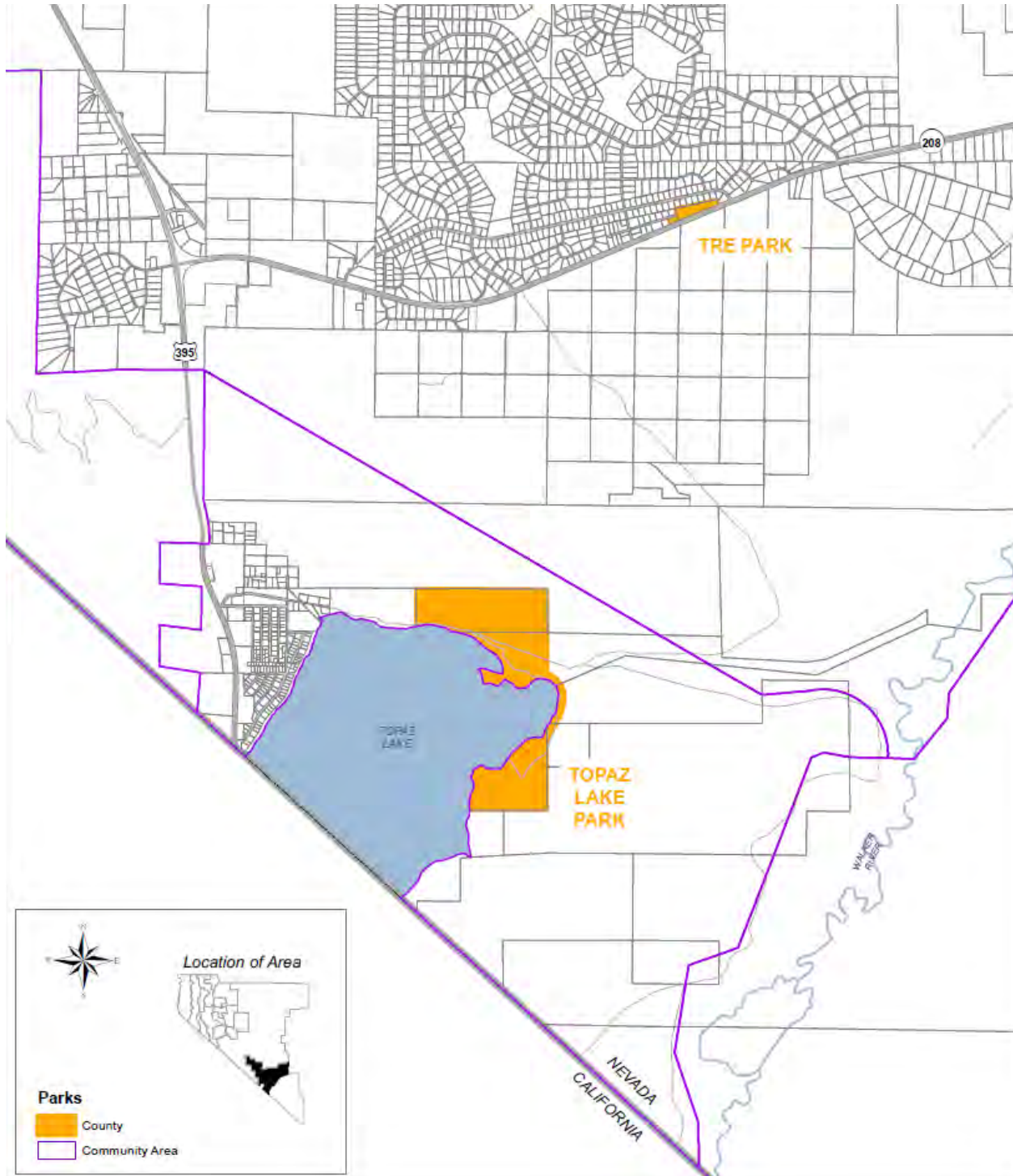
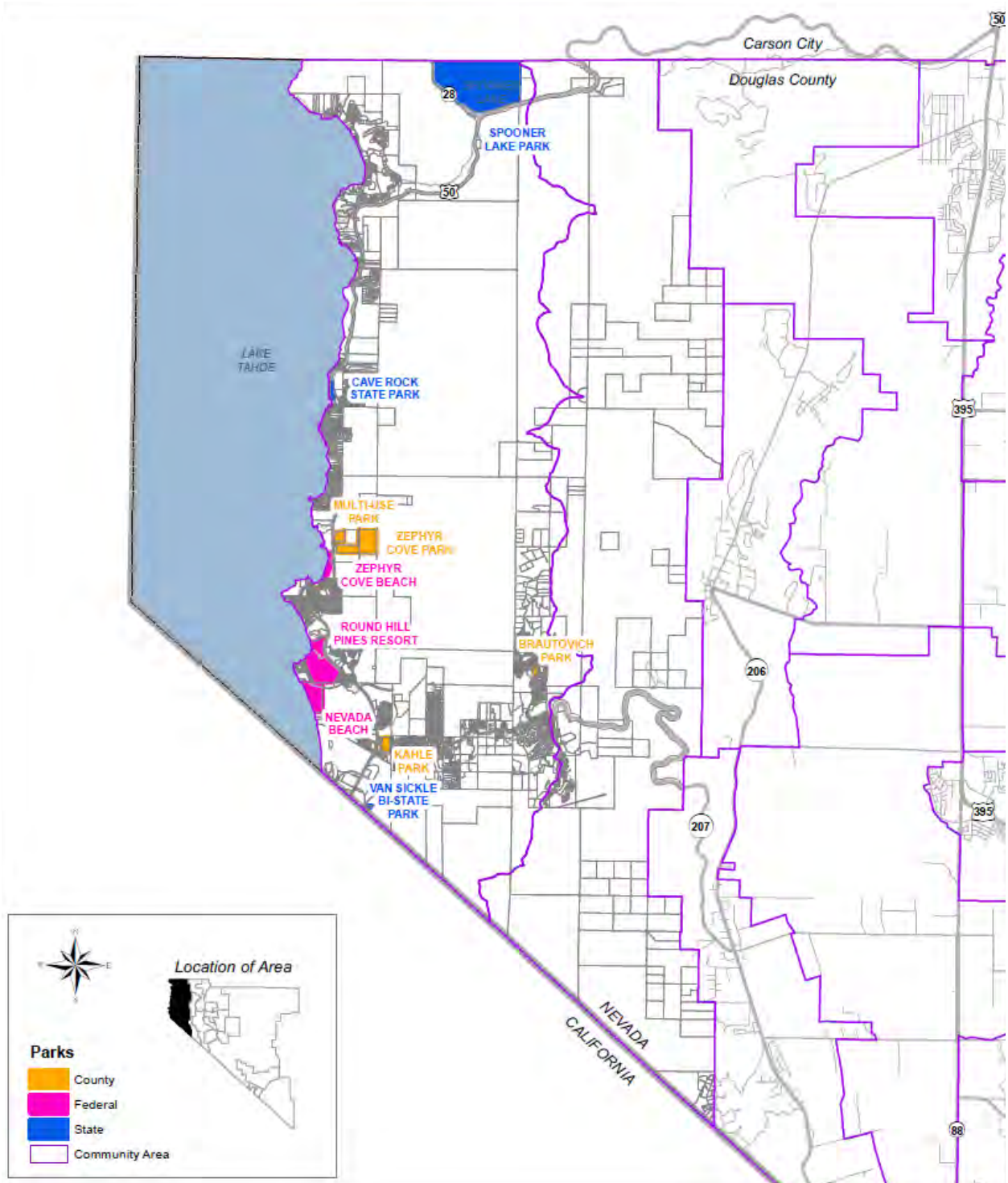


DIAGRAM PF26 – PARKS IN THE TAHOE BASIN



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, areas that 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

The County has established assessment districts in the past to convert septic systems to community wastewater systems. It may be time for the County to explore setting up new assessment districts for areas with septic tank concentrations that can be served either by Douglas County or MGSD. The overconcentration of septic systems in Johnson Lane and Ruhenstroth 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, the plan 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 Nevada Revised Statute 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 pay for public facilities. Under NRS 278B, impact fees may only be used for certain types of capital improvements, such as parks, fire and police stations, wastewater, drainage, and streets. Impact fees can’t be used for school facilities under Nevada law.

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, House Moran Consulting, Inc. was contracted by Douglas County to conduct a feasibility study to evaluate the viability of an impact fee program for the County. The study involved evaluation of regulatory requirements contained in Nevada Revised Statutes Chapter 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 tend to result in a favorable distribution of cost on a per unit basis. Low growth rates result in distributing cost of infrastructure among a relatively small number

² Source: Impact Fee Feasibility Study, Douglas County, Nevada prepared by Douglas County and House Moran Consulting, Inc. May 1, 2018.

of units, resulting in 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 noncontiguous service area may be required in order 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 include:

- Alignment with the goals, policies and actions included in the Master Plan's Growth Management Element;
- Consolidation of fee collection process, which allows for a single accounting system for all fees;
- All capital improvements could be included and managed under a single program;
- By definition, the cost for capital improvements associated with new construction are directly proportional to the impact fees collected;
- Existing residents won't bear the cost of new development through increased taxes;
- Revenue generated is earmarked exclusively for infrastructure for new development;
- Ensuring the land use plan and capital improvement plan are properly synchronized; and
- The program can be incrementally implemented by with the most critical and/or most costly infrastructure.

Disadvantages of adopting an impact fee program for the County include:

- Several actions are required in order to establish an impact fee program which requires 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 Capital Improvements Program (CIP). The CIP identifies priorities and funding for each capital improvements project. The cycle of needs identification, needs analysis, and project programming should be reviewed to ensure 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 advises that it 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.

The first land use designation is Recreation and there is only one compatible zoning district: PR, or Private Recreation. The PR Zoning district is intended to provide commercially oriented recreational land uses on privately owned parcels, such as tennis clubs and golf clubs.

The second land use designation which is 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 is Forest and Range. The Forest and Range land use designation includes two 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.

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

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.

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, provides an example of a project that provides access to the Carson River, protects the floodplain, and restores the health of the Carson River. The Bently-Kirman Trail, which is located north of Heybourne Road, is yet another example of a project that provides access to the Carson River while protecting the floodplain from development.

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 Chapter 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. The 2001 vote was not successful, however. 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 of the voters, 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 less than 100,000 population after September 29, 2029. Beginning on October 1, 2029, only counties with more than 100,000, but less than 700,000 population, are 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 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.



12

EAST RURAL FIRE AND PARAMEDIC DISTRICTS
FIRE STATION #12



6. PUBLIC SAFETY





PURPOSE

The purpose of the Public Safety Element is to review public safety services and capacity in Douglas County. This section provides an update status on fire protection, emergency medical, emergency management, law enforcement, emergency services in Douglas County. Consistent with NRS 278.160 (g), the safety element also identifies potential types of natural and manmade hazards, including floods, landslides, fires, or hazardous materials and seismic safety plans.

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



Flood-prone areas, including wetlands, sloughs, arroyos, alluvial fans, detention facilities, and other flood risk areas should be considered for dedication for public usage as parkways, sports facilities, neighborhood parks, recreational areas, and for wildlife habitat. Adequate right-of-way for the conveyance of storm water to the Carson River should be obtained.



Non-structural flood control measures such as zoning limitations, open space acquisition, and watershed management should be used within the Carson River Floodplain and tributary watersheds as alternatives to structural measures.



Encourage maintenance of historic stormwater discharge rates and volumes into surface water systems via the promotion of state-of-the-art stormwater management techniques.



Assist the agricultural community in maintenance of irrigation systems used for drainage and/or flood control.



Require sufficient easement widths for improvements and maintenance along all conveyance ditches that will be used for stormwater flood flows.



Encroachments and structure setbacks should be reviewed and easement placements should be required on future maps to eliminate conflicts and ensure that maintenance of the conveyance ditch and/or storm drain system can be achieved.



Continue to work with the Carson Water Subconservancy District, the Bureau of Land Management (BLM), and the United States Forest Service (USFS) to address the upstream source area of flooding.



Areas where flooding of structures occurs should be given top priority for both structural and non-structural improvements.



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 Bureau of Land Management, and the U.S. Forest Service 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.



Acknowledging that the community is located in a seismically active area, require strict adherence to building code recommendations for potential seismic events to protect individuals, buildings and infrastructure.



Implement and keep the Hazard Mitigation Plan updated regularly.



All local roads should 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.



Reduce exposure to pollutants and promptly mitigate spills and releases of toxic chemicals.



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.



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



Consider the adoption of the Wildland Urban Interface Code and consider the adoption and updating of a Community Wildfire Protection Plan (CWPP).



Encourage the use of social networks in communicating matters of public safety.

CURRENT TRENDS

The health and safety of residents and visitors to the community remains the highest priority for Douglas County and its partner agencies. The County is committed to ensuring 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 which provide public safety services are listed below.

- 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 thirteen (13) fire stations operated by East Fork and four (4) fire stations and one (1) crew quarters operated by Tahoe Douglas. The Douglas County Sheriff's Office has two (2) main offices and three (3) substations (see Diagram PS1 for the locations). 911 Emergency Services is located in the County Call Center and operates a mobile incident command center.



DIAGRAM PS1 – LOCATION OF PUBLIC SAFETY FACILITIES IN DOUGLAS COUNTY

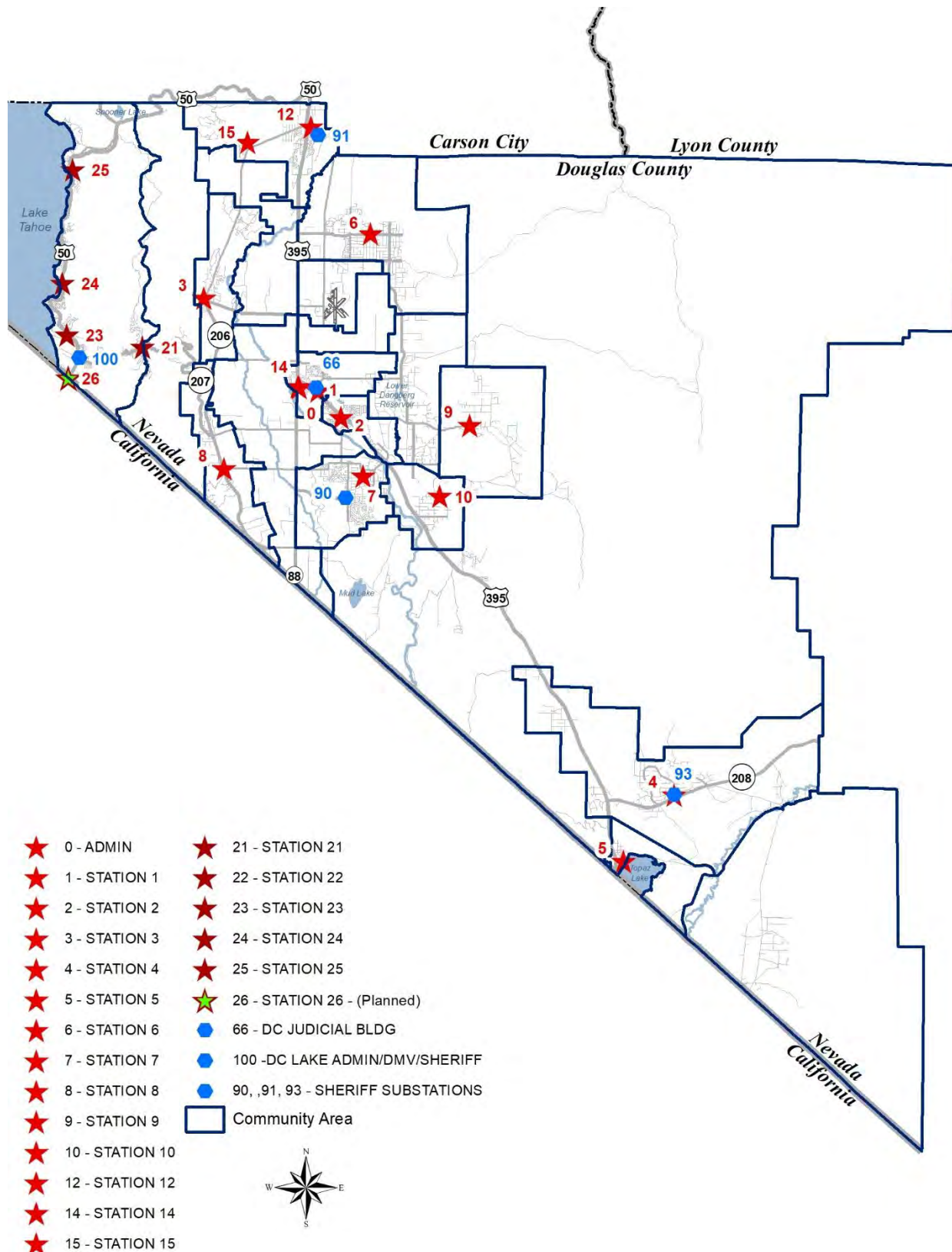
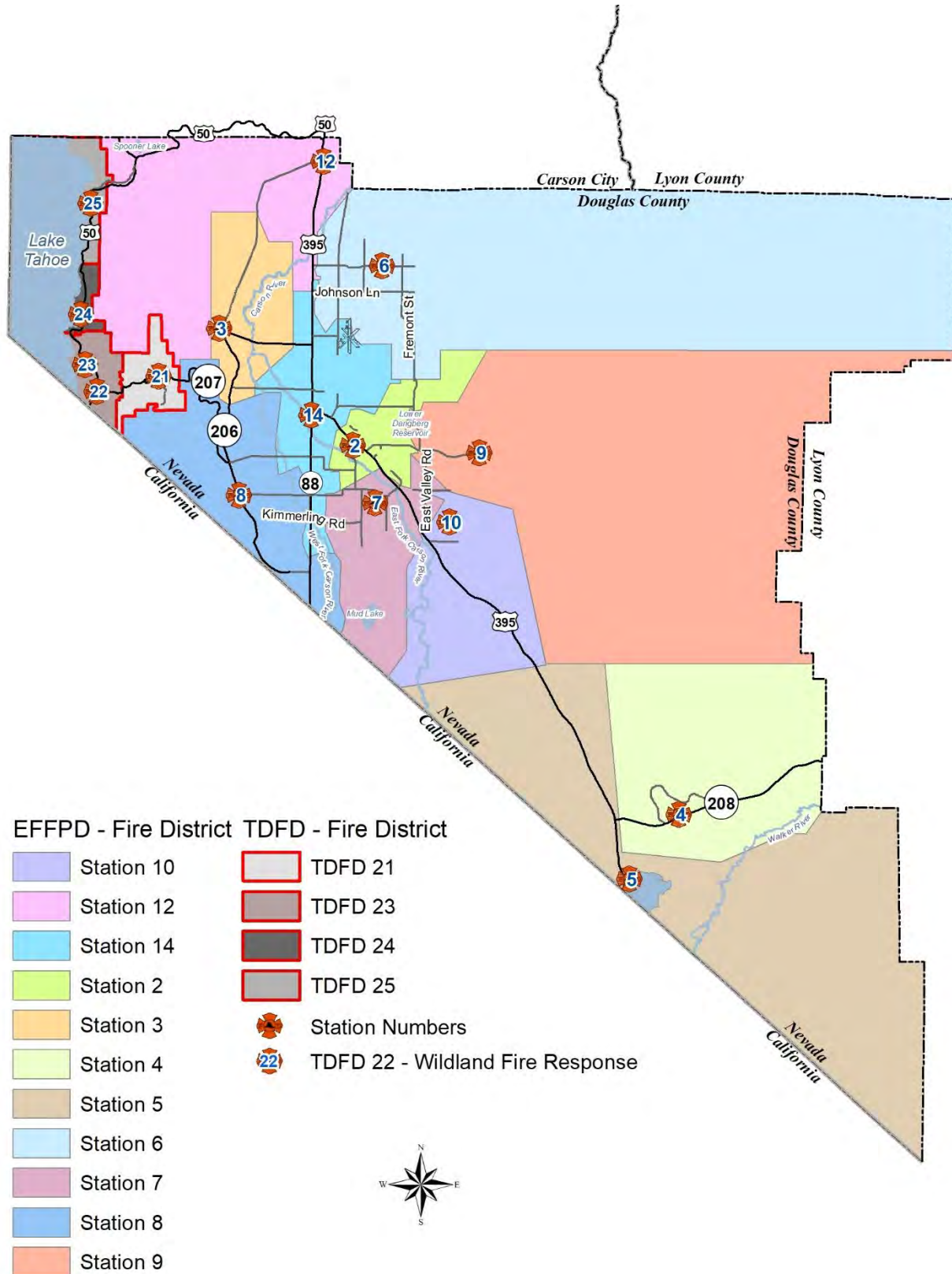


DIAGRAM PS2 – TAHOE FIRE AND EAST FORK FIRE RESPONSE DISTRICTS



FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

In Douglas County, fire protection and emergency medical services (EMS) 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 which would recognize and reconstitute the district under the provisions of NRS 474.010 to 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 Pine Nut region is mostly under the jurisdiction on Bureau of Land Management (BLM) and



Bureau of Indian Affairs (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 United States Forest Service (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 6500 calls for service annually and serves a population of approximately 43,000 residents (15.11 calls per 1000 residents), which increases to approximately 60,000 seasonally. Many aid agreements have been approved with various Nevada, California, and Federal (USFS and BLM) fire service agencies to provide seamless responses to Douglas County citizens and those that border the county, 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 1 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, fire safety inspections; code enforcement; plans review; and public education.

Standards of Cover and ISO Rating

The East Fork Fire Protection District Board of Directors adopted [Standards of Cover](#) in July 2017. 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 towards firefighter safety. The goal is to provide adequate life safety and/or fire attack resources in pre-flashover stage of the fire, allowing the victims of fire the greatest chance of survival possible.

East Fork has improved its Public Protection Classification with the Insurance Service Office/Commercial Risk Services, Inc. (ISO). The Public Protection Classification Number is used to by the insurance industry for determining premiums for residential and commercial property. East Fork’s current ISO Fire Suppression Rating Schedule is a Class 3 for eighty-five (85) percent of the district. Double Spring Flat within the Topaz Ranch estates /Holbrook junction community area is a protection 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 all volunteer staffed, five are solely staffed with career personnel, and one station is leased to the U.S. Forest Service 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 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 with 42 volunteers also wildland trained. The ratio of career firefighters for every 1,000 population is provided in Table PS2.

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, Nevada, established and organized in 1946 under Nevada Revised Statute (NRS) 318. Tahoe Douglas provides fire protection, emergency medical service (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.





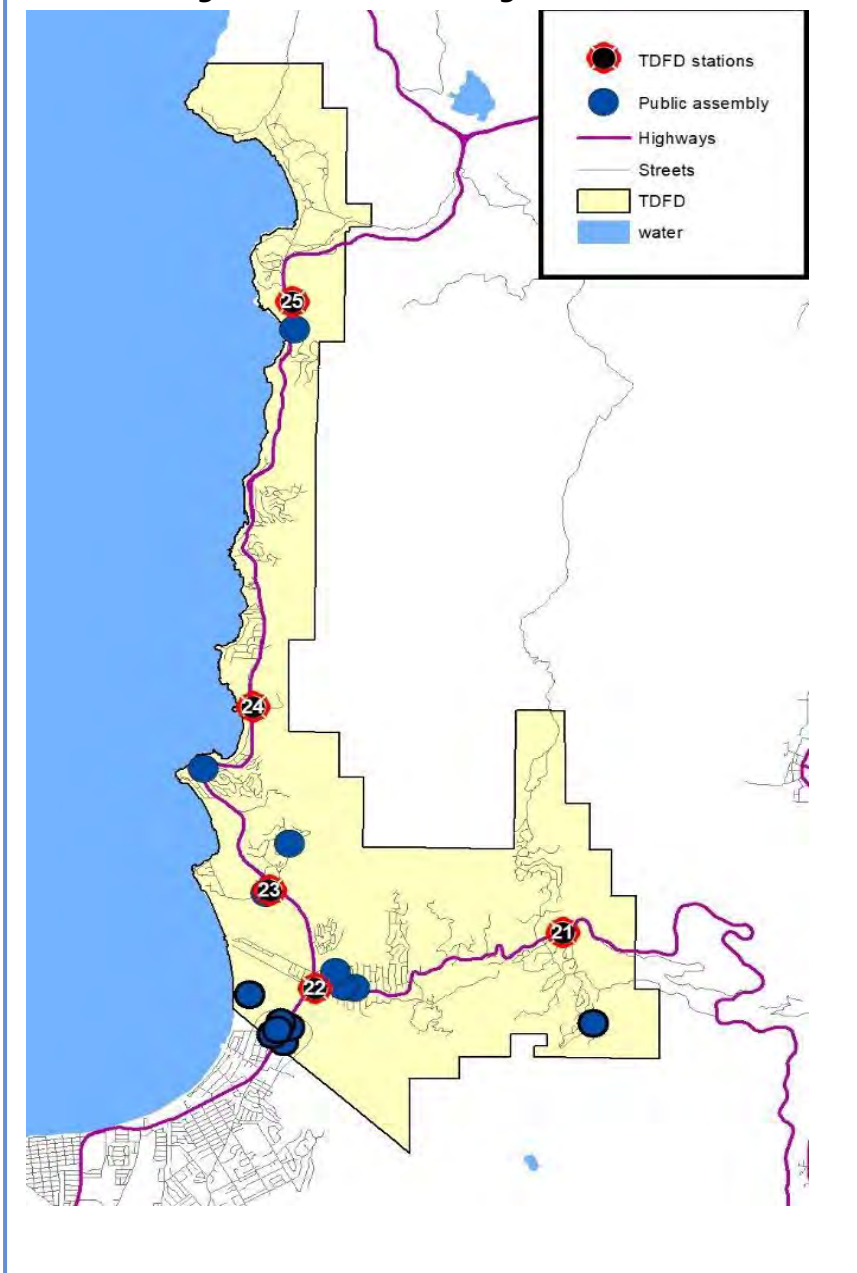
Policy direction for Tahoe Douglas is provided by an elected five-member Board of Trustees (Board). The Board provides the necessary power and authority to govern the provisions of fire protection and emergency services. The Board appoints the fire chief who is responsible for implementing Board policy and overseeing the operation of the fire district.

The Tahoe Township is the area of Douglas County 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

Tahoe Douglas Fire Protection Districts is divided into five response districts. The Stateline area is made up of several large hotel resort casinos, residences, condominiums, apartments, and a wide variety of businesses. The tourist population in the 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.

Diagram PS3 -Tahoe Douglas Fire District

all times.

Tahoe Douglas (Goal H) 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. [Standards of Cover, ISO Rating](#). 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 counting the seasonal wildland, fuels reduction crews, serving a full-time resident population, and protects 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 population with 2.4 firefighters per 1,000 population on duty at

The fire district operates four fire stations and one fleet maintenance facility, a wildland crew facility, and 24 response apparatus, 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.

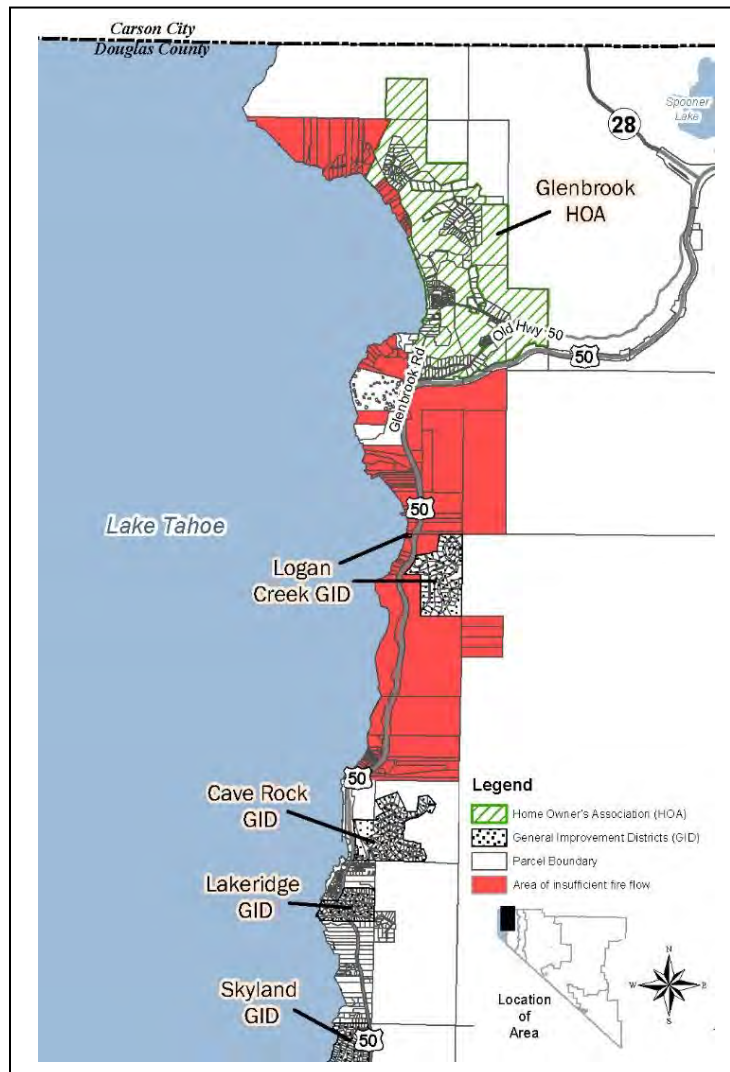
**Table PS3 – Tahoe Douglas
Calls for Service**

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) April of 2017, there are four participating paid member areas and a new fire boat has been purchased. 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 as required), see Diagram PS4. Tahoe Douglas has future 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 manpower. 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 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 if necessary, 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-3s, and R-2s with less than 5 units. Occupancies will be inspected in accordance with the currently adopted editions of the International Fire and Building Codes.

The Tahoe Douglas Fire Prevention Bureau Inspects all permitted Vacation Home Rentals (VHR). One out of every four (4) homes within the District is a VHR, currently around 600 units. The average occupancy in each unit is 10 persons. The highest occupancy is 26 persons. The largest unit is 10,000 sq./ft. The average size is 2,131 sq./ft and many are multi-story. These Residential group R3 occupancies are primarily permanent in nature with a change of use permitted through Douglas County, VHR's 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 4-year rotating cycling to be evaluated for code compliance with necessary follow up and enforcement. Fire Prevention will also assist the community by issuing Tahoe Regional Planning Association (TRPA) tree removal permits for trees that create a fire threat to surrounding structures. Diagram PS2 displays the boundary lines and the response districts for East Fork and Tahoe Fire.

LAW ENFORCEMENT

Douglas County Sheriff's Office (DCSO) serves as the County's only local law enforcement agency within both, the Tahoe and East Fork Township. 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. There are substations located in Lake Tahoe, Indian Hills, Gardnerville Ranchos, and Holbrook Junction. The DCSO currently employs 130 employees, including 110 sworn officers. The Staffing ratios (as of July 2020) for law enforcement officers per 1000 residents are provided in Table PS4.



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, Motor Boat Patrol, Search and Rescue, School Safety Intervention and youth educational 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 Investigation Division has six Investigators assigned to general investigations and four Investigators 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 Judicial and Law Enforcement Center (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 people in Douglas County). The total building is comprised of 9,723 square feet of administrative space, Court rooms and jail facilities. See Public Facilities Element 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 in the DCSO includes six Sergeants, 38 patrol deputies, and six traffic enforcement positions for a total of 50 personnel. That is 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 and responds to approximately 40,100 calls for service and investigates about 400 to 500 traffic accidents annually. The Patrol Division also serves as the Deputy Coroners 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

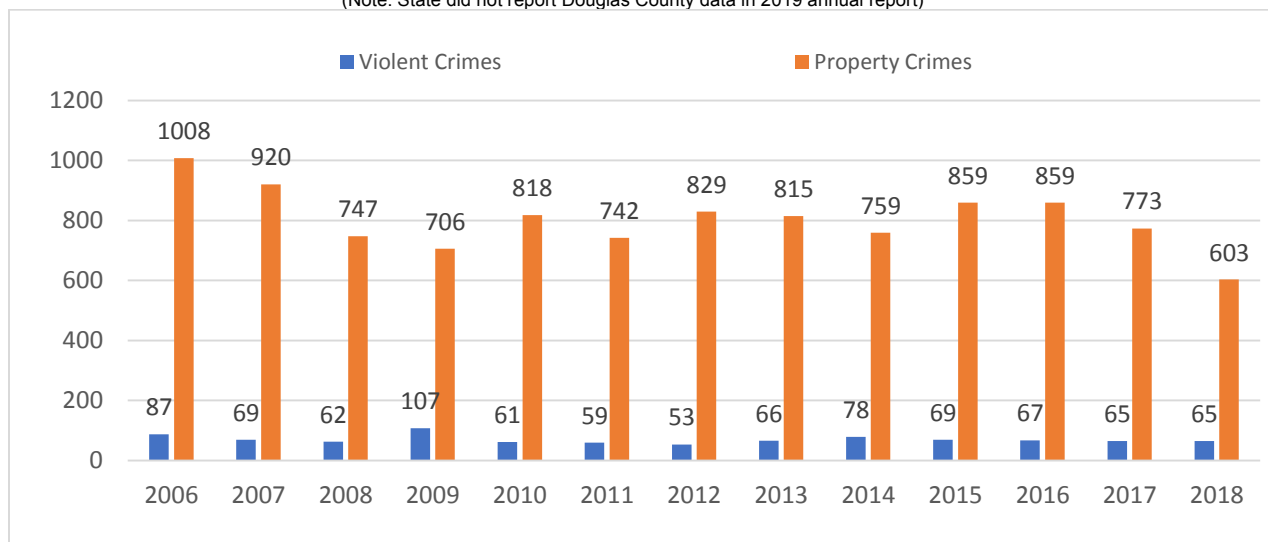
Year	Calls for Service	Arrests	Citations	Total Bookings in Jail	Total Releases from Jail	Average Daily Jail Population
2010	40,374	2,426	5,036	2,578	2,602	81
2011	42,557	2,462	5,944	2,491	2,482	60
2012	42,155	2,663	5,966	2,675	2,711	63
2013	36,164	2,495	5,717	2,848	2,557	63
2014	35,753	3,007	5,577	3,030	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, consisting of: criminal homicide, rape, robbery, and aggravated assault, and property crimes which include: burglary, larceny-theft, motor vehicle theft and arson. For calendar year 2018, the crime rate for Douglas County was 13.47 crimes per 1000 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). 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 towards 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 (Sherriff, 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 for 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 Call (2010 – 2019)

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 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%

NATURAL HAZARDS

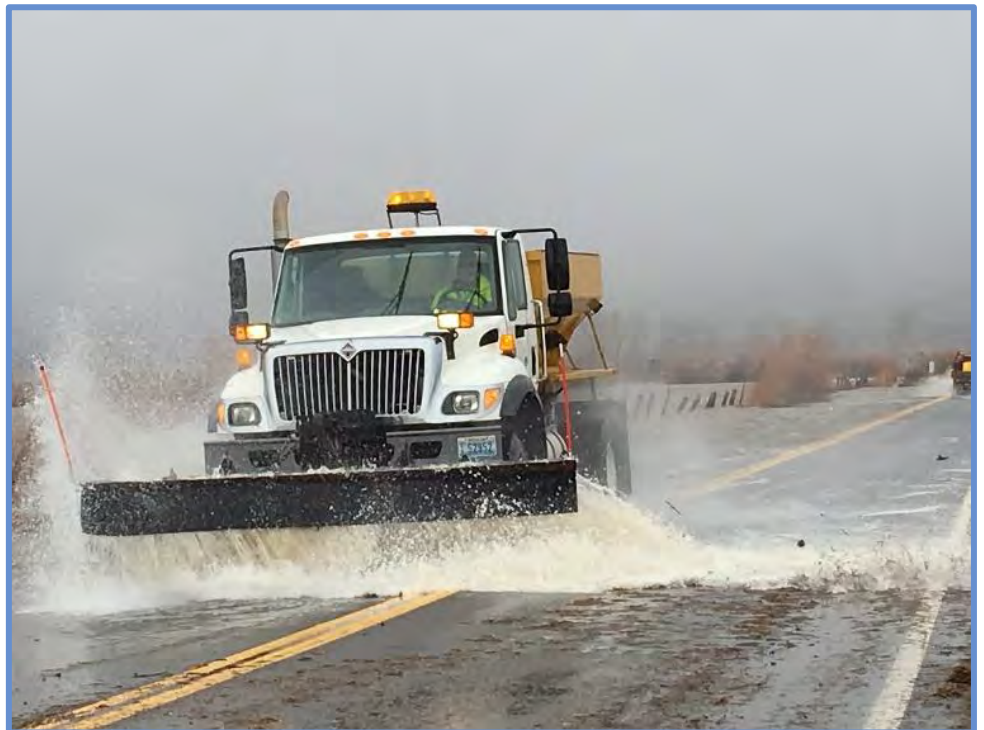
The top five natural hazards identified in the 2019 Douglas County Hazard Mitigation Plan are: flooding, earthquakes, wildland fires, drought, and severe events. The Public Safety Element focuses on flooding, earthquakes and wildfires due to the frequency of these events during the last 20 years.

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. In Douglas County, 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 any time between November and April in successive years, or not occur at all for many years.

Riverine floodplains allow flood waters 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 the 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 to rush through



canyons and ravines onto the Valley floor in just minutes or hours after the intense storm. 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 flash floods is an issue that our residents face each year. The county does provide flood awareness literature information to residents annually in an effort to bring awareness to both the causes of flash flooding and recommendations for what residents can do to prepare 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 webpage [here](#).

[Nevada Flood Chronology records](#) retained by United States Geologic Survey note flooding in the Carson River Watershed also occurs as part of the natural cycle of snow pack 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" run off and overflow from the river, protecting houses and structures in developed areas of the County. Additional information on protection of floodplains is addressed in the Agricultural and Conservation Element of the Master Plan.

In 2018 Carson Water Subconservancy District (CWSD) worked with Michael Baker International to prepare a [Carson River Watershed Floodplain Management Plan \(2018\)](#). The purpose of this Regional Floodplain Management Plan (RFMP) is to create a long-term vision and develop strategies which 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 first adopted by the five county boards impacted by the Carson River in 2008 and updated in 2013. To increase flood safety in Douglas County related to the Carson River, the CWSD Carson River Watershed Floodplain Management Plan (2018) recommended a number of flood risk reduction and floodplain strategies for the region 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) in order for property owners to 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 based on 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 as a 6, which gives property owners that are required to obtain flood insurance a 20% 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.

Special Flood Hazards Areas (SFHA) are defined as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year. The 1%

annual chance flood is also referred to as the base flood or 100-year flood. These 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% 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 (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.

DIAGRAM PS5 – SPECIAL FLOOD HAZARD ZONES IN CARSON VALLEY REGION

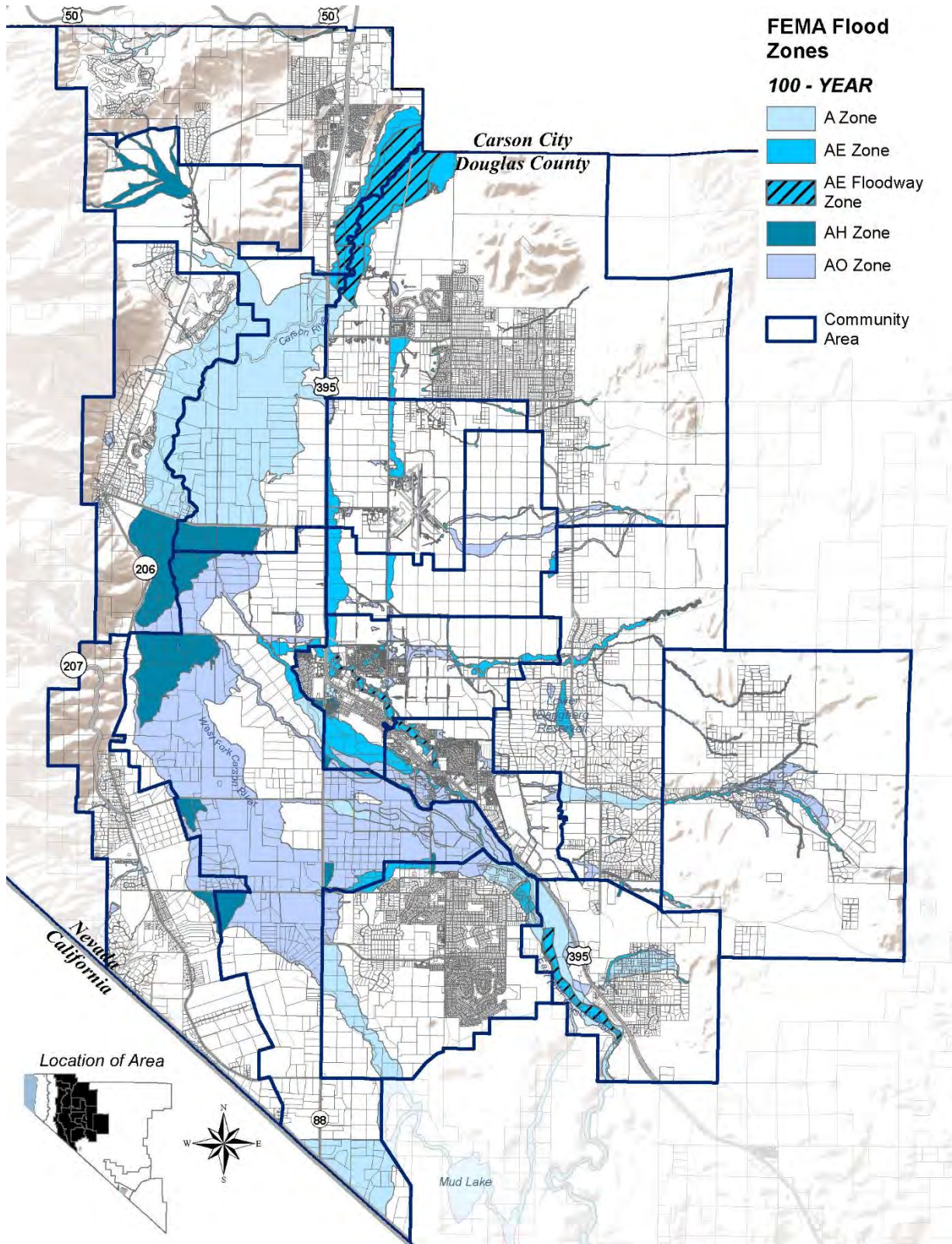


DIAGRAM PS6 – SPECIAL FLOOD HAZARD ZONES IN TOPAZ RANCH

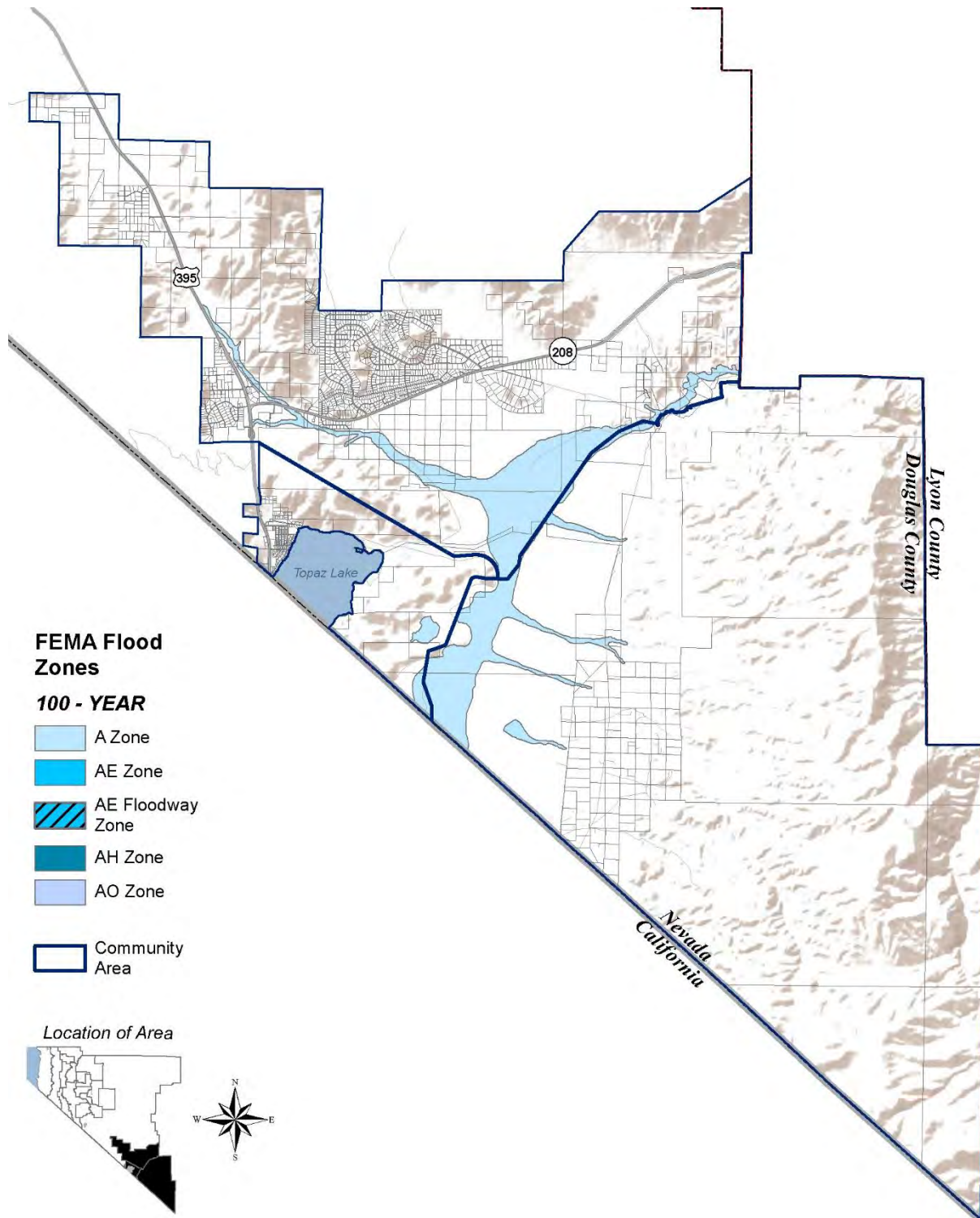
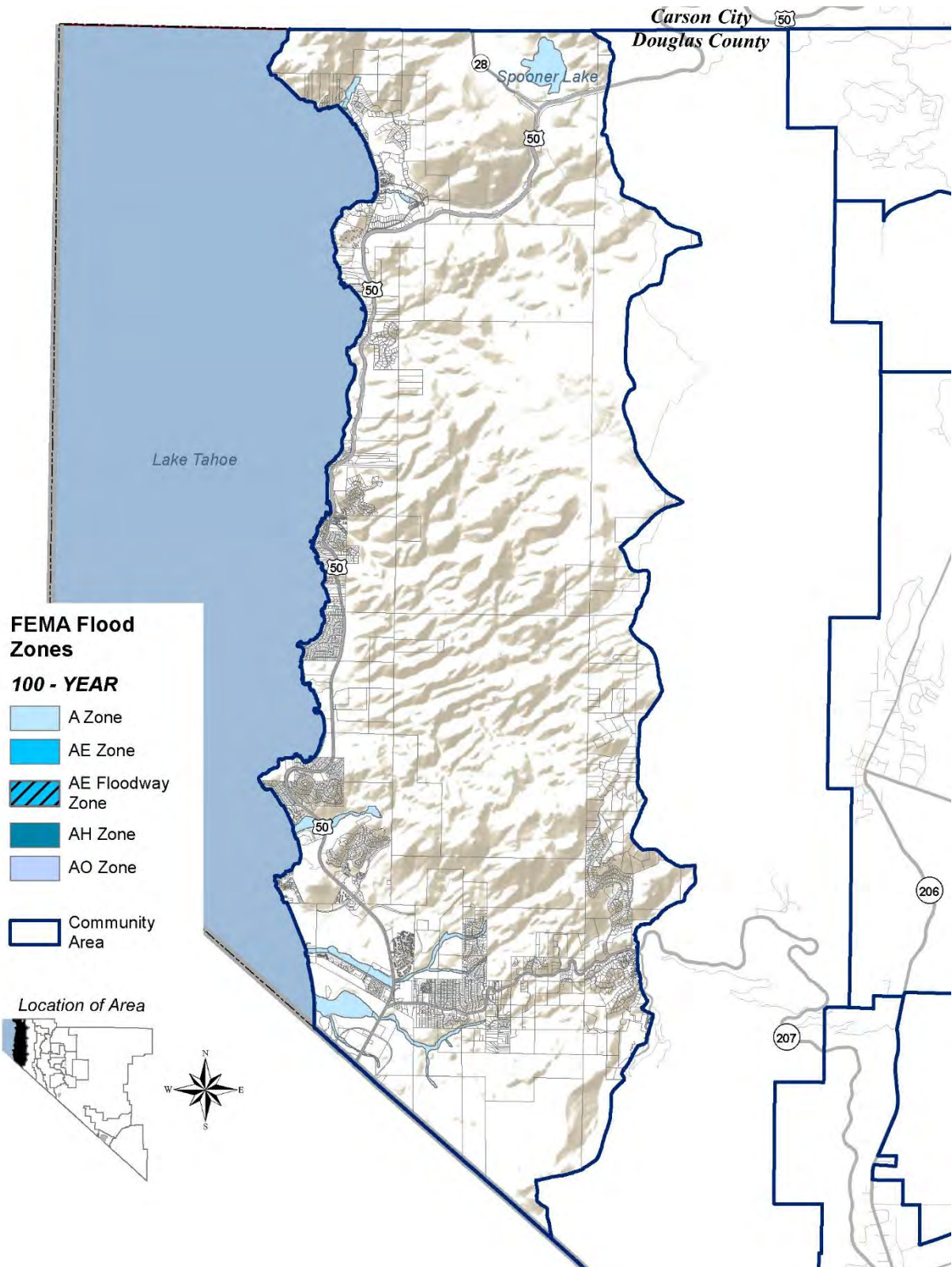


DIAGRAM PS7 – SPECIAL FLOOD HAZARD ZONES IN TAHOE BASIN REGION

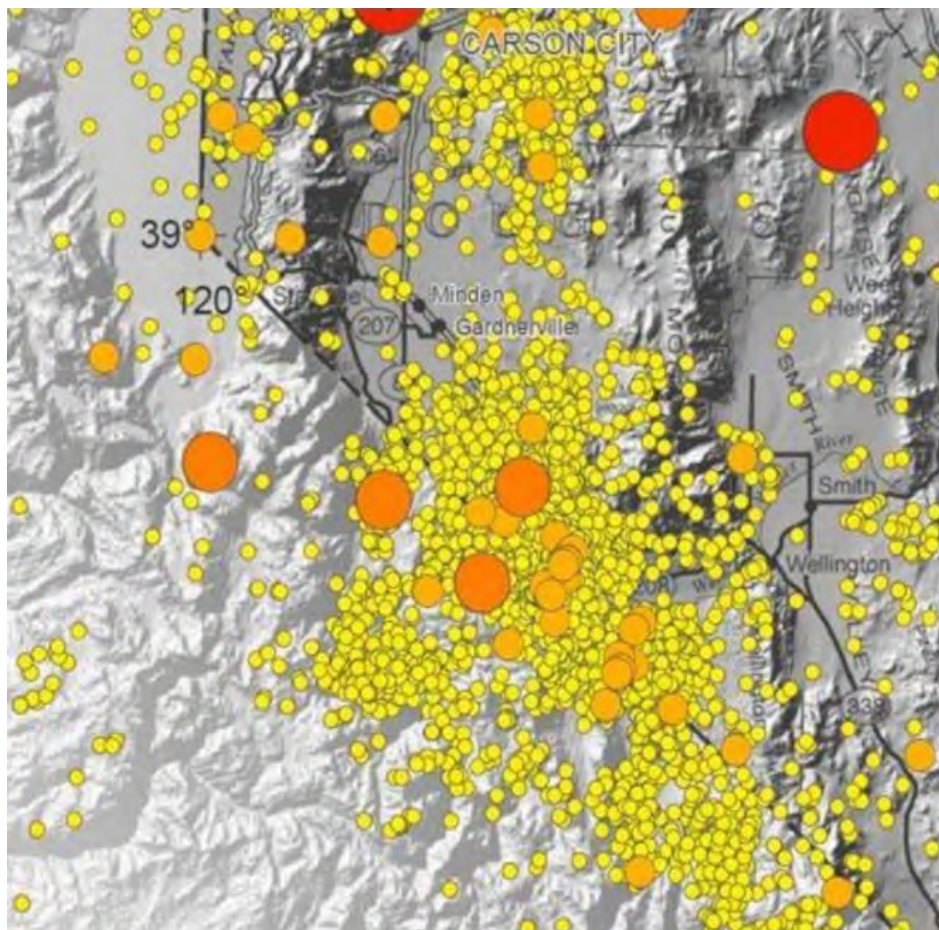


Earthquakes

Nevada is ranked third in the United States having the highest number of large earthquakes. Earthquakes have strongly shaken Douglas County in 1887, 1932, 1933, and 1994. Over 3,700 earthquakes were recorded in the county between 1970 and 2010, see Figure PS2. The small yellow dots are earthquake magnitude of 4 or less, while the smaller orange dots represent magnitude of 4 to 4.9, larger darker orange dots are magnitude 5 and 5.9 and large red dots are magnitude 6 and larger.

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 include:

- 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 earthquakes for the major faults in Douglas County range from magnitude 6.5 to 7.2. These major earthquakes usually occur every few thousand years 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, emergency and recovery planning purposes, understanding the largest earthquakes that can occur in the county are the most important.

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 a phenomenon known as liquefaction occurs. During liquefaction, 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 faults lines in the county and the hazard area within the county. Diagrams PS9-PS11 displays the geologic hazards with fault lines, and liquefaction susceptible areas, alluvial deposit areas, subsurface material types and fault lines throughout Douglas County.

DIAGRAM PS8 – DOUGLAS COUNTY LONG TERM HAZARD AREA

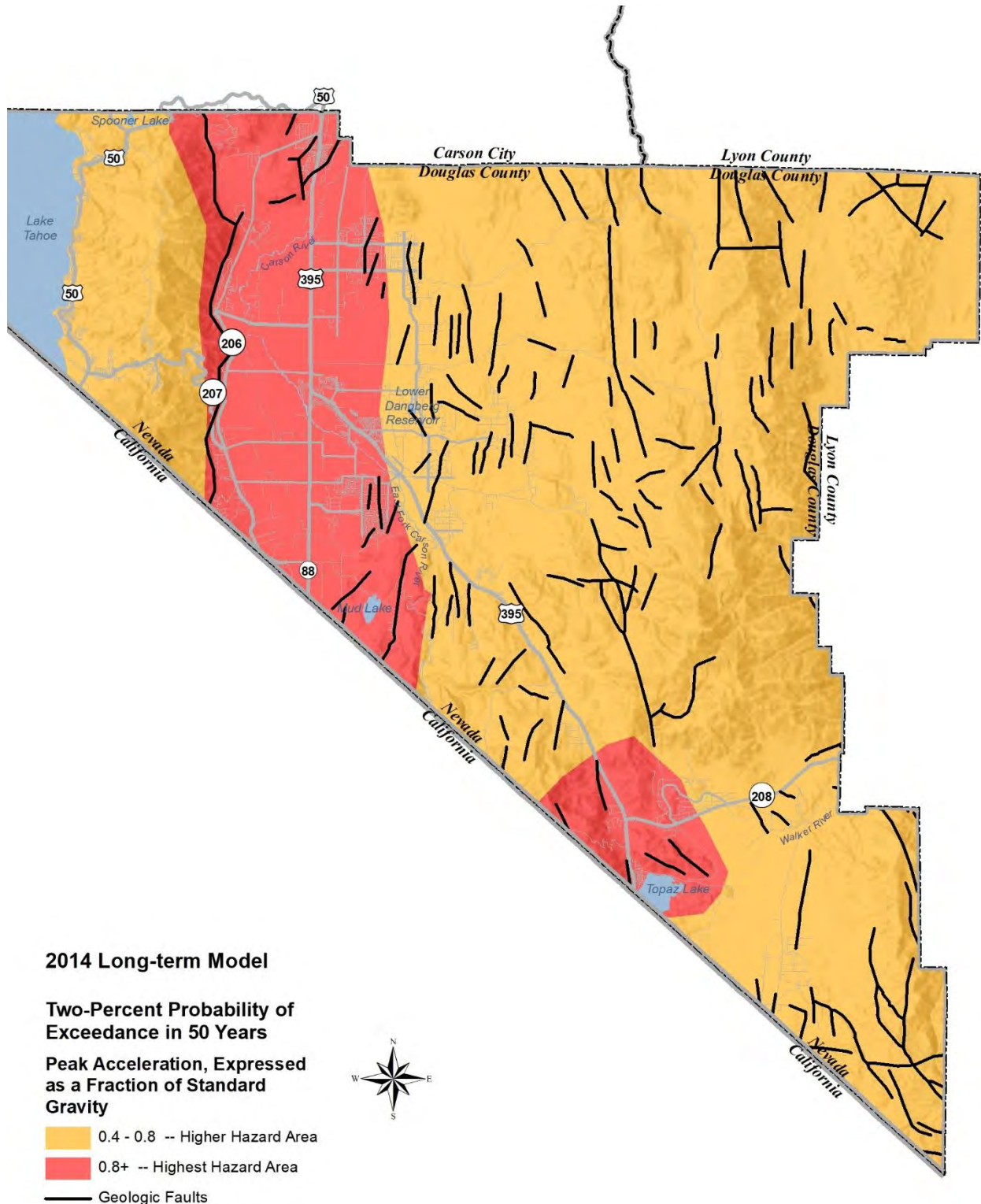


DIAGRAM PS9 – CARSON VALLEY REGION - GEOLOGIC FEATURES / FAULTS

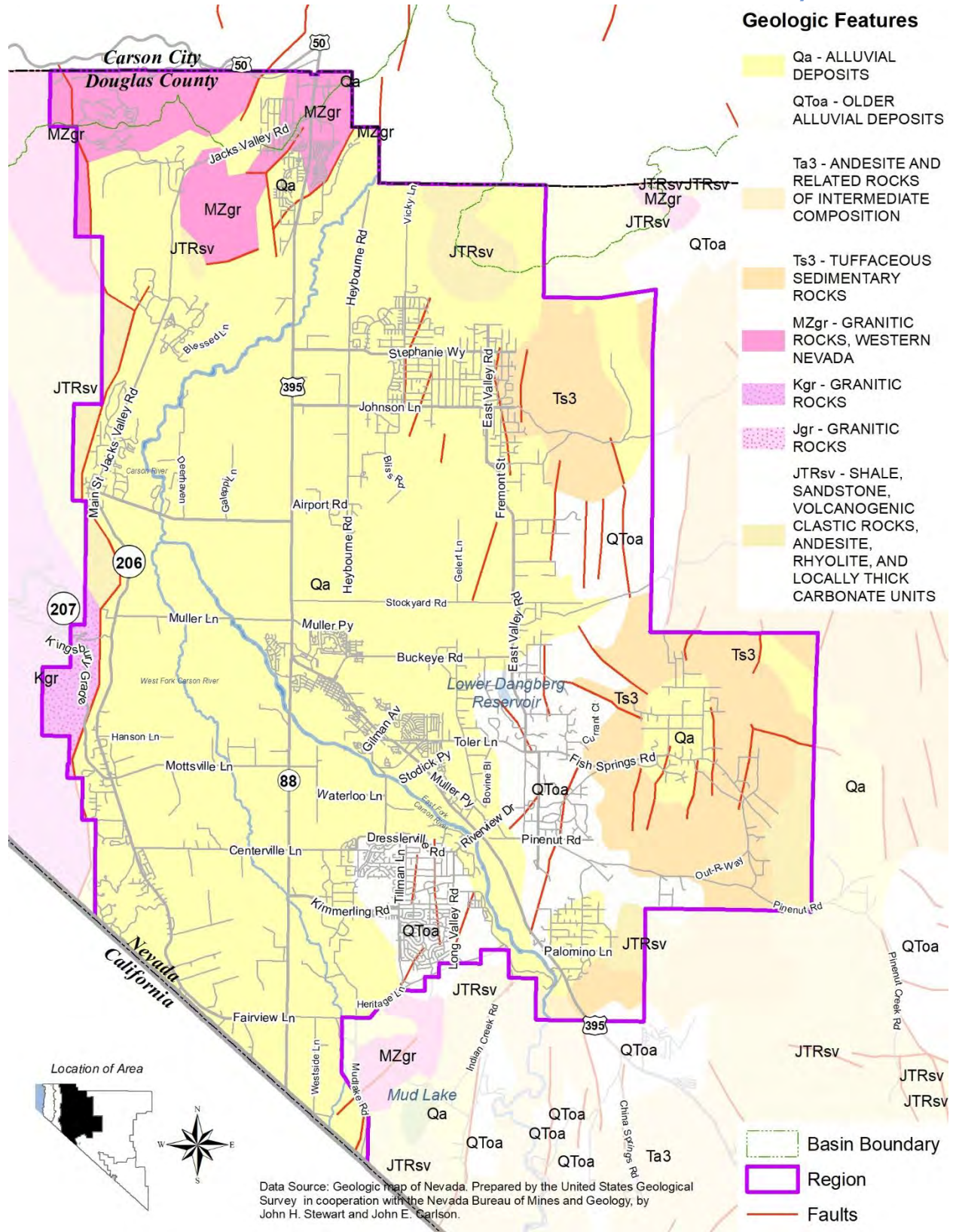


DIAGRAM PS10 –PINENUT REGION – GEOLOGIC FEATURES / FAULTS

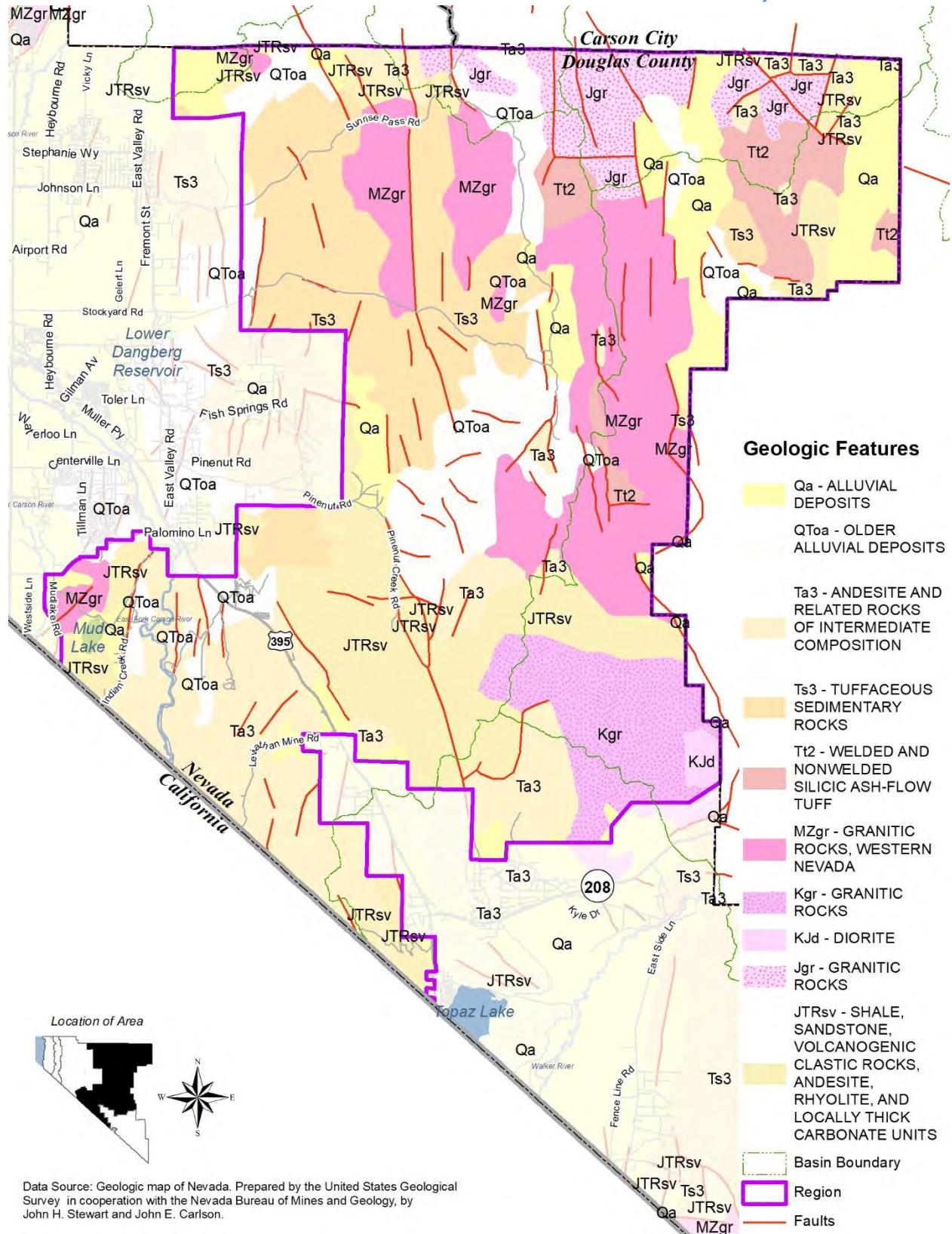
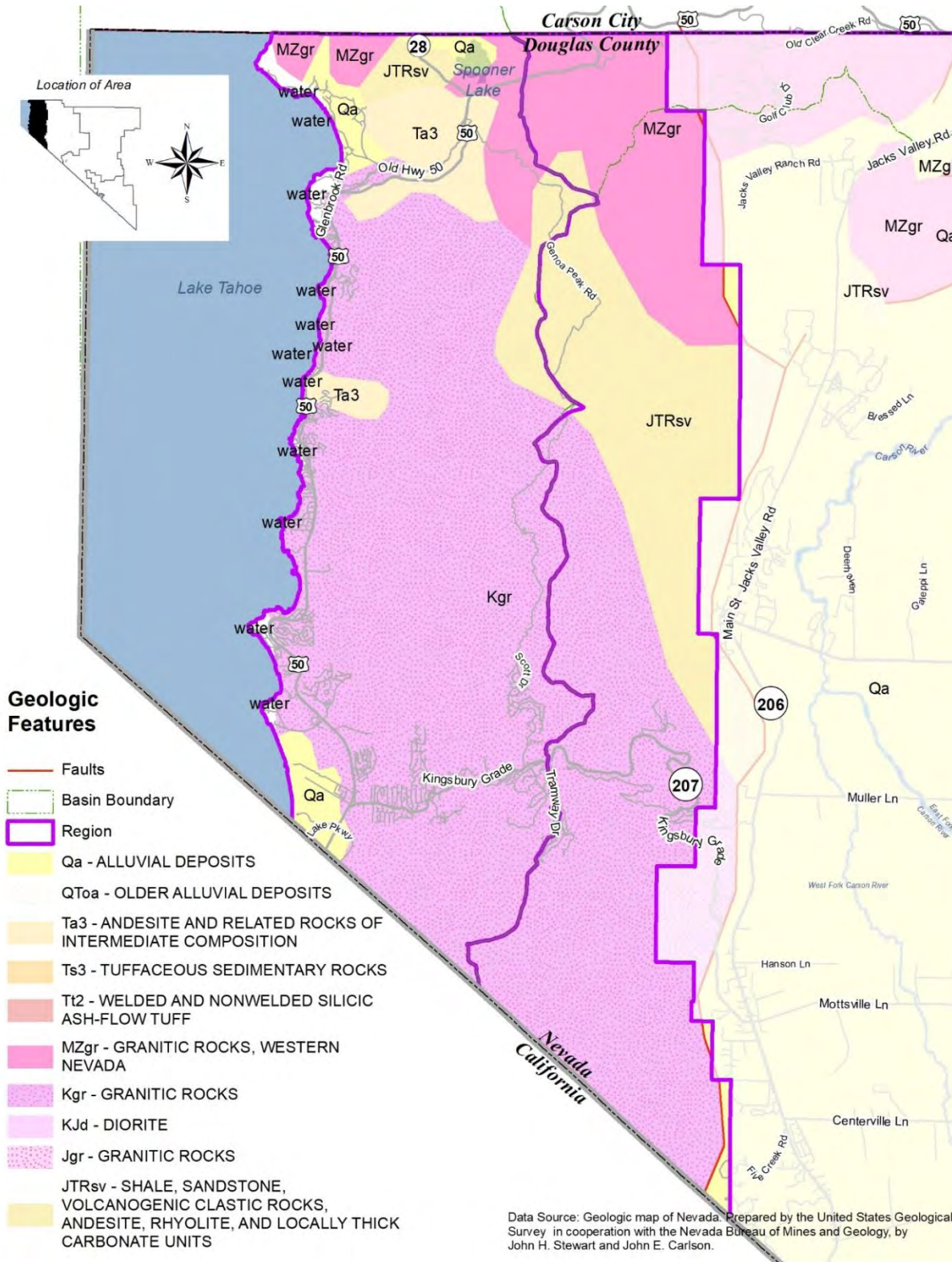


DIAGRAM PS11 – TAHOE BASIN & SIERRA REGION – GEOLOGIC FEATURES / FAULTS



Wildland Fires

As shown in Table PS7, almost 73,000 acres have been burned, taking 28 structures, since 2011 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 and cost \$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, yet 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 Nevada Administrative Code 477.

Diagrams PS12-PS14 displays the location of wildland fires between 2000 and 2019.

DIAGRAM PS12 –WILDLAND FIRES IN THE CARSON VALLEY REGION

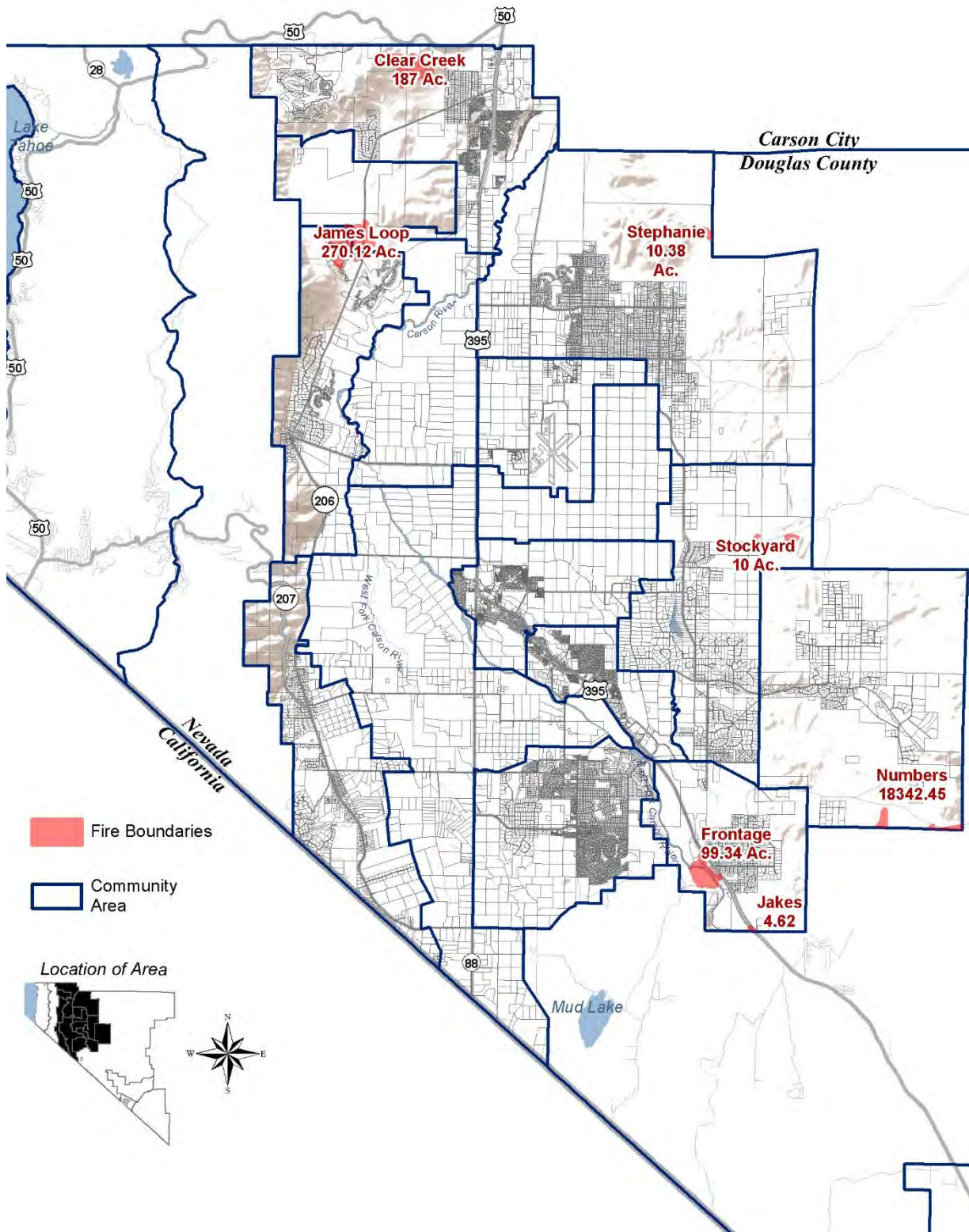


DIAGRAM PS13 – WILDLAND FIRES IN THE PINENUT REGION

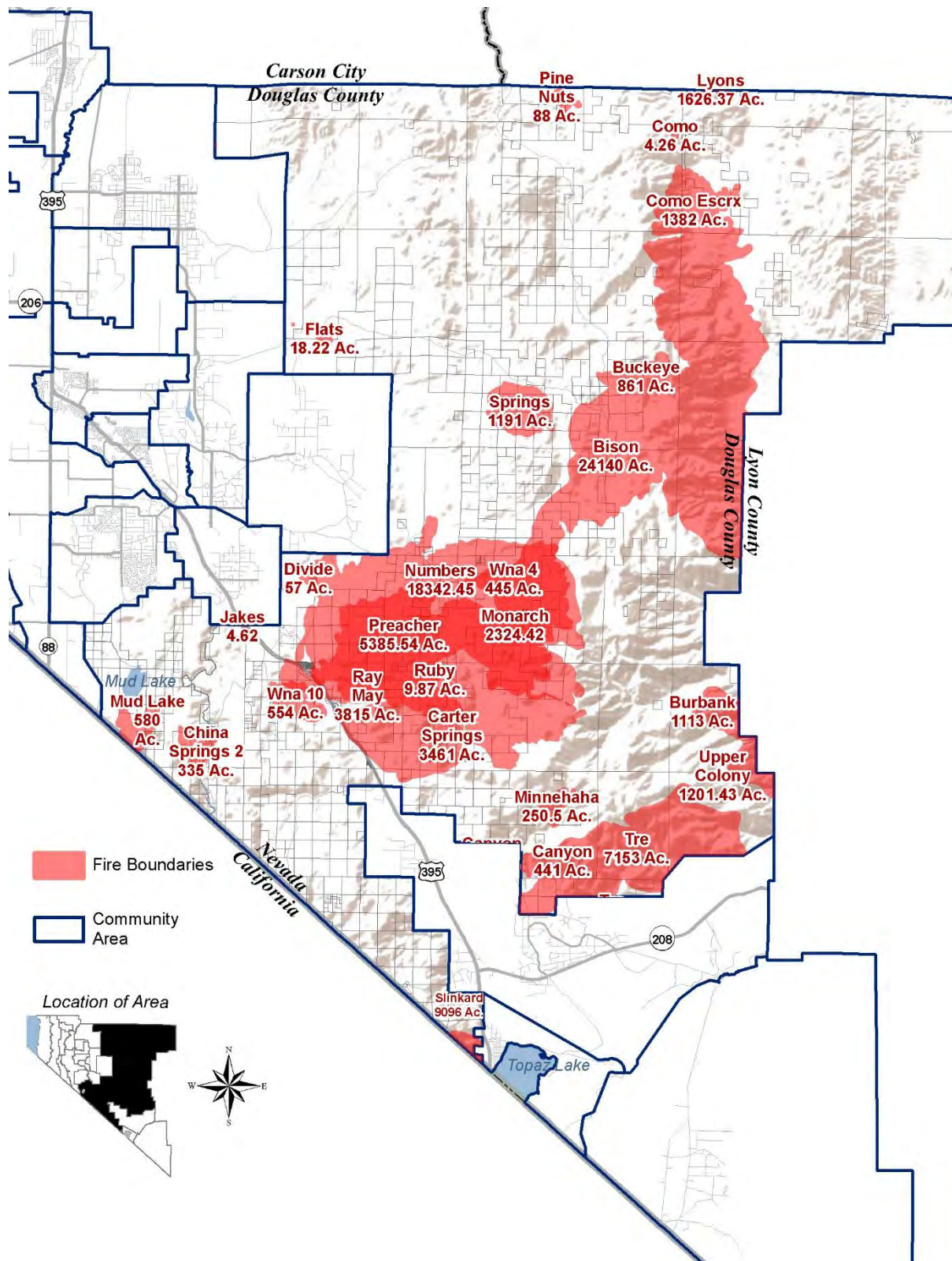
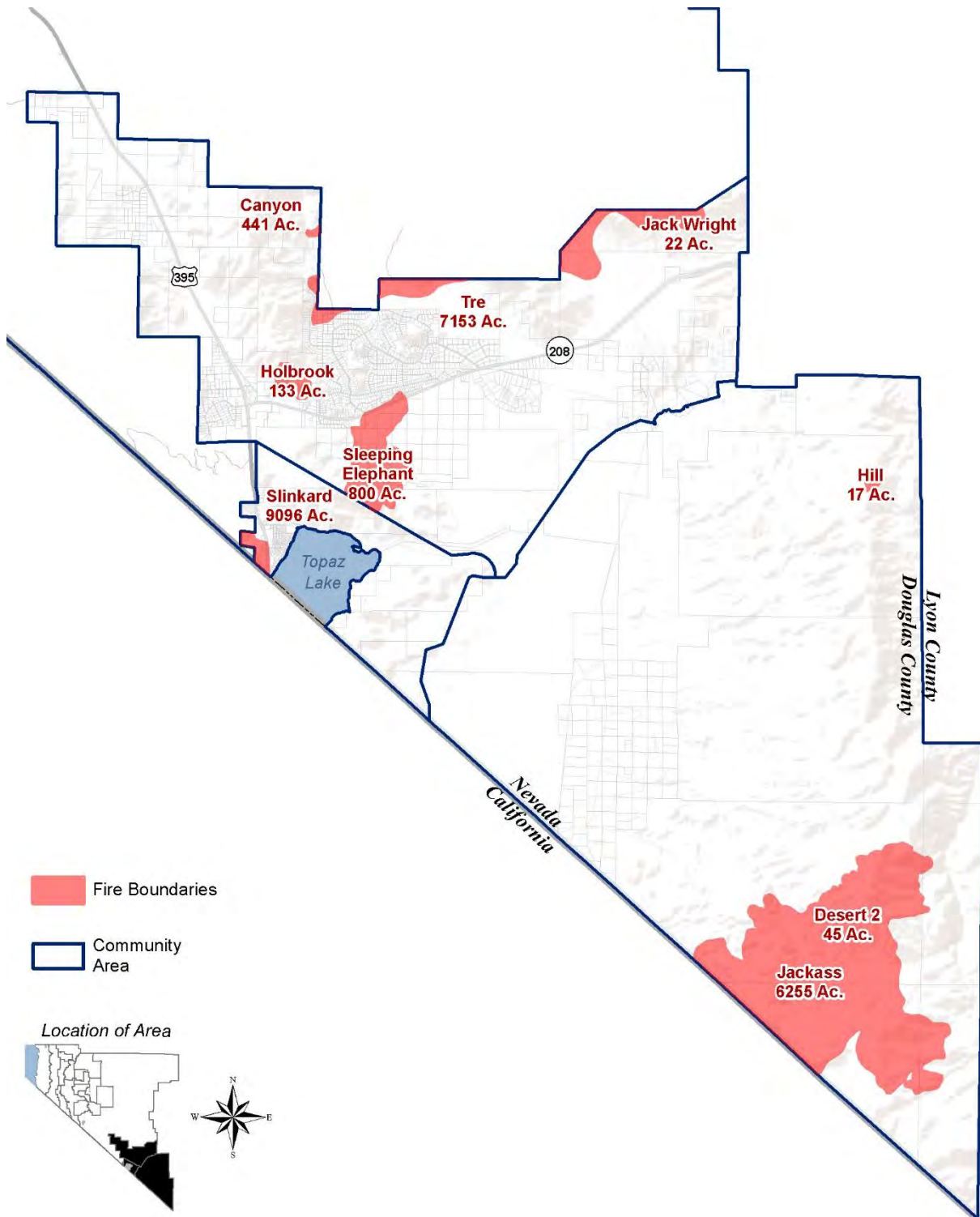


DIAGRAM PS14 – WILDLAND FIRES IN THE TOPAZ REGION



Evacuation Routes

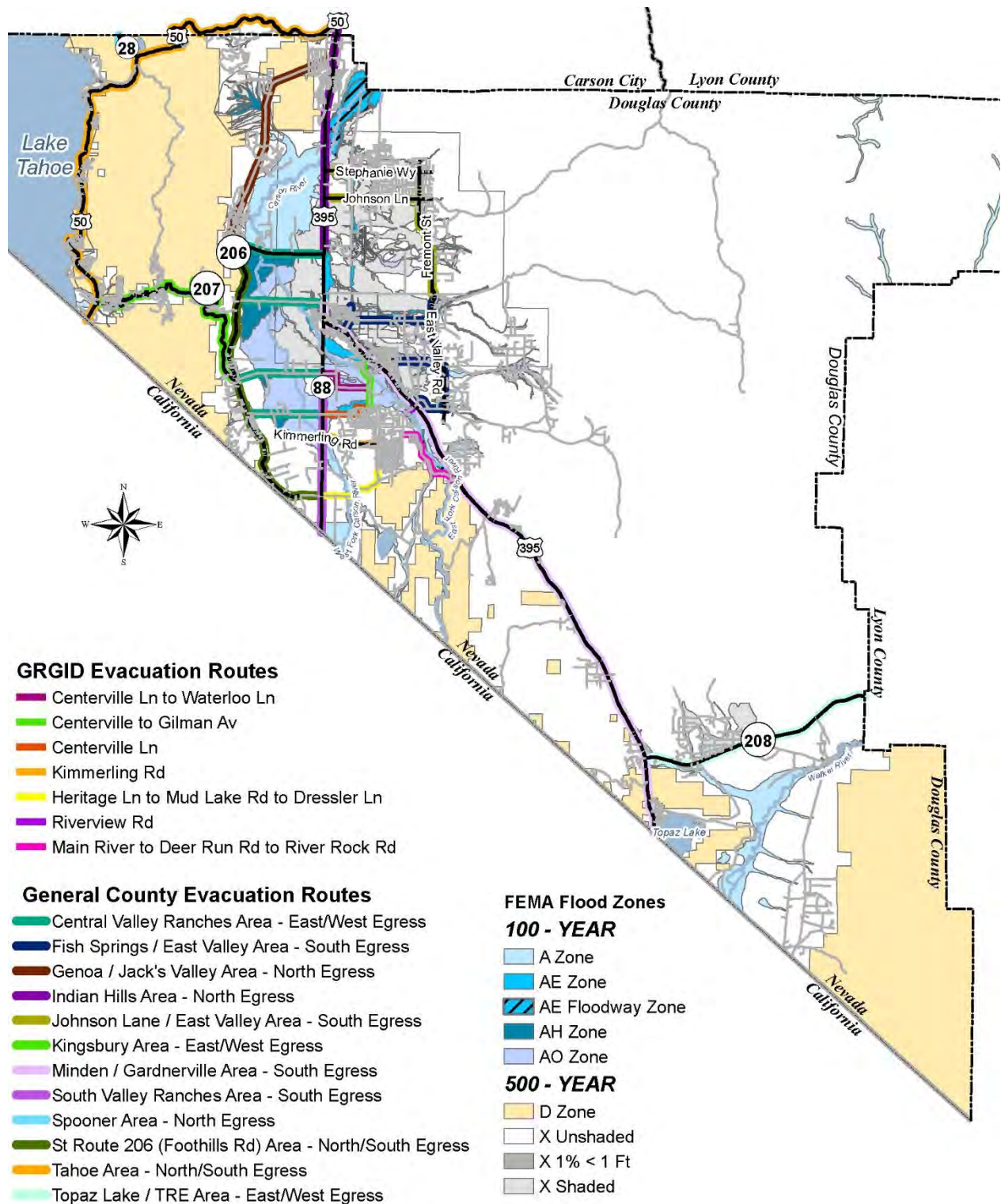
In the event of any disasters, such as flooding or wildfires, residents in threatened areas must be able to safely evacuate to temporary locations. The Carson River Watershed's Regional Floodplain Management Plan and the 2019 Hazard Mitigation Plan show that the Carson River is able to handle a flood stage of 13.5 feet before transportation is affected and there is a need for first responders to mobilize.

The evacuation routes for Douglas County are depicted on Diagram PS15. It should be noted that during flood events, many of the east-west arterials between Foothill/Jacks Valley Road and US Highway 395 are overtopped with floodwaters and impassable. Additionally, a portion of Highway 395 at Cradlebaugh Bridge was overtopped during flooding in early 2017.

It should be noted that some of the designated evacuation routes, such as East Valley Road, is not an improved transportation corridor. There is a proposed 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 provides training to residents annually for the three primary evacuation routes – Spooner Summit - HWY 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 currently require a business registration to do business in the County. A business registration would identify materials as well as occupancy loads. At the current time, there is no required review to check on compliance with building, zoning, and fire codes before a new business operates in the County. 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 help with the following:

- Public safety would increase 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.
- Would assist DCSO with nuisance bars for noncompliance of code.
- Would assist Code Enforcement with code violations.
- Would 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 (WUI) Code for the East Fork Fire Protection District. The 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 that 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, 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 is in need of an additional fire station east of Martin Slough, west of East Valley.

- Tahoe Douglas Fire is in need of 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 evacuation routes. The Hazard Mitigation Plan requires improvements to routes in emergencies.

- Buckeye Road from Heybourne Road to Highway 395 over the Martin Slough needs to be raised to allow passage in a flood event.
- 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 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. Carson City adopted an Airport Clearance Zone (Chapter 16.02) in 1967. This ordinance restricts heights and also prohibits public assembly lands uses such as schools and hospitals.

Douglas County should also consider creating an Airport Zoning Overlay District to protect airplane operations as well as 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 on priorities from the board on 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 timeframe based on four levels: one (1) to three (3) years, three (3) to five (5) years, five (5) to ten (10) years or possibly longer, and ongoing items which may continue to be addressed each year. These Actions identify amendments to the Douglas County Development Code that may be needed, as well as, defining actions that need to be included in the County's five-year Capital Improvement Program. It is intended that 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 Douglas County will amend Title 20 to incorporate the Master Plan Land Use Designations and compatible Zoning Districts.	1-3
 Action 2 Douglas County will amend the Master Plan Land Use Designation Table to allow multi-family residential zoning in the Commercial land use category.	1-3
 Action 3 Douglas County Community Development shall work with Douglas County GIS, the Recorder's Office and affected property owners to eliminate parcels with split land uses, split zoning and/or other mapping inconsistencies.	3-5
 Action 4 Douglas County Community Development will periodically amend the Master Plan future land use map to change the future land use designation for built out receiving areas.	1-3
 Action 5 Douglas County will support the Towns of Gardnerville and Minden in submitting Historic District nomination packages to the State of Nevada.	3-5
 Action 6 Douglas County shall submit an application for Certified Local Government status to 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 countywide Historic Preservation Board and program.	1-3

	Priority
L LAND USE & HISTORIC PRESERVATION	
 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
 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 AND CONSERVATION	
 Action 1 Douglas County will 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. The update should 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 manage public lands access.	5-10
 Action 4 The County should establish an open space acquisition program.	1-3
 Action 5 Douglas County will prepare recommendations on establishment of a Transferred Development Rights (TDR) bank to encourage conservation of open space areas in the County.	1-3

	Priority
A AGRICULTURE AND CONSERVATION	
 <p>Douglas County will prepare a Low Impact Development Ordinance for all new residential, commercial, and industrial development to reduce pollutants from entering surface waters in Douglas County.</p>	1-3
 <p>Douglas County will 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.</p>	3-5
 <p>Douglas County will develop comprehensive storm drainage design criteria for developed areas in conjunction with the Towns and GIDs.</p>	3-5
 <p>Douglas County will develop and implement a stormwater management plan.</p>	5-10
 <p>Douglas County will implement the Clear Creek and Johnson Lane Stormwater Management Plans as required by the MS4 NPDES Permit.</p>	1-3
 <p>Douglas County will amend the development code to include noise standards for noise generating activities, including limitations on hours of operation within the day.</p>	3-5
 <p>Douglas County will evaluate and update agricultural exemptions and incentives to encourage continued agricultural conservation of open space to support the continuation of agricultural activities.</p>	3-5
 <p>Douglas County will evaluate agricultural zoning districts and property tax structure to support perpetual farming and agricultural uses in specific areas.</p>	5-10
 <p>Douglas County shall minimize conversion of agricultural land to non-agricultural uses and ensure that recognized needs for growth are met by infill and contiguous development.</p>	Ongoing





	Priority
A AGRICULTURE AND CONSERVATION	
 Douglas County shall provide procedures for the acquisition, dedication, or purchase of agricultural preservation easements, by public or non-profit entities, as a means to retain land in agriculture.	1-3
 Drainage facilities on U.S. Highway 395 at Smelter Creek, south of Gardnerville and from Minden north to Cradlebaugh Bridge should be expanded and improved at every opportunity.	1-3
 Wetlands shall be protected to provide for groundwater recharge, flood protection, sediment and pollution control, wildlife habitat, and open space.	1-3
 Development occurring at urban densities shall be serviced by a sanitary sewer utility.	3-5
 Implement the Agrihood Strategy Framework accepted by the Board of County Commissioners September 3, 2020.	1-3
 Douglas County will include provisions in the development code for the mandatory use of TDR's for an increase in density associated with a Zoning Map Amendment.	1-3
 Create alternatives to the urban development of existing agricultural lands in order to preserve these agricultural areas.	1-3

Priority Explanation in years | 1-3 (High) 3-5 (Medium) 5-10 (Low)




	Priority
E ECONOMIC DEVELOPMENT	
 Consider amendments to the Development Code to allow permanent sidewalk merchandise displays in the downtowns.	1-3









	Priority
E ECONOMIC DEVELOPMENT	
Action 2  Complete infrastructure projects such as the Martin-Slough Trail; Muller Parkway; and utilization of Complete Streets vision and plan for US 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
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 upon 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

	Priority
E ECONOMIC DEVELOPMENT	
 Action 13 Develop a GIS layer for the public viewer which 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 of making 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
 Action 20 Support development of business incubators, innovation center 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 to broadband.	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









	Priority
E ECONOMIC DEVELOPMENT	
 Action 24 Douglas County should consider amendments to the Development Code to create a process for applying to install public art, including separate criteria for murals and sculptures, as well as consideration for temporary, permanent, and rotating displays.	1-3
 Action 25 Facilitate the creation of a Cultural Commission - an advisory board to the County Commissioners for matters relating to arts and culture for benefit of all residents and visitors.	1-3
 Action 26 Continue to work with our network of partners to promote and advocate for Arts & Cultural Programming.	Ongoing
 Action 27 Explore incentives for the inclusion of live-work space in planned developments.	1-3









Priority Explanation in years | 1-3 (High) 3-5 (Medium) 5-10 (Low)










	Priority
G GROWTH MANAGEMENT & HOUSING	
 Action 1 Douglas County shall develop key indicators to monitor the impacts of growth, as well as progress being made towards implementing the County's growth management programs, and report on their effectiveness and possible improvements on an annual basis.	1-3
 Action 2 The Community Development Department will provide input during the preparation of the annual CIP to insure consistency with the Master Plan and the Growth Management Chapter of the Douglas County Development Code.	Ongoing
 Action 3 Douglas County shall analyze the effectiveness of the Transfer of Development Rights Program before the next update of the Douglas County Master Plan and prepare recommendations on sending and receiving areas and TDR values.	1-3


	Priority
G GROWTH MANAGEMENT & HOUSING	
 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 multifamily residential and mixed-use commercial zoning districts.	1-3
 Action 7 Douglas County will revise the Master Plan land use designations to permit multi-family zoning within the Commercial Land Use designation.	1-3
 Action 8 Douglas County will review the single-family design standards in the Development Code to determine whether or not impediments exist for the development of moderately priced entry level homes including single-family attached units.	1-3
 Action 9 Douglas County will revise the criteria in the Mixed-Use Zoning District to reduce the percentage of commercial usage required in MUC Zoning Districts.	1-3
 Action 10 Prepare recommendations on amending the development code to require developers to include a percentage of affordable units in large subdivisions in return for a density bonus.	1-3
 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.	3-5

Priority Explanation in years | 1-3 (High) 3-5 (Medium) 5-10 (Low)






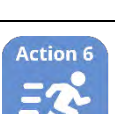

	Priority
PF PUBLIC FACILITIES, SERVICES & RECREATION	
Action 1  Develop a facilities master plan to address space needs for government services.	3-5
Action 2  Identify critical services, and define desired service levels from government service providers that address all policies of this section.	3-5
Action 3  Define desired service levels and establish clear expectations for service providers to ensure efficient and cost-effective delivery of services.	3-5
Action 4  Explore the feasibility of connecting communities with high concentrations of private wells, such as, Ruhenstroth, Johnson Lane, Topaz Lake and Topaz Ranch Estates, to public water systems.	1-5
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 Ruhenstroth.	3-5
Action 6  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.	1-3
Action 7  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.	1-3
Action 8  Identify appropriate locations for infrastructure before it is needed by projecting the location of future growth.	1-3






		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 to relieve recreation pressure in areas of more critical habitat, and 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	The County should 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	The County shall 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	The County shall continue to monitor areas with high septic system densities for signs of groundwater contamination from nitrates.	Ongoing
 Action 14	Douglas County will 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 trail concept plan for the upper Kingsbury Grade segment of 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 have the Numerical Groundwater- Flow Model of the Carson Valley, Douglas County, Nevada and Alpine County, California model updated, 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 AB240, growth management report as required.	Ongoing
 Action 22 Douglas County will implement the Airport, Johnson Lane, Alpine View Estates, and Ruhenstroth Area Drainage Master Plans.	1-3
 Action 23 New Action. Douglas County should 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 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.	Priority 1-3

 Action 26	Assist in the improvement of arts organizations' existing facilities in order to enhance the quality and quantity of arts offerings.	Priority 1-3
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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	As part of each Master Plan Update, the Community Development Department, in coordination with East Fork Fire and the County Sheriff, will provide an evaluation of population growth and changing demographics in order to effectively maintain fire service coverage and police services at an optimal level.	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 Emergency Medical Services (EMS) calls, fire calls, and 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 to provide for a detailed watershed analysis and improvement recommendations by watershed in relation to the seriousness of the existing and potential flood flow problems.	3-5

		Priority
PS PUBLIC SAFETY		
 Action 8	Investigate the use of existing irrigation ditches and canals to help alleviate Carson River and stormwater flooding problems, and 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
 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	Areas Developed by serial land parceling should be studied and the current water conveyance capacity of the infrastructure should be verified. Deficiencies should be noted and corrected as practicable. Downstream capacities should be analyzed and improved 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 related 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 (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 Board of Commissioners in various ways through the presentations included as part of the 20 year master plan update.