

4.9. LAND USE AND POPULATION AND HOUSING

4.9.1 INTRODUCTION

The purpose of the Land Use and Planning/Population and Housing chapter of the EIR is to examine the proposed project's compatibility with existing land uses in the area and identify any incompatibilities with applicable land use plans, policies and regulations adopted by the County for the purpose of avoiding environmental effects, namely the Nevada County General Plan¹. In addition, the chapter assesses the compatibility of the proposed project with the surrounding land uses. Furthermore, the chapter includes discussion of the potential for the project to induce substantial population growth in the project area, either directly or indirectly. The reader is referred to the various environmental resource evaluations presented in the other technical chapters of this EIR for a discussion of potential physical/environmental effects that may result from the proposed land use changes.

4.9.2 EXISTING ENVIRONMENTAL SETTING

This section describes the baseline conditions on the overall project site and within the surrounding area at the time the Notice of Preparation (NOP) was published on July 17, 2020, as well as the existing plans and policies that guide the development of the project site. In addition, the Existing Environmental Setting section describes current population and housing trends in the project region.

Project Site Characteristics and Surrounding Land Uses

The proposed project consists of two separate project sites: the Brunswick Industrial Site and the Centennial Industrial Site, totaling 175.34 acres, as well as a portion of East Bennett Road, where a new potable water line would be installed, and proposed areas of underground mining within the 2,585-acre mineral rights boundary owned by the applicant. The potable water pipeline easement would be located within the existing right-of-way (ROW) of East Bennett Road. The majority of the project site contains the historic Idaho-Maryland Mine underground gold mine. The mine has been inactive since closure in 1956 and was allowed to flood. In 1941, the Idaho-Maryland Mine employed approximately 1,000 workers and was California's largest lode gold mine and the second-largest lode gold mine in the U.S., based on annual production. The Idaho-Maryland Mine encompasses an extensive system of approximately 73 miles of underground tunnels, many raises, four inclined shafts, and two vertical shafts. The historic mining operation had extensive surface infrastructure adjacent to the Centennial Industrial Site and at the Brunswick Industrial Site, most of which has been dismantled and removed.

The Idaho-Maryland Mine has three distinct sections (Idaho #1, Idaho #3, and Brunswick Mines), which are connected by underground workings. The Union Hill Mine is a smaller mine that was closed in 1918 and has been flooded with groundwater since then. The Union Hill Mine is not connected to the Idaho-Maryland Mine, but is near the Brunswick portion of the Idaho-Maryland Mine. The gold-quartz veins of the Union Hill Mine are believed to be part of the Brunswick vein

¹ Nevada County. *Nevada County General Plan*. Updated 2014.



system. The property owner, Rise Grass Valley, is proposing to dewater the Idaho-Maryland Mine, but not the Union Hill Mine.

The Centennial Industrial Site was historically used by the Idaho-Maryland Mine to deposit mine tailings and waste rock. Such mine tailings were never compacted. Some of the materials used to build the tailings berm and small quantities of mineralized rock contain elevated metals. As a result, under existing conditions, the majority of the Centennial Industrial Site cannot be developed because of unstable soils and/or contamination. As discussed in the Introduction chapter of this EIR, the project applicant has entered into a Voluntary Cleanup Agreement with the California Department of Toxic Substances Control (DTSC) for the voluntary cleanup of soil contamination on Centennial Industrial Site. A Remedial Action Plan (RAP) has been prepared and approved by DTSC. Additional detail regarding existing contamination issues is provided in Chapter 4.7, Hazards and Hazardous Materials, of this EIR. Substantial evidence exists to support adjusting the existing conditions baseline for the Centennial Industrial Site to the post-remediation condition, as such adjustments will give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts (CEQA Guidelines Section 15125(a)).

The Brunswick Industrial Site consists primarily of undeveloped land, with remnants of the previous gold mining and sawmill operations still located on-site. The terrain of the undeveloped portion of the Brunswick Industrial Site is typical of the lower Sierra Nevada foothills, varying between flat ridges and valleys to gently and moderately sloping hillsides. The Brunswick Industrial Site is located adjacent to South Fork Wolf Creek and is dominated by mixed hardwood-conifer forests and developed areas, with smaller areas of wetlands and annual grassland. Vegetation communities present within the site are discussed in further detail in Chapter 4.4, Biological Resources, of this EIR.

The Centennial Industrial Site, under the above-described baseline condition, consists of a 5.6-acre engineered fill pad along its eastern boundary, up to approximately 28 acres of graded, revegetated areas, and the remainder consisting of natural habitats, such as montane hardwood-conifer, chaparral, montane-riparian, and annual grassland.

As discussed previously, underground gold mining occurred below the majority of the project sites, while aboveground portions of the sites were used for various gold mining and processing activities. Several shaft entrances are located on the Brunswick Industrial Site, including the Brunswick and Union Hill shafts. The shafts are covered to prevent inadvertent access. Other portions of the site include graveled or paved areas from previous land uses.

The project sites are surrounded by undeveloped land, industrial, low-density residential developments, and commercial uses. Existing land uses surrounding the Centennial Industrial Site include commercial uses and the City of Grass Valley limits to the north, west, and east, and industrial uses to the north, south, and east. Existing land uses surrounding the Brunswick Industrial Site include industrial uses to the north, undeveloped land to the west and south, South Fork Wolf Creek to the west, and rural residences scattered around the site. Table 4.9-1 below provides a summary of the locations of the surrounding land uses and the receptors closest to the project site.



**Table 4.9-1
Surrounding Land Uses and Closest Receptors**

Direction	Land Use	Zoning	Closest Land Use
Brunswick Industrial Site			
North	East Bennett Road, rural residential, industrial	Residential Agriculture (RA-1.5)	Residential
West	Undeveloped land, rural residential, South Fork Wolf Creek	Residential Agriculture (RA -3-PD)	Residential
South	Undeveloped land, rural residential	Single-Family Residential (R-1) and Residential Agriculture (RA-X)	Residential
East	Brunswick Road, undeveloped land, rural residential	Residential Agriculture (RA-3) and Residential Agriculture (RA-5)	Residential
Centennial Industrial Site			
North	Grass Valley city limits, commercial, industrial, Idaho-Maryland Road	Grass Valley city limits – Commercial/Industrial (M-1 Grass Valley city limits), Grass Valley city limits – Special Districts (SP1-B Grass Valley city limits)	Commercial/Industrial
West	Grass Valley city limits, commercial	Grass Valley city limits – Commercial/Industrial (C-3 Grass Valley city limits) and Business Park (BP)	Commercial
South	Undeveloped land, East Bennett Road, industrial	Light Industrial (M1) and Open Space (OS)	Industrial
East	Grass Valley city limits, Centennial Drive, industrial, commercial	Grass Valley city limits – Special Districts (SPA1-A Grass Valley city limits)	Industrial/Commercial

Land Use and Zoning Designations

Both project sites are located within unincorporated western Nevada County (see Table 4.9-2). The 119-acre Brunswick Industrial Site (APN's, 006-441-003, -004, -005, -034; and 009-630-037, -39) is located southwest of the intersection of East Bennett Road and Millsite Road, and is accessible from Brunswick Road or East Bennett Road. The 56.41-acre Centennial Industrial Site (APN's 009-550-032, -037, -038, -039, -040; and 009-560-036) is located southwest of the intersection of Idaho Maryland Road and Centennial Drive. The majority of the project is located on the Brunswick Industrial Site, which is partially located within the City of Grass Valley's long-term sphere of influence and designated Urban Low Density on the Grass Valley General Plan Land Use Diagram. The southern portion of the Brunswick Industrial Site is outside of the City's sphere of influence. The Centennial Industrial Site is located within the City of Grass Valley's near-term sphere of influence and designated Business Park and Urban Medium Density on the Grass Valley General Plan Land Use Diagram. While the majority of the Sites are located in the City's sphere of influence and assigned General Plan land use designations by the City, the Sites are located within unincorporated Nevada County and are not proposed to be annexed to the City of Grass Valley.

The Nevada County General Plan divides the County into Community Regions and Rural Regions. Within the Rural Regions, growth is limited to those types and densities of development which are consistent with the open, rural lifestyle, pastoral character and natural setting and surrounding land use patterns which exists in these areas. Within the Community Regions, balanced growth is encouraged to provide managed housing, community, located for



convenience, efficiency and affordability. The overall project site is mostly in the Community Region, and the southern portion of the Brunswick Industrial Site is in the Rural Region. All proposed buildings on the Brunswick Industrial Site are located within the Community Region.

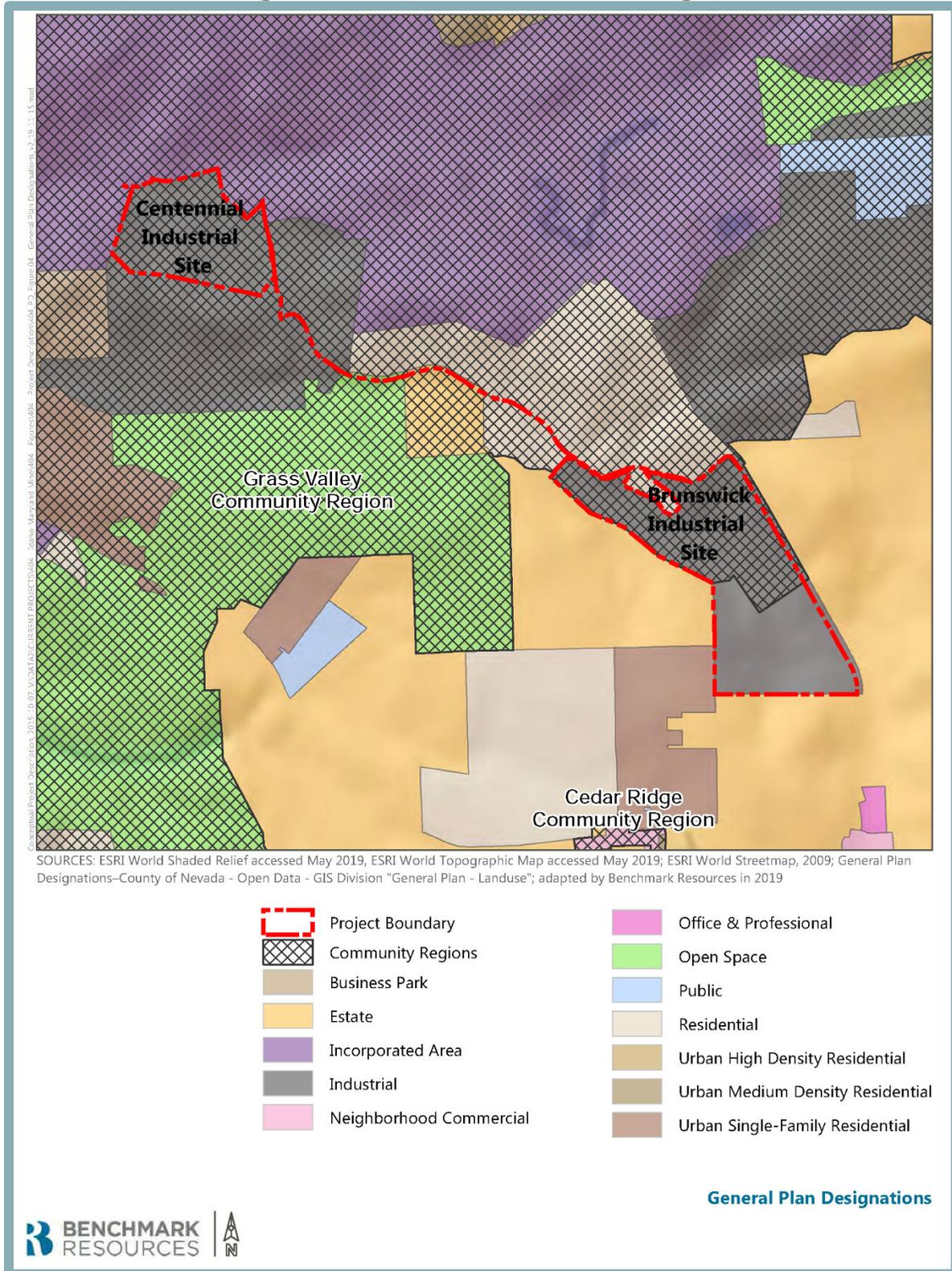
As seen in Table 4.9-2, the Brunswick Industrial Site, Centennial Industrial Site, and the off-site water pipeline areas are located in the Nevada County Industrial (IND) land use category (see Figure 4.9-1). In addition, the Brunswick Industrial Site is zoned as Light Industrial, Site Performance Combining District (M1-SP) and both the Centennial Industrial Site and the off-site water pipeline areas are zoned as Light Industrial (M1) (see Figure 4.9-2).

Table 4.9-2 Project Site Summary				
Project Site	Assessor Parcel Numbers	Acreage	Existing Zoning	Existing General Plan Designations
Brunswick Industrial Site	009-630-037	21.80	M1-SP ¹	IND ²
	009-630-039	15.07	M1-SP	IND
	006-441-003	15.19	M1-SP	IND
	006-441-004	0.85	M1-SP	IND
	006-441-005	50.01	M1-SP	IND
	006-441-034	16.01	M1-SP	IND
	<i>Brunswick Industrial Site Subtotal:</i>	<i>118.93</i>	--	--
Centennial Industrial Site	009-550-032	0.48	M1 ³	IND
	009-550-037	4.47	M1	IND
	009-550-038	40.1	M1	IND
	009-550-039	0.98	M1	IND
	009-550-040	0.13	M1	IND
	009-560-036	10.25	M1	IND
	<i>Centennial Industrial Site Subtotal:</i>	<i>56.41</i>	--	--
Project Sites Total:		175.34	--	--
Potable Water Pipeline Easement	009-560-045	--	M1	IND
	009-560-016	--	M1	IND
	Off-Site Total:	0.30	--	--
<ol style="list-style-type: none"> 1. M1-SP is defined as Light Industrial with Site Performance Combining District, pursuant to the County's Land Use and Development Code. 2. IND is defined as Industrial, pursuant to the County's General Plan. 3. M1 is defined as Light Industrial, pursuant to the County's Land Use and Development Code. 				

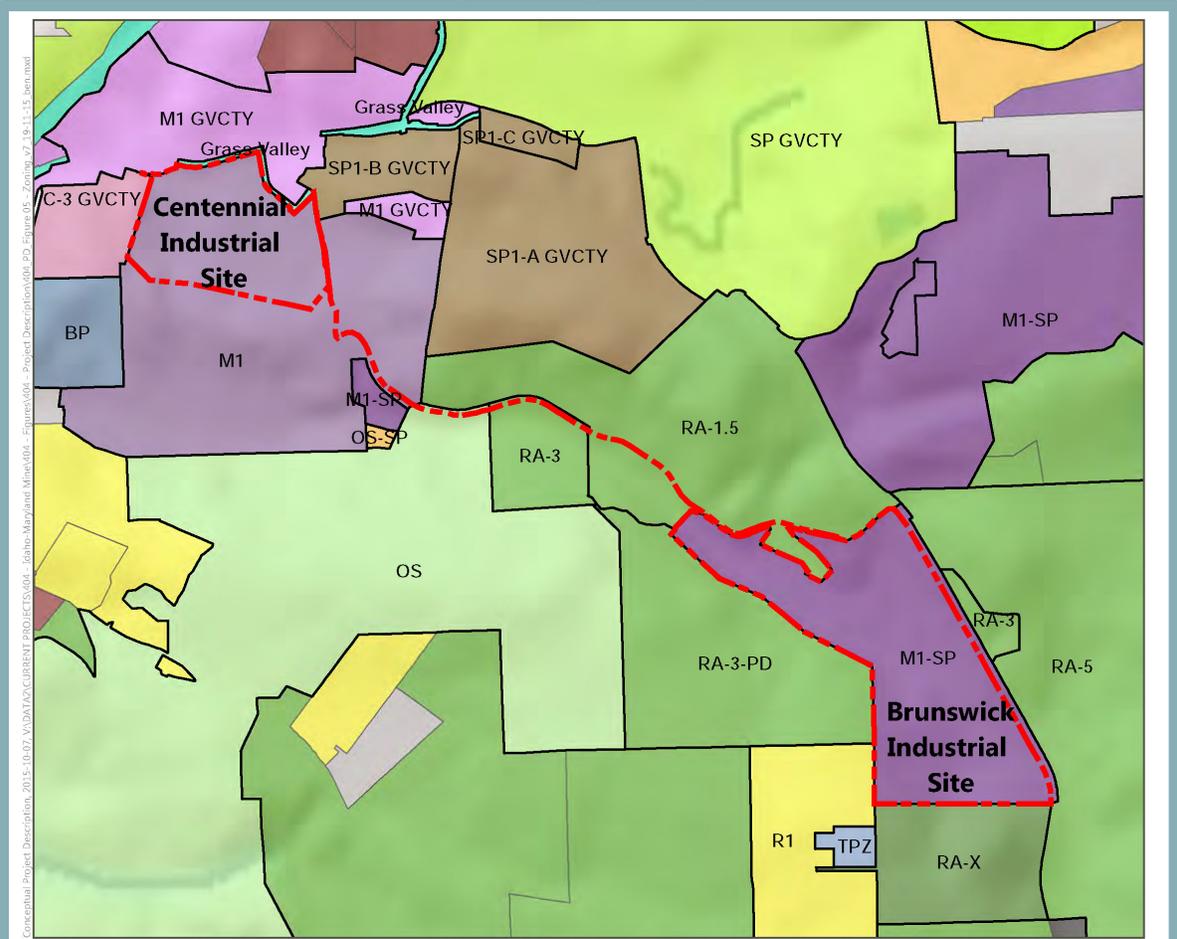
Nevada County Ordinance No. 1853, adopted by the Board of Supervisors on January 18, 1994, created the SP Zoning District for an approximately 80-acre portion of the Brunswick Industrial Site. The remaining approximately 40 acres was subsequently rezoned to the same M1-SP. The Ordinance established design standards and land use regulations for an 80-acre portion of the Brunswick Industrial Site. The purpose of the design standards is to achieve design consistency for the overall development, including minimum standards for buildings, landscaping, off-street parking, signs, lighting, noise, air pollution, hazardous material, and circulation. The land use regulations identify three distinctive subareas for the Brunswick Site, namely, Business Park (5.4 acres); Service Business Light Manufacturing (18.6 acres); and Industrial (18.3 acres).



**Figure 4.9-1
 Existing General Plan Land Use Designations**



**Figure 4.9-2
 Existing Zoning Designations**



SOURCES: ESRI World Shaded Relief accessed May 2019, Zoning—County of Nevada - Open Data - GIS Division "Zoning Districts" (10-17-2018); Nevada County Zoning Ordinance (Article 2; Section L-II 2.1 Establishment of Zoning Districts); adapted by Benchmark Resources in 2019

- NOTES:
1. "GVCTY" refers to City of Grass Valley Zoning Ordinance descriptions.
 2. Zoning descriptions pulled from "ZONEDETAIL" field attributes for areas under Nevada County Zoning Ordinance; descriptions pulled from "ZONETYPE" field attributes for areas under City of Grass Valley Zoning Ordinance.
 3. Labels pulled from "ZONECODE" filed with some labels combined in legend for simplicity.

Project Boundary	OS-SP—Open Space, Site Performance Combining District
BP—Business Park	R1—Single-Family Residential
C-3 GVCTY—Heavy Commercial GVCTY	RA-(1.5;3;3-PD;5)—Residential Agricultural
Grass Valley	RA-X—Residential Agricultural, Subdivision Limitation Combining District
M1—Light Industrial	SP GVCTY—Specific Plan GVCTY
M1 GVCTY—Light Industrial GVCTY	SP1-(A;B;C) GVCTY—Whispering Pines Specific Plan
M1-SP—Light Industrial, Site Performance Combining District	TPZ—Timberland Production Zone
OS—Open Space	

Zoning



Land Use Designation Definitions

The following sections provide definitions of the land use designation noted above, as summarized from the Nevada County General Plan.

Nevada County General Plan Designation

The Nevada County General Plan defines the IND land use designation as follows:

Industrial (IND)

The IND land use category is intended to provide for areas in which goods are produced, distributed and warehoused, along with supporting business and service uses. Locations within this designation should be able to provide buffering from adjacent land uses to minimize incompatibility, and should have convenient, controlled access to arterial or major collector roads without passing through residential areas.

Zoning Designation Definitions

The following sections provide definitions of the zoning designations noted above, as summarized from the Nevada County Land Use and Development Code (LUDC) (Title 3 of the Nevada County Code). It is noted that subsurface mining activities are an allowed use in all base zoning districts, subject to the approval of a Use Permit as required by Nevada County LUDC, Section L-II 3.21 – Subsurface Mining. In addition, pursuant to Section L-II 3.22, surface access to subsurface mining activities, including vent and escape shafts, are allowed in the AG, FR, M1, M2, P and PD base zoning districts, subject to the approval of a Use Permit.

Nevada County Land Use and Development Code

The Nevada County LUDC defines the M1 and M1-SP zoning designations as follows:

Light Industrial (M1)

The M1 District provides areas for the production, repairing, distribution, and warehousing of goods and equipment, along with supporting businesses and services. Uses should provide for buffering from adjacent land uses to minimize incompatibility and should have convenient, controlled access to arterial or major collector roads without passing through residential areas.

Light Industrial, Site Performance Combining District (M1-SP)

The M1-SP District provides for refinements in the site development standards and/or the permitted uses in the base zone district with which the SP District regulations are combined. Such refinements shall ensure consistency with, and further the intent of, all General Plan policies. The SP District shall restrict the use of land and/or structures and establish all other conditions in accordance with the specific ordinance establishing the zone district for the affected property or land area. The ordinance shall have the ability to establish the permitted and prohibited uses of the land, site development standards, public service and utility requirements, and the size, height and use of structures provided that the land usage provisions of the SP District are not less restrictive than the base zone district.

Population and Housing

Population growth assumptions, average household sizes, and vacancy rates for Nevada County are discussed below.



Historical and Current Population

Since the year 2010, Nevada County has seen an increase in its overall population. Consistent with population trends in the three incorporated areas within the County, the unincorporated area of Nevada County has seen a slight increase in population over the last three years as shown in Table 4.9-3.

Year	Unincorporated Nevada County	Nevada County Total
2010	66,656	98,764
2014	65,671	97,842
2015	65,822	98,217
2016	66,075	98,613
2017	65,375	97,019
2018	66,207	99,155
Average Annual Change		
Number	107	236
Percent	0.2	0.3

Source: Nevada County. 2019-2027 Housing Element Update. Adopted June 24, 2019

As shown in Table 4.9-3, the Nevada County Housing Element estimates that in 2018, Nevada County had a population of 99,155 people and has experienced an annual percent change increase of approximately 0.3 percent over the last five years.²

Average Household Size

The average size of households is a function of the number of residents living in households within a given area divided by the number of occupied housing units within the given area. As shown in Table 4.9-4, average household sizes in California slightly increased between 2010 and 2018, with average household sizes increasing by approximately 0.11 persons/household. Concurrently, the average household size within Nevada County remained the same between 2010 and 2018.

Area	2010	2018
California	2.87	2.98
Unincorporated Nevada County	2.38	2.39
Nevada County Total	2.35	2.35

Source: Nevada County. 2019-2027 Housing Element Update. Adopted June 24, 2019

Vacancy Rate

The residential vacancy rate is a good indicator of the balance between housing supply and demand in a community. When the demand for housing exceeds the available supply, the vacancy rate will be low. In a healthy market, the vacancy rate is between five and eight percent. If the vacant units are distributed across a variety of housing types, sizes, price ranges, and locations throughout the County, there should be an adequate selection for all income levels.

² Nevada County. 2019-2027 Housing Element Update [page 8-18]. Adopted June 24, 2019.



As shown in Table 4.9-5, the overall housing vacancy rate in Nevada County, including incorporated areas is at 22.5 percent, which is an increase of approximately 6.6 percent over 2010 levels. Each jurisdiction in the County has seen a similar increase in the overall number of vacant units within their jurisdiction with the unincorporated area going from 12.3 percent in 2010 to 14.4 percent in 2018.³

Area	Total Housing Units	Single-Family	Multi-Family	Mobile Homes	Occupied	Vacant Units	Vacancy Rate
Grass Valley	6,696	3,214	3,043	436	6,157	539	8.0%
Nevada City	1,545	1,283	250	12	1,422	123	8.0%
Truckee	13,322	11,414	1,466	442	6,531	6,691	51.0%
Unincorporated Nevada County	32,182	29,464	435	2,283	27,537	4,645	14.4%
Nevada County Total	53,745	45,375	5,194	3,176	41,647	12,098	22.5%

Source: Nevada County. 2019-2027 Housing Element Update. Adopted June 24, 2019

4.9.3 REGULATORY CONTEXT

Federal laws or regulations pertaining to land use and planning or population and housing are not applicable for this analysis. However, the existing State and local laws and regulations are listed below, as applicable.

State Regulations

The following are applicable State regulations related to land use and planning and population and housing.

Title 14 California Code of Regulations Section 15131

Title 14, California Code of Regulations (CCR) Section 15131 provides that economic or social information may be included in an EIR, but those economic or social effects shall not be considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic or social changes resulting from a project, which may eventually lead to physical changes in the environment. Such economic or social changes can be used to determine the significance of physical changes on the environment.

Local Regulations

Relevant goals and policies from the Nevada County General Plan and various other local guidelines and regulations related to land use and population and housing, are discussed below.

Nevada County General Plan

Applicable land use-related policies from the Nevada County General Plan that have been adopted for the purpose of avoiding or mitigating an environmental effect are listed below. The

³ Nevada County. 2019-2027 Housing Element Update [page 8-22]. Adopted June 24, 2019.



remaining chapters of this EIR address additional Nevada County General Plan goals and policies that are resource/topic (e.g., noise, transportation) specific and applicable to the proposed project. Please refer to Chapters 4.1 through 4.13 of this EIR.

Policy 1.1.2 The General Plan divides the County into Community Regions and Rural Regions. All of the land area of the County is placed in one of these regions. Within the Rural Regions, growth is limited to those types and densities of development which are consistent with the open, rural lifestyle, pastoral character and natural setting and surrounding land use patterns which exists in these areas. Within the Community Regions, balanced growth is encouraged to provide managed housing, community, located for convenience, efficiency and affordability.

The General Plan Land Use Maps delineate specific boundaries for Community Regions. All portions of the County not within a Community Region shall be considered to be in a Rural Region.

Policy 1.1.3 Within Nevada County, the Community Regions are established as the areas of the County within which growth should be directed to provide compact, areas of development where such development can be served most efficiently and effectively with necessary urban services and facilities.

The Community Regions are defined by Community boundaries generally based upon the following criteria:

- a. Existing development patterns reflecting higher intensity and density of use and need to provide land area to accommodate a balanced pattern of development in the County;
- b. Existing and potential service areas for major services such as public sewer and water;
- c. Location of major topographic patterns and features;
- d. Major transportation corridors and travel patterns;
- e. Ability to provide and maintain appropriate transitions at Community boundaries.

In addition to the Town of Truckee, Grass Valley and Nevada City, Community Regions are established for Higgins Corner/Lake of the Pines, Lake Wildwood and Penn Valley. Boundaries for the Community Regions are shown on the General Plan Land Use Maps.

In addition, The New Town Reserve, as provided in Policy 1.4.4, shall be considered as a Community Region upon approval of a specific plan designating the community boundary.

Policy 1.2.2 The County will review innovative land use measures that promote the preservation of open space and environmentally-sensitive



areas. Such concepts as transferable development credits, clustering incentives, and site analysis requirements will be considered.

Policy 1.2.4 The General Plan provides for future development in accordance with the following criteria for the various land use designations: ...

- n. Industrial (IND) is intended to provide for areas in which goods are produced, distributed and warehoused, along with supporting business and service uses. Locations within this designation should be able to provide buffering from adjacent land uses to minimize incompatibility, and should have convenient, controlled access to arterial or major collector roads without passing through residential areas...

Policy 1.5.1 Establish a land use pattern which provides for open space, environmentally sensitive land, resource management areas and appropriate transitions.

Policy 1.5.3 The adopted Comprehensive Site Development Standards, contained in the Land Use and Development Code (Chapter II, Article 4), were established and are implemented as directed by Action Policy 1.17 of the 1995 General Plan. These standards are used during the “project site review process” to provide a consistent approach for addressing the presence of sensitive environmental features and/or natural constraints, clustering and provisions of open space as a part of development, the potential for land use conflicts between uses, and the potential for public health hazards. Applicable to all development projects in the County, the Comprehensive Site Development Standards have been designed to be protective of the County’s unique character, providing guidance for:

- a. Protection of environmentally sensitive resources;
- b. Provision of open space as part of site development;
- c. Prevention and reduction of fire hazards;
- d. Maintenance and enhancement of vegetation and landscaping;
- e. Prevention and reduction of flood hazards;
- f. Transitions between uses and multiple-use site development;
- g. Community design;
- h. Buffering and screening to mitigate adverse effects;
- i. Incentives to provide for access to public resources and
- j. open space; and
- k. Protection of important agricultural, mineral, and timber resources.

These standards shall identify the basic requirements for site development in the County, including, at a minimum, standards to



mitigate the impact of development on the following environmentally sensitive resources:

- Wetlands (as delineated in the U.S. Fish and Wildlife Service National Wetlands inventory);
- Major deer migration corridors, critical range, and critical fawning areas (as defined by the State Department of Fish and Wildlife's Migratory Deer Range Maps);
- Landmark oaks, (defined as any oak 36" or greater at dbh);
- Landmark oak groves, (defined as areas with 33+% canopy closure based on the State Department of Forestry and Fire Protection's Hardwood Rangeland Maps);
- Rare and endangered species, (as found in the California Natural Diversity Database and the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California);
- Riparian corridors within 100 feet of intermittent or perennial water courses (as shown the U.S. Geological Survey Quadrangle Topographic Maps);
- Significant cultural resources (as may be defined based upon recommendations by the Native American Heritage Commission or recognized Native American Group, Nevada County Landmarks Commission, or the Nevada County Historical Society);
- Floodplains precluding development and land disturbance within floodways and restricting development within the floodway fringe, through the establishment of floodplain setbacks and associated development regulations (as defined by the Federal Emergency Management Agency's Flood Insurance Rate Maps);
- Important agricultural lands, (as defined by the State Department of Conservation's Important Farmlands Map);
- Significant mineral areas, (as defined by the State Division of Mines and Geology 's Nevada County Mineral Classification Report Maps referred to as Mineral Resource Zones -2);
- Earthquake faults, (as defined by the State Division of Mines and Geology's Fault Map of California the United States Bureau of Reclamation's Seismotectonic Study of the Truckee/Lake Tahoe Area);
- Avalanche hazards (as defined by the Norman Wilson Avalanche Hazard Study);
- Steep slopes (30+%);
- Areas with high erosion potential (as determined by the United States Department of Agriculture's Soil Surveys of Nevada County and the Tahoe National Forest);
- Areas subject to fire hazards, (as defined by the State Department of Forestry and Fire Protection's Fire Hazard Severity Map); and



- Visually important ridgelines and viewsheds, (as defined by standards developed by Policy 18.3 of the General Plan).

Policy 1.5.4 Where such resources are present, the standards shall require that professional field inventory and review shall be undertaken to delineate the extent of the resource and determine the impact of the proposed development. The following siting and design measures shall be implemented as appropriate to meet the performance criteria:

- Identification of building envelopes;
- Conservation easements/deed restrictions;
- Use of common vs. individual driveways;
- Specification of location and type of fencing;
- Identification of setbacks and/or buffers;
- Development restrictions;
- Use of Transfer of Development Rights; and
- Offsite mitigation/mitigation banking.

The County shall approve a project for a discretionary permit only if it can be demonstrated that the project, as designed and sited, meets the intent of the Comprehensive Site Development Standards.

Policy 1.10.1 Implement the adopted Airport Land Use Compatibility Plans for the Nevada County and Truckee Tahoe Airports to maintain compatible land use development patterns within the identified airport influence zones.

Policy 1.10.2 Refer all land use actions which always require Airport Land Use Commission (ALUC) review and other major land use actions affecting property within an airport influence area, to the appropriate ALUC, as listed in accordance with the policies set forth in the applicable Airport Land Use Compatibility Plan, as those standards are in effect and may be hereafter amended.

Policy 6.9 Development standards for project design, grading, construction and use, established through the Comprehensive Site Development Standards, shall be used in project review of all discretionary project permits to determine open space requirements for each project.

These standards shall provide for consideration of non- disturbance of, and open space setbacks from identified sensitive environmental, biological, or cultural resources, e.g. 100-year floodplains, wetlands, slopes in excess of 30% (excepting access across slopes up to 30%), lakes, ponds, significant historic or archaeological sites/resources, critical wildlife areas, minimization of land disturbance, consistency with the landforms and aesthetic



context of the site, temporary and permanent erosion and sedimentation controls, and vegetation retention, replacement and enhancement.

Policy 11.2 Encourage the protection of resources which produce water for domestic and agricultural consumption.

Policy 11.6 The County shall continue to enforce its regulations concerning the installation and operation of private sanitary waste disposal systems in order to protect the quality of surface and ground water. The location of septic tanks and leach fields and their appropriate setbacks from water courses shall be in accordance with the guidelines of the Lahontan Regional Water Quality Control Board (eastern County) and the Central Valley Regional Water Quality Control Board (western County).

Policy 11.9B Require new utilities, critical facilities and non-essential public structures to be located outside the 100-year flood plain unless such facilities are necessary to serve existing uses, there is no other feasible location, and construction of these structures will not increase hazards to life or property within or adjacent to the floodplains.

Policy 17.9 Encourage the mining of previously mined land, if such land still contains economically mineable minerals, so the land can be reclaimed for alternative uses.

Policy 17.12 In approving mining projects which according to expert opinion may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses, the County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water.

Where water quantity and quality problems occur, an immediate water supply shall be provided by the operator until the source of the problem is determined. The burden of proof shall be on the operator to show that the mining operation did not create the water problem. If it is determined that the operator is at fault, impacted owners shall be compensated by the operator.

Policy 17.14 Already existing development - commercial, residential, and community - as well as undeveloped private lands, shall be protected from adverse environmental effects caused by mining through enforced use permit conditions and mitigations measures, or denial of the projects. The County shall be the enforcement agency.

Policy 17.17 The County shall use the "ME" Mineral Extraction Combining District as a means to provide for the public awareness of the



potential for surface mining to occur where it has been established that important minerals are present. The "ME" District shall be used only on those lands which are within any of the compatible General Plan designations and which are not residentially zoned.

Policy 17.25 Surface access to subsurface mining is conditionally permitted only in compatible General Plan designations as defined herein. However, vent and escape shafts are conditionally permitted in incompatible General Plan designations where surface disturbance is minimal.

Policy 18.1 The County shall prepare Community Design Guidelines applicable to the various General Plan Designations and zoning classifications, and adopt such guidelines as part of Comprehensive Site Development Standards, to be used in the project site review of all discretionary and ministerial project permits. The guidelines may include, but not be limited to the following:

- a. Community identity
- b. Preservation of natural landforms
- c. Protection and management of viewsheds
- d. Protection and management of river corridors and other significant streams

These Guidelines shall be the base design standards applicable to all projects. Area-specific Design Guidelines, where adopted by the County pursuant to Policy 18.2, shall be applicable in addition to the base guidelines within the specified area.

Policy 18.3 The County shall establish standards for the protection of large-scale views and viewsheds and shall incorporate such standards in the Comprehensive Site Development Standards. The standards shall provide an inventory of sensitive views and viewsheds within Nevada County, and specify protective measures and impact controls applicable through the project site review process.

Policy AH-10.4.1 Maintain land use and development patterns in the vicinity of airports that reflect and are consistent with policies for the different airport land use compatibility zones within the defined Airport Influence Areas as set forth by the Nevada County and Truckee Tahoe Airport Land Use Compatibility Plans (ALUCPs).

Nevada County Land Use and Development Code

The following sections of the Nevada County LUDC are applicable to the proposed subsurface and surface mining operations.



Subsurface Mining (Section L-II 3.21)

Subsurface mining is allowed in all base districts subject to approval of a Use Permit. Surface access to subsurface mining, including vent and escape shafts, is allowed in the AG, FR, M1, M2, P, and PD base districts subject to approval of a Use Permit. Small vent and escape shafts disturbing not more than 100 cubic yards of overburden are allowed in all other base districts subject to approval of a Use Permit.

Surface Mining Definition (Section L-II 3.22 [B.19])

Surface Mining - All, or any part of, the process involved in the mining of minerals on mined lands by removing overburden and mining directly from the mineral deposits, open-pit mining of minerals naturally exposed, mining by the auger method, dredging and quarrying, or surface work incident to an underground mine. Surface mining operations include, but are not limited to, combination, concentration, processing, in-place distillation or retorting or leaching, the production and disposal of mining waste, borrow pitting, streambed skimming, and segregation and stockpiling of mined materials (and recovery of same). Said process shall not include the processing and use of on-site aggregate for on-site construction (see Section L-II 3.13).

Surface Mining (Section L-II 3.22 [D.3])

Surface mining is allowed in the AG, FR, M1, M2, P, PD, and TPZ Districts and where the property is zoned ME, subject to approval of a Use Permit and Reclamation Plan. Within the TPZ Districts, surface boulder collection only is allowed, and is limited to exposed rocks within areas of historic, previously mined lands where no significant impacts to sensitive resources occur, and no additional roads are constructed, subject to a Use Permit and Reclamation Plan.

Mineral Extraction Combining District (ME)

The purpose of the ME Combining District is to allow for surface mining and to provide for public awareness of the potential for surface mining to occur where adequate information indicates that significant mineral deposits are likely present. The ME Combining District is intended to inform the public of the existence of minerals and the potential for mineral extraction and shall be used only on those lands that are within any of the compatible Nevada County General Plan designations and which are not in a residential zone.

4.9.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to land use and planning and population and housing. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;
- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure); or



- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Method of Analysis

The following section describes the method of analysis used to evaluate potential impacts of the proposed project related to land use and planning and population and housing.

Land Use and Planning

This chapter analyzes the compatibility of the proposed project with surrounding land uses and compliance of the proposed project with adopted plans and policies. Environmental impacts resulting from the proposed project are discussed in the respective technical environmental chapters. This discussion complies with Section 15125(d) of the CEQA Guidelines, which requires that EIRs discuss inconsistencies with adopted local plans as part of the environmental setting. The ultimate determination of consistency rests with the Nevada County Board of Supervisors.

Consistency with the Applicable Land Use Regulations

The proposed project is examined for consistency with the Nevada County General Plan based on the relevant policies adopted for the purpose of avoiding or mitigating an environmental effect contained within the document. The project's consistency with the LUDC is also discussed.

Population and Housing

The level of significance of the impacts related to population and housing is determined by evaluating whether the proposed project, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure), would induce substantial unplanned population growth in the project area.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.9-1 Physically divide an established community. Based on the analysis below, the impact is *less than significant*.

The proposed project would reinstate underground mining and gold mineralization processing for the Idaho-Maryland Mine over an 80-year permit period, and would operate on land designated for industrial use and currently used to store industrial materials on both the Brunswick and Centennial Industrial Sites. The project would not affect access to the nearby roadways and would not change access to a nearby community from these roadways. In addition, following completion of mining and processing activities, the project sites would be reclaimed to undeveloped land suitable for future industrial uses. The proposed project would not cut off any existing or proposed transportation route that provides connectivity in the area. The proposed potable water pipeline along East Bennett Road would be underground and would not affect circulation or divide an established community. Therefore, the proposed project would not physically divide an established community. Thus, a ***less-than-significant*** impact would occur.



Mitigation Measure(s)

None required.

4.9-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the impact is *less than significant*.

The General Plan Guidelines published by the State Office of Planning and Research (OPR) defines consistency as follows, “An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment.” Therefore, the standard for analysis used in this EIR is in general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the project is consistent or inconsistent with the Nevada County General Plan policies or other County plans and policies is ultimately the decision of the Nevada County Board of Supervisors. Furthermore, although CEQA analysis may identify some areas of general inconsistency with County policies, the County has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies. A discussion of the project’s general agreement with policy language and furtherance of policy intent is discussed in further detail below. The LUDC carries out the policies of the Nevada County General Plan by classifying and regulating the uses of land and structures within the unincorporated County, consistent with the General Plan.

The proposed project includes subsurface mining activities which are an allowed use in all base zoning districts, subject to the approval of a Use Permit as required by Nevada County LUDC, Section L-II 3.21 – Subsurface Mining. In addition, pursuant to Section L-II 3.21, surface access to subsurface mining activities, including vent and escape shafts, are allowed in the AG, FR, M1, M2, P and PD base zoning districts, subject to the approval of a Use Permit. Thus, as proposed, both the subsurface mining activities and the surface access to subsurface mining activities uses are allowed within the M1 Zoning District, subject to the approval of a Use Permit, and would therefore be consistent with the M1 Zoning District allowed uses pursuant to Nevada County LUDC. LUDC Section L-II 3.22 (B.19) includes processing as a surface mining operation and LUDC Section L-II 3.22 (D.3) allows surface mining, which includes processing plant operations, in the M1 zone district, and where the property is zoned ME, subject to the approval of a Use Permit and Reclamation Plan. The proposed project includes a subsurface estate of approximately 2,585 subsurface acres, to which the applicant retains the mineral rights and which is comprised of many different types of base zoning districts. However, as previously demonstrated, subsurface mining activities are allowed in all base zoning districts, subject to the approval of a Use Permit, as allowed by Nevada County LUDC, Section L-II 3.21 – Subsurface Mining.

The proposed project includes the requested rezone of the parcels located at the Brunswick Industrial Site from M1-SP to Light Industrial with Mineral Extraction



Combining District (M1-ME) (Figure 4.9-3). Pursuant to Section L-II 2.7.3, the primary purpose of the ME Combining District is to allow for surface mining and to provide for public awareness of the potential of the existence of minerals and the potential for surface mining to occur where adequate information indicates that significant mineral deposits are likely present. While the primary mining activities would be subsurface, which is a conditionally allowed use in the M1 Zoning District, the proposed activities at the Brunswick site include activities defined as surface mining and require a ME zoning under LUDC Section L-II 3.22. In addition, the rezoning of the Brunswick Industrial Site to remove the Site Performance Combining District is also necessary because it was added as part of Ordinance No. 1853 in 1994 when the project site was owned by Sierra Pacific Industries and proposed as the Nevada County Business and Industrial Center. Given that the Nevada County Business and Industrial Center is no longer proposed, it would be appropriate to rezone the subject site to remove the SP Combining District.

In establishing the ME Combining District, one or more of the following standards must be met:

1. Said lands have been designated as MRZ-2 based on State of California Classification Reports.
2. It has been clearly demonstrated that significant mineral deposits are likely present on said lands based on data similar in nature to the State Classification Reports.

As shown in Figure 4.6-3 in the Geology, Soils, and Mineral Resources chapter of this EIR, the project sites are located on land designated MRZ-2b, and historic gold mining of the project site and recent exploratory drilling clearly demonstrates that significant mineral deposits are accessed from the Brunswick Industrial Site. Therefore, both standards are met. With the rezone, the proposed use would be consistent with the permitted uses for the zoning designation and allowed with a conditional use permit.

In addition, to ensure consistency with all other applicable plans and policies, the project includes several other entitlements, including the request for a Use Permit for the following uses over the 80-year permit life:

- Operation of pumps and a water treatment facility to dewater the underground mine workings;
- Construction of a water pipeline to transport treated water to an outfall located in South Fork of Wolf Creek;
- Construction of the necessary aboveground facilities at the Brunswick Industrial Site (to include but not limited to, headframes and hoists, surface structures, a mineral processing plant) to support underground mining and mineral processing;
- Underground mining, including drilling, blasting, and gold mineralization removal;
- Gold mineralization and rock processing at the Brunswick Industrial Site including off-site transport of gold concentrate;



- Transport of engineered fill from the Brunswick Industrial Site and placement at the Centennial Industrial Site;
- Transport of engineered fill from the Brunswick Industrial Site to off-site construction projects;
- Placement of engineered fill at the Brunswick Industrial Site; and
- Construction of a potable water pipeline to supply residences along a portion of East Bennett Road.

The project also includes the approval of a Reclamation Plan and financial assurance mechanism to reclaim project-related surface disturbance to a condition suitable for industrial uses as allowed by Nevada County LUDC, Section L-II 3.22A.3.

To be able to execute the activities allowed on-site with the zone change, certain structures must be taller than 45 feet. Thus, a variance to the building height limits is requested to allow for the construction of structures up to a height of 165 feet, where 45 feet is currently required in the M1 Zoning District. Specifically, the Variance would apply to the proposed 64-foot-tall process plant, the proposed 165-foot-tall headframe for the Brunswick shaft, the proposed 80-foot-tall headframe for the proposed service shaft, and the proposed 50-foot-tall hoist buildings associated with the two mine shafts. The increased building heights would be designed, constructed, and operated in compliance with the Occupational Safety and Health Administration (OSHA) requirements, zoning standards, the County building code, the health and safety code, Nevada County Consolidated Fire District rules, and other applicable County and state regulations. In addition, the project building heights would comply with the Nevada County Airport Land Use Compatibility Plan (NCALUCP). The Brunswick Industrial Site is partially within Zones C, D, D-Urban Overlay, and E of the NCALUCP. For Zone D, airspace review is required for objects greater than 3,207 feet above mean sea level (msl).

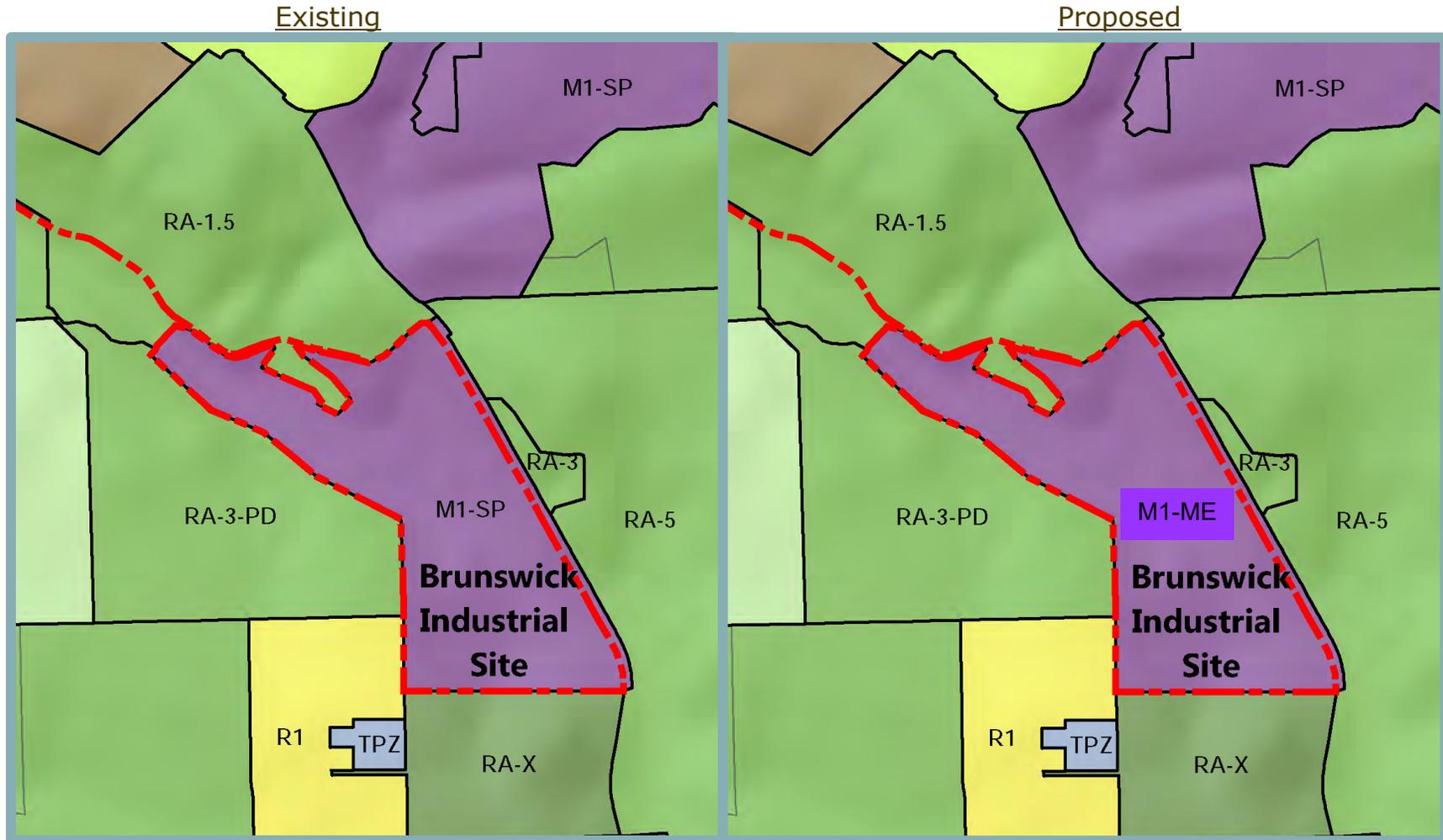
The top of the tallest proposed feature at the Brunswick Industrial Site (the 165-foot-tall headframe building) would be at 2,912 feet msl, and is therefore not subject to air space review under the NCALUCP and would not create the potential to conflict with airport operations.

The project is not a noise-sensitive use, would not pose a hazard to flight, and would not exceed the density requirements; therefore, the project would comply with the requirements of the NCALUCP for Zones C, D, D-Urban Overlay, and E. According to the Nevada County Airport Land Use Commission (NCALUC), the proposed project does not contain characteristics likely to result in inconsistencies with the compatibility criteria set forth in the Nevada County Airport Land Use Compatibility Plan and the NCALUC gives approval of the project.⁴

⁴ Daniel Landon, Executive Director, Nevada County Transportation Commission. Email correspondence to Matt Kelley, Senior Planner, Nevada County, January 27, 2020.



Figure 4.9-3
Existing and Proposed Zoning Designations of the Brunswick Industrial Site



General Plan Policy 18.1 states that the County shall prepare Community Design Guidelines applicable to the various General Plan Designations and zoning classifications. The Western Nevada County Design Guidelines were adopted by the Board of Supervisors on March 19, 2002. The Guidelines provide direction regarding building heights, such as “Design building heights to relate to adjacent open spaces to allow maximum sun and ventilation, and to minimize obstruction of views,” and “Use a height and scale for new development that is compatible with that of surrounding development.” Development surrounding the Brunswick Industrial Site, where the mine-related structures would be located, is relatively limited. While the 12836 Greenhorn Road project, north of the Brunswick Industrial Site, is under construction, and would result in the construction of five light-industrial buildings ranging in size from 2,452 square feet to 4,118 square feet, the limited surrounding development primarily consists of rural residential dwellings. Given the former and existing mine-related structures on the Brunswick Industrial Site, such as the current day 85-foot-tall concrete silo, the setting is already one where the height and scale of features on the Brunswick Industrial Site are not compatible with the surrounding rural dwellings. Nevertheless, the proposed project would double the height of the silo to create the headframe structure, and introduce additional structures exceeding the height limit of the M1 Zoning District (64-foot-tall process plant, 80-foot-tall headframe for the proposed service shaft, and 50-foot-tall hoist buildings), and thus require a Variance. Thus, from an aesthetics perspective, the proposed project could be considered incompatible with surrounding development, and as discussed in more detail in Chapter 4.1, Aesthetics, of this EIR, the proposed project would be considered to have a significant and unavoidable impact, after mitigation, related to substantially degrading the visual character or quality of the site and its surroundings.

A boundary line adjustment at the Brunswick Industrial Site is also requested as part of the Project to transfer approximately 46.27 acres for three separate parcels (APN: 009-630-039, 006-441-034, 006-441-003) to reconfigure the parcels in a manner that would allow for the proposed building configuration, while avoiding buildings crossing property lines within the Brunswick Industrial Site.

The project also includes a request to amend the Final Map for the formerly proposed Bet Acres Subdivision recorded in February 1987, in Book 7 of Subdivision Maps at Page 75, to remove the “200’ Building Setback From Fault”, as shown on Sheet 4 of Final Map #85. Sheet 4 of the Final Map includes a portion of the Brunswick Industrial Site. The Final Map shows the location of where Anderson Geotechnical Consultants had believed a fault to be, based on their previous site investigations, and depicted it as a straight dashed line with two parallel lines located 200 feet either side, presumably showing Anderson’s suggested setback distances for building construction. Substantial evidence is provided in the Geology, Soils, and Mineral Resources of this EIR (Chapter 4.6, see Impact 4.6-1), indicating that the area is not seismically active, and thus, building setbacks are not required. Sec. L-IV 2.18 of the County Subdivision Ordinance allows for corrections and amendments to an approved tentative map, recorded final map or a parcel map, if the amendments have a cumulatively minor effect on the subdivision and its impacts. The proposed changes to the map or to conditions of approval must be considered at a public hearing by the original approval body.



The County LUDC requires preparation and implementation of management plans when certain on-site conditions exist and/or the project would disturb certain habitat types and land uses, in order to avoid or mitigate environmental effects. A management plan is required by the County to minimize the impacts of development on environmentally sensitive environmental resources and/or constraints. The County LUDC establishes site development standards for sensitive resources, providing successive methods to protect the resource. Therefore, management plans for this project have been prepared for the following environmentally sensitive resource areas:

- Allow for development within the required 100-foot setback from the Riparian Area of a Perennial Watercourse, pursuant to the Nevada County LUDC, Section L-II 4.3.17, at the Brunswick and Centennial Industrial Sites;
- Minimize the direct impact to special-status plant species, pursuant to the Nevada County LUDC, Section L-II 4.3.12, at the Centennial Industrial Site;
- Allow development within locations of areas of steep slopes that are in excess of 30 percent and high erosion potential at both the Brunswick and Centennial Industrial Sites, pursuant to the Nevada County LUDC, Section L-II 4.3.13; and
- Allows limited grading within the County's 100-foot buffer from the Wolf Creek 100-year floodplain boundary, subject to mitigations and conditions that must be complied with to ensure that the operations at the Centennial Industrial Site would not result in adverse effects to the 100-year floodplain associated with Wolf Creek.

Please refer to the respective technical chapters of this EIR for detailed discussions regarding how these management plans avoid or mitigate the project's environmental effects.

Another General Plan Policy adopted for the purpose of avoiding/mitigating environmental effects is Policy 17.12 concerning water quality and quantity. According to Policy 17.12, when approving mining projects which according to expert opinion may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses, the County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water.

Potential impacts to water quality are discussed in Chapter 4.8 at Impact 4.8-1 and potential effects on groundwater wells and water quantity are discussed in Chapter 4.8 at Impact 4.8-2. The analysis of potential effects on groundwater wells (Impact 4.8-2) identifies potential adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. To address this potential effect, the project proposes the extension of the NID potable water system to connect up to 30 properties to the NID water supply system, funded by the proponent, to guarantee a supply of water in this area. Residences on the streets of Cordell Court, Miskin Court, Amethyst Court, Emerald Court, Diamond Court, and Old Mine Road and several private driveways would be offered the opportunity to connect to a new potable water line provided by the project. Residential connection to a new potable water line that would be installed by the project would be voluntary and at the property owner's discretion. The pipeline would be installed within the right-of-way in the above-stated streets and stubbed at the property owner's property boundary. If the property owner



decides to connect to the potable water line, the applicant would fund the permitting, construction, and ongoing service costs. This project component is defined in a Well Mitigation Plan that would be implemented by the applicant pursuant to Mitigation Measure 4.8-2(c) of this EIR.

General Plan Policy 17.14 states that existing development - commercial, residential, and community - as well as undeveloped private lands, shall be protected from adverse environmental effects caused by mining through enforced use permit conditions and mitigations measures, or denial of the projects. The project requires County approval of a conditional use permit for the proposed mining operations, and this EIR includes mitigation measures to protect the surrounding community from the project's potential physical environmental impacts.

General Plan Policy 1.2.4 provides criteria for the various land use designations, including Industrial, with direction to provide buffering from adjacent land uses to minimize incompatibility. Visual compatibility was discussed previously, but compatibility concerns also typically include noise and lighting. These issues are addressed in Chapters 4.1 and 4.10 of this EIR, respectively. The EIR concludes that the proposed project has been designed to ensure operational noise and lighting would result in less-than-significant impacts to nearby receptors. However, short-term noise increases due to initial construction of the potable water pipeline in East Bennett Road would result in a significant and unavoidable impact, after mitigation, thus, creating a short-term incompatibility. With respect to lighting, all exterior lighting within the Brunswick Industrial Site would comply with Section L-II 4.2.8, Lighting, of the Nevada County LUDC, and Section E, Lighting, of the Western Nevada County Design Guidelines. As shown in the photometric exhibits included in Chapter 4.1 (see Figures 4.1-2 through 4.1-5), the proposed outdoor light fixture designs would prevent light spillover onto any of the nearest sensitive receptors.

Conclusion

A CEQA analysis of land use plan consistency does not require that a project strictly conform with all General Plan policies.⁵ Instead, a project is to be evaluated for potential conflicts with General Plan policies that serve to avoid or mitigate an environmental effect. As demonstrated throughout this EIR and with implementation of mitigation measures identified in this EIR, the proposed project would avoid or otherwise mitigate the majority of its potentially significant environmental impacts, while furthering County policies regarding mineral resources, such as General Plan Policy 17.9, which encourages the mining of previously mined land, if such land still contains economically mineable minerals, so the land can be reclaimed for alternative uses. Overall, the proposed project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; therefore, this impact is **less-than-significant**.

Mitigation Measure(s)

None required.

⁵ Stephen L. Kostka and Michael H. Zischke, *Practice Under the California Environmental Quality Act, Second Edition (Continuing Education of the Bar: California)*, March 2020, Section 12.33.



4.9-3 Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure). Based on the analysis below, the impact is *less than significant*.

Growth can be induced in a number of ways, including through the elimination of obstacles to growth or through the stimulation of economic activity within the region. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped. The following sections describe potential effects related to direct and indirect population growth associated with implementation of the proposed project.

Direct Population Growth

The proposed project includes underground mining operations and above-ground operations and does not include proposed residential development. In addition, the proposed off-site potable water line would serve existing residences only. Therefore, the proposed project would not result in direct population growth in the area.

Indirect Population Growth

The proposed project would reinstate underground mining and gold mineralization processing for the Idaho-Maryland Mine over an 80-year permit period. The total workforce when the Idaho-Maryland Mine Project reaches commercial production is estimated at 312 persons. Therefore, the number of jobs required during operation of the proposed project could draw more people to the area and result in indirect population growth as a result. Table 4.9-6 shows the breakdown of the operations workforce by working schedule and area. The majority of workers (268 employees) would work 12 hour shifts with seven days of work followed by seven days of rest. The remaining workforce (44 employees) would work regular eight hour shifts with five days of work followed by the weekend of rest.

As discussed previously and shown above in Table 4.9-5, as of 2018, Nevada County has 53,745 total housing units with a 22.5 percent vacancy rate (12,098 vacant housing units). The unincorporated area of Nevada County has a total of 32,182 housing units with 4,645 vacant housing units (14.4 percent vacancy rate). Therefore, it is reasonably anticipated that the addition of 312 persons as a result of increased employment generated by the proposed project could be accommodated by existing housing stock in Nevada County.



**Table 4.9-6
Idaho-Maryland Mine Workforce by Area and Schedule**

Workforce	Shift	Total Employees	Employees Per Shift
Management and Technical Staff	8 hours a day, 5 days a week - dayshift	36	36
Assaying and Construction	8 hours a day, 5 days a week - dayshift	4	4
Underground Mine	12 hours a day, 7 days on, 7 days off	202	50
Mineral Processing	12 hours a day, 7 days on, 7 days off	64	16
Truck Transport of Engineered Fill	12 hours a day, 7 days on, 7 days off	2	1
Placement and Compaction of Engineered Fill	8 hours a day, 5 days per week - dayshift	4	4
Total Workforce		312	111

Source: Rise Grass Valley, Inc. Idaho-Maryland Mine Project Employment Details. November 2020

Additionally, substantial economic incentives exist to maximize employee recruitment from the local Nevada County area. Rise Grass Valley estimates that approximately two-thirds of the workforce can be recruited locally. Rise has established local recruitment targets to be achieved through the implementation of a training program. A total of 162 positions have been designated for trainees with no previous experience. Rise estimates that approximately 51 additional workers, with previous experience and training in mining, engineering, electrical or other trades, are available for local area recruitment. Therefore, at least 213 workers (approximately 68 percent of the mine's workforce) are estimated to be sourced from the immediate Nevada County area. It is anticipated that approximately 99 workers (32 percent of workforce) would be recruited from outside the local area; these positions require extensive experience in underground mining which are less likely to be possessed by persons currently residing in the immediate local area.

Considering that the average metal miner in the U.S. is 41.5 years of age, it is reasonable to assume that many employees would have families.⁶ Conservatively assuming that each of the 99 workers recruited from outside the local area would have a family, the total new population introduced to the local Nevada County area from these 99 workers would be approximately 240 people.⁷ The addition of 240 persons as a result of the proposed project would not impact the existing housing stock for Nevada County, given the existing vacancy rates.

As discussed in Chapter 3, Project Description, of this EIR, the proposed project includes a Reclamation Plan, which upon completion of aboveground gold processing and off-site sale of engineered fill, the Brunswick Industrial Site would be reclaimed to open space and industrial uses. A majority of the aboveground facilities and structures

⁶ National Institute for Occupational Safety and Health. *National Survey of the Mining Population, Part I: Employees.* Information Circular 9527, 2012, pg. 75; available at: <https://www.cdc.gov/niosh/mining/UserFiles/works/pdfs/2012-152.pdf>; accessed January 26, 2021.

⁷ Assuming 2.42 persons per household, consistent with the Nevada County 2019-2027 Housing Element, pg. 8-23.



including access roads, parking areas, and driveways, would remain to support future post-mining industrial uses on the site; however, any future industrial use would require separate environmental review and discretionary approvals by Nevada County.

Conclusion

As discussed above, the proposed project would provide employment opportunities that would result in indirect population growth. However, population growth resulting from the proposed project would not exceed the current housing stock in the area. Therefore, the proposed project would not induce substantial unplanned population growth, and this impact would be **less-than-significant**. Potential impacts related to growth inducement are discussed further within Chapter 5, Statutorily Required Sections, of this EIR.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

Detail regarding the cumulative setting is included in Chapter 5, Statutorily Required Sections, of this EIR.

4.9-4 Cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the cumulative impact is less than significant.

As discussed in Impact 4.9-2, the proposed project would be generally consistent with relevant policies in the Nevada County General Plan. As discussed in Section 5.3 of this Draft EIR, Cumulative Impacts, the cumulative projects considered in this EIR are generally considered to be consistent with the General Plans of their respective land use agency (i.e., Nevada County and City of Grass Valley). Therefore, similar to the proposed project, the projects would not be expected to conflict with any land use plan, policy, or regulation adopted by the respective land use agency.

In addition, land use plans or policies and zoning generally do not combine to result in cumulative impacts. The determination of significance for impacts related to such issues is whether the project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Such a conflict is site-specific, and, thus, is typically addressed on a project-by-project basis.

Based on the above, the proposed project would not cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the cumulative impact would be **less than significant**.



Mitigation Measure(s)

None required.

4.9-5 Cumulative unplanned population growth. Based on the analysis below, the cumulative impact is *less than significant*.

The proposed project would reinstate underground mining and gold mineralization processing for the Idaho-Maryland Mine over an 80-year permit period, and the total workforce when the Idaho-Maryland Mine Project reaches commercial production is estimated at 312 persons. Due to Nevada County's current vacancy rates, Nevada County has sufficient available housing stock to accommodate the entire estimated workforce for the project, and while the cumulative list of projects considered in this EIR could add just under 600,000 square feet of non-residential uses to the surrounding communities, an additional 1,209 residential units is also projected, which could provide needed housing for indirect growth related to increased employment opportunities. For example, the 600,000 square feet of non-residential use could be anticipated to result in around 1,600 additional employees, using industry standard generation rates. This indirect growth, in combination with the project, could be accommodated by the additional residential growth projected in the cumulative scenario along with vacant units within the region.

Considering the above, implementation of the proposed project, in combination with development of the cumulative projects identified in this EIR, would result in a ***less-than-significant*** cumulative impact related to unplanned population growth.

Mitigation Measure(s)

None required.

