4.9 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential presence of existing hazards and hazardous materials within the proposed project areas and other hazardous conditions in the project vicinity, and then analyzes the risks associated with introducing proposed development and associated human activities to the area.

4.9.1 ENVIRONMENTAL SETTING

DEFINITIONS

The U.S. Environmental Protection Agency (EPA) and the California Department of Toxic Substance Control (DTSC) have developed and continue to update lists of hazardous wastes subject to regulation. The regulation of hazardous wastes is provided on both the state and federal levels.

The term "hazardous material" refers to both hazardous substances and hazardous waste. A material is defined as "hazardous" if it appears on a list of hazardous materials prepared by a federal, state, or local regulatory agency, or if it has characteristics defined as "hazardous" by such an agency. A "hazardous waste" is a "solid waste" that exhibits toxic or hazardous characteristics. The EPA has defined the term "solid waste" to include many types of discarded materials, including any gaseous, liquid, semi-liquid, or solid material which is discarded or has served its intended purpose, unless the material is specifically excluded from regulation. Such materials are considered waste whether they are discarded, reused, recycled, or reclaimed.

EXISTING HAZARDS AND HAZARDOUS MATERIALS

Wildland Fires

A typical fire season for Nevada County (County) ranges from May 15 to October 31, which is about 168 days, or 46 percent of the year. Peak fire season ranges from June 15 to October 15, or 122 days (33 percent) of the year. The extended wildfire season, linked to the Sierra Nevada region and the rest of California, can exceed 275 days (75 percent) of the year, and some years it can be a year-round season. It is also common to have wildfires burn during non-fire season periods in the County and throughout the state.

The interface of the natural and manmade environment creates potential safety hazards, including earthquakes (along with related seiches and dam failures), flooding and wildfires. Refer to Section 4.8 (Geology and Soils) for further information pertaining to potential impacts due to seismic hazards, and Section 4.10 (Hydrology and Water Quality) for further information on potential impacts related to flood hazards. There are several factors that influence the potential for fire hazard, including population growth, vegetation and slope, and weather. The County has a high potential for wildland fires of devastating intensity. Based on a "Fire Hazard Severity Zone" map developed by the CAL FIRE, almost all of the County has been placed in the "very high" category of severity, including the proposed project area. See Impact 4.9-6 for a wildland fire hazard discussion specific to each of the sites.

Generally, vegetative areas over eight percent in slope are defined as fire hazardous. The steeper the slope, the faster the fire climbs. CAL FIRE has categorized vegetation based on fuel burning, or "fuel loading" characteristics.

These include:

- Light – flammable grass and annual herbs
- Medium – scrub brush of lighter species
- Heavy – timber, woodland, and heavier brush species

Weather also plays a critical role in determining fire hazard. According to the CAL FIRE, summers with little precipitation and low relative humidity dry out vegetation, which increases the amount of fuel available for burning. The drying winds of the winter months also contribute to fire hazard in the County.

Airports

The Federal Aviation Administration (FAA) identifies 10 public and private airport facilities within Nevada County. Of the 10 airports identified by the FAA, five of the facilities are located within two miles of the project sites. The Nevada County Airport is located within one-half mile of the Sites 3 through 9 (to the southeast). Both the Shaws Hill Heliport and the Sierra Nevada Memorial Hospital Heliport are located approximately one-mile west of Sites 3 through 9. The Limberlost Ranch Airport, a private airstrip, is located approximately two miles northwest of the Penn Valley sites, Sites 10 through 13. The Alta Sierra Airport is located approximately 4.5 miles north of the sites in the Lake of the Pines area, specifically Sites 14 through 18.

Hazardous Materials

Hazardous Waste and Substances Sites

The State of California Hazardous Waste and Substances Site List (also known as the Cortese List) is a planning document used by state and local agencies and by private developers to comply with California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials sites. The California Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List, through its EnviroStor database. The EnviroStor database does not identify any of these types of hazardous material sites within one mile of the project site (DTSC 2013).

Leaking Underground Storage Tanks

Leaking underground storage tanks (LUST) are a significant source of petroleum impacts to groundwater and can also result in potential threats to health and safety. The State Water Resources Control Board (SWRCB) records soil and/or groundwater contamination caused by LUSTs in its Geotracker database. An inquiry through SWRCB's Geotracker database identified no LUST sites within one mile of the project site (SWRCB 2013).

Household Hazardous Waste

Hazardous materials, used in many household products (such as drain cleaners, waste oil, cleaning fluids, insecticides, and car batteries), are often improperly disposed of as part of normal household trash. These hazardous materials can interact with other chemicals to

create risks to people or cause soil and groundwater contamination. All Nevada County residents are able to recycle and properly dispose of household hazardous waste at the McCourtney Road Transfer Station, Household Hazardous Waste Facility, and Recycling Center (Transfer Station), which is located approximately 10 miles north of the project site at 14741 Wolf Mountain Road in Grass Valley. The limit of household hazardous waste per visit is 15 gallons or 125 pounds (Nevada County 2013).

Transportation of Hazards Substances

Interstate 80 (I-80), the Southern Pacific Railroad, and the Southern Pacific pipeline are the three major transportation routes by which tons of hazardous materials are transported through Nevada County (Nevada County 1995, p. 370). (Note: The Southern Pacific and Union Pacific railroads merged in 1996; Union Pacific Railroad is the name by which the company is now known.) The Union Pacific railroad tracks roughly parallel I-80, and the underground hydrocarbon pipeline runs adjacent to the Union Pacific railway tracks (OES 2006, p. 60). At its closest point, the I-80 transportation route is located over 3 miles from Site 18. Hazardous materials are also transported along State Routes (SR) 20, 49, 89, 174, and 267. While the majority of these transportation routes are not in the vicinity of the project site, Site 2 is located just east of SR 49 and Site 13 is located adjacent to SR 20.

4.9.2 REGULATORY SETTING

The EPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes responsibility for issuing permits and monitoring and enforcing compliance. The management of hazardous materials and waste within the State of California is under the jurisdiction of the California Environmental Protection Agency (Cal/EPA) and the DTSC. The Cal/EPA was created by the State of California to establish a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources. The DTSC regulates hazardous waste, clean-up of existing contamination, emergency planning, and identifies alternatives to reduce the hazardous waste produced in California. Additionally, the nine Regional Water Quality Control Boards (RWQCB) regulate the quality of water within the state, including contamination of state waters as a result of hazardous materials and/or waste. Other local departments (i.e., fire department, environmental health services department, etc.) may also have jurisdiction over hazardous materials. Refer to Table 4.9-1, *Summary of Hazardous Materials Regulatory Authority*.

FEDERAL FRAMEWORK

Environmental Protection Agency

The EPA provides leadership in the nation's environmental science, research, education, and assessment efforts. The EPA works closely with other Federal agencies, state and local governments, and Indian tribes to develop and enforce regulations under existing environmental laws. The EPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes responsibility for issuing permits and monitoring and enforcing compliance.

Other Federal Agencies

Other federal agencies that regulate hazardous materials include the Occupational Safety and Health Administration (OSHA), the United States Department of Transportation (DOT), and the National Institute of Health (NIH). The following federal laws and guidelines govern hazardous materials:

- Occupational Safety and Health Act
- Federal Insecticide, Fungicide, and Rodenticide Act
- Comprehensive Environmental Response, Compensation, and Liability Act
- Guidelines for Carcinogens and Biohazards
- Superfund Amendments and Reauthorization Act Title III
- Resource Conservation and Recovery Act
- Toxic Substances Control Act

Table 4.9-1
Summary of Hazardous Materials Regulatory Authority

Regulatory Agency	Authority
Federal Agencies	
U.S. Department of Transportation (DOT)	Hazardous Materials Transport Act – Code of Federal Regulations (CFR) 49
Environmental Protection Agency (EPA)	Federal Water Pollution Control Act (Clean Water Act) Clean Air Act Resource Conservation and Recovery Act (RCRA) Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Superfund Amendments and Reauthorization Act (SARA) Federal Insecticide, Fungicide and Rodenticide Act
Occupational Safety and Health Administration (OSHA)	Occupational Safety and Health Act and CFR 29
State Agencies	
Department of Toxic Substances Control (DTSC)	California Code of Regulations
Department of Industrial Relations (CAL-OSHA)	California Occupational Safety and Health Act, CCR Title 8
State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB)	Porter-Cologne Water Quality Act Underground Storage Tank Law
Health and Welfare Agency	Safe Drinking Water and Toxic Enforcement Act
Air Resources Board and Air Pollution Control District	Air Resources Act
Office of Emergency Services (OES)	Hazardous Materials Release Response Plans/Inventory Law
Department of Food and Agriculture	Food and Agriculture Code
State Fire Marshal	Uniform Fire Code, CR Title 19
Local Agencies	
Department of Environmental Health	County Hazardous Waste Management Plan

Prior to August 1992, the principal agency at the federal level regulating the generation, transport and disposal of hazardous waste was the EPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, the DTSC was authorized to implement the state's hazardous waste management program for the EPA. The EPA

continues to regulate hazardous substances under the Comprehensive Response Compensation and Liability Act (CERCLA).

STATE FRAMEWORK

California Environmental Protection Agency

The Cal/EPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Underground Storage of Hazardous Substances Act
- Department of Toxic Substances Control

Within Cal/EPA, the DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL).

LOCAL FRAMEWORK

Nevada County Department of Environmental Health

The Nevada County Department of Environmental Health (DEH) manages most hazardous materials regulation and enforcement in the County. Large cases of hazardous materials contamination or violations are referred to the RWQCB and the DTSC.

The DEH maintains the County Hazardous Waste Management Plan (CHWMP), which addresses existing and projected hazardous waste generation from the residential, commercial and industrial sectors. Types of treatment and disposal for such wastes are identified and possible locations for treatment and disposal facilities are discussed. The CHWMP also addresses emergency response programs, contaminated sites, and educational and administrative programs related to hazardous wastes. The County CHWMP has been adopted locally, but was not accepted by the DTSC. The CHWMP provides criteria that, when implemented, would minimize safety hazards associated with the use, transport, storage and disposal of hazardous materials in the County.

The DEH also provides guidance on removal of septic tanks within the County. The DEH requires a Tank Abandonment Permit to be obtained prior to the removal, relocation, or replacement of septic tanks. The DEH also requires septic tanks to be properly closed and abandoned in accordance with DEH requirements.

Nevada County Fire Protection

According to the Nevada County General Plan, the County is protected by multiple fire protection agencies, including eight local fire districts, one water district, two City fire departments, CAL FIRE, the Bureau of Land Management (BLM), and the US Forest Service (USFS). In Western Nevada County, the following fire districts and departments provide fire protection services, or support for the cities and unincorporated areas of the County:

- Grass Valley City Fire Department
- Higgins Fire Protection District
- Nevada City Fire Department
- Nevada County Consolidated Fire District
- North San Juan Fire Protection District
- Ophir Hill Fire Protection District
- Peardale-Chicago Park Fire Protection District
- Penn Valley Fire Protection District
- Rough and Ready Fire Protection District
- Washington County Water District (supports local volunteer fire department)

Fire protection services are determined by jurisdiction and responsibilities. In general, local fire districts and city departments provide emergency medical services, other emergency responses, and fire protection for structures within their respective jurisdictions. Many fire districts are staffed with volunteers. CAL FIRE provides wildland fire protection services on private, non-federal lands for the purpose of life, property and resource protection. USFS and BLM provide wildland fire protection services on federal lands in Federal Responsibility Areas for watershed and resource protection. Various agreements between the fire protection agencies enable cooperative fire protection services. The Grass Valley Emergency Command Center, a cooperative facility between the USFS and CAL FIRE, provides emergency dispatching services through cooperative agreements with all the fire districts and cities within Nevada County.

Nevada County Airport Land Use Compatibility Plan

The Nevada County Airport is approximately 0.50 mile to the east/southeast of Sites 3 through 9. The Nevada County Airport Land Use Compatibility Plan (ALUCP) was adopted by the Nevada County Airport Land Use Commission (ALUC) on September 21, 2011. The plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to land owners in their design of new development. The influence area extends 1.7 miles from the airport's runway. The plan is used by the ALUC staff to define compatibility for noise, safety, airspace protection, and overflight as it pertains to newly proposed projects in the vicinity of the Nevada County Airport.

Local Hazard Mitigation Plan

The Disaster Mitigation Act of 2000 (DMA 2000), PL-106-390 requires that each State develop a hazard mitigation plan, in order to receive future disaster mitigation funding following a disaster. California completed its most recent “State of California Multi-Hazard Mitigation Plan” in 2010. The requirements also call for the development of local or county plans for that particular county to be eligible for post-disaster mitigation funding. The purpose of these requirements is to encourage state and local government to engage in systematic and nationally uniform planning efforts that will result in locally tailored programs and projects that help minimize loss of life, destruction of property, damage to the environment and the total cost of disasters before they occur. The Nevada County

Operational Area Emergency Services Council prepared the Local Hazard Mitigation Plan for Nevada County, for the years 2011 to 2016.

Nevada County specifically includes and adopts the most recent State of California Multi-Hazard Mitigation Plan where the State's plan relates to issues pertaining to Nevada County. However, in the interest of not duplicating State efforts, Nevada County in its plan refers to the State where the State has identified an issue or provided information that supplements Nevada County's plan.

The Code of Federal Regulations (CFR) Section 201.6(c)(3) outlines the process for localities in developing their mitigation strategies. Specifically, the Local Hazard Mitigation Plan must "include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools." These strategies should be built on an assessment of hazard risks and vulnerabilities.

Nevada County General Plan

The Safety Element of the Nevada County General Plan includes several goals, objectives and policies with respect to hazards and hazardous materials, including the following:

Goal EP-10.1	Provide a coordinated approach to hazard and disaster response preparedness.
Objective EP-10.1.3	Existing and future land use patterns shall provide for alternative routes for emergency access.
Goal AH-10.4	Ensure the safety and compatibility of land uses in the vicinity of airports.
Objective 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 impact zones within the Airport Influence Area.
Goal HM-10.5	Protect the community's health, safety, natural resources, and property through regulation of use, storage, transport, and disposal of hazardous materials.
Objective HM-10.5.1	Provide means for the identification, safe use, storage, transport, and disposal of hazardous materials.
Goal SF-10.6	Ensure adequate public safety services and facilities through development standards, development fees, and land use patterns.
Objective SF-10.6.1	Maintain appropriate levels of safety and protection services and facilities on land and water for both Community and Rural Regions.
Goal FP-10.7	Enhance fire safety and improve fire protection effectiveness through infrastructure and service improvements.
Objective FP-10.7.1	Identify existing County-maintained roads not meeting design standards for current or anticipated use as designated on the General Plan Land Use Map.

Objective FP-10.7.4	Encourage fire protection agencies to determine appropriate levels of fire protection facilities and services for both Community and Rural Regions.
Goal FP-10.8	Reduce fire risk to life and property through land use planning, ordinances, and compliance programs.
Objective FP-10.8.5	Land use patterns and development standards shall minimize fire hazard.
Goal FP-10.11	Reduce fire severity and intensity through fuels management.
Objective FP-10.11.1	Recognize Public Resources Codes 4290 and 4291, and other defensible space standards and guidelines in order to protect structures from wildfire, protect wildlands from structure fires, and provide safe access routes for people and firefighters.

Nevada County Land Use and Development Code

Section L-11 4.3.18 – Wildland Fire Hazard Areas

The Nevada County Land Use and Development Code, Section L-II 4.3.18, includes regulations intended to prevent or minimize the impact of wildland fire hazards associated with development. These include defensible space regulations that require vegetation clearance around structures to meet the minimum requirements of Public Resources Code Section 4291 prior to any occupancy of the project site. Structures are required to maintain a firebreak by removing and clearing away all brush, flammable vegetation, or combustible growth no less than 100 feet from structures or to the property line, whichever is closer. The regulations also include standards for roads and private driveways to facilitate emergency service response to structural and wildland fires. The standards require the provision of secondary road access to new projects where necessary for fire safety or emergency access. In addition, these regulations require all discretionary projects within the very high wildland Fire Hazard Severity Zones to submit a Fire Protection Plan and Fuels Management Plan. The regulations also require compliance with the following fire protection-related provisions of the Nevada County Land Use and Development Code:

a. Chapter II: Zoning Regulations, which establishes residential and rural base district side yard and rear yard setback standards.

b. Chapter V: Article 5, Fire Safety Standards, which establish fire-safe building codes relative to building construction.

c. Chapter VII: Street Addressing and Naming, which requires the naming and posting of roads and the posting of street addresses.

d. Chapter XVI: Fire Safety Regulations, which establishes regulations for fuel modification, water storage, and driveway construction.

e. Chapter XVII: Road Standards, which establishes minimum standards for fire-safe road construction and maintenance.

City of Grass Valley 2020 General Plan

The Safety Element of the 2020 General Plan includes several goals, objectives and policies with respect to hazards and hazardous materials, including the following:

Goal 1-SG:	Reduce the potential risk of death, injury, property damage, and economic and social dislocation resulting from hazards.
Objective 2-SO:	Reduction of risk from exposure to hazards related to past and present mining, including shafts, tunnels, tailings, and toxic materials.
Objective 4-SO:	Reduction of risk from exposure to structural and wildlife fires.
Policy 4-SP:	Based on location or probable need, require development plans in mined areas to include in-depth assessments of potential safety, including mining-related excavations, and health hazards and accompanying mitigation measures.
Policy 6-SP:	Incorporate fire hazard reduction considerations into land use plans/patterns, both public and private.
Policy 7-SP:	Identify, maintain, and mark evacuation routes for use in case of disasters or emergencies.
Policy 13-SP:	Continue to implement provisions of the Nevada County Airport Comprehensive Land Use Plan, and to coordinate as appropriate with Nevada County, Airport management, and the Foothill Airport Land Use Commission regarding Airport plans and safety considerations.

Grass Valley Fire Protection

According to the City of Grass Valley 2020 General Plan, fire protection agencies in the Grass Valley Planning Area include the City of Grass Valley (City) Fire Department, which provides service within the City, the Nevada County Consolidated Fire District (NCCFD), which serves the area generally north, west and south of the City, and the Ophir Hill Fire District, which serves lands east of the City. An Automatic Aid agreement was reached among these agencies in 1998 to provide efficient response throughout the City. The proposed project areas within the Grass Valley Sphere of Influence would be served jointly by the Grass Valley Fire Department and the NCCFD. Also, the CAL FIRE provides fire protection for wildland areas, and is legally responsible for wildland fires during the fire season.

4.9.3 ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the *CEQA Guidelines*, the proposed project would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

AREA OF NO PROJECT IMPACT

The following impact is either not applicable to the project or not reasonably foreseeable:

- Safety hazard as a result of a private airstrip

The proposed project sites are not located within the vicinity of a private airstrip. Therefore, no impact would occur in this regard. For all other airport-related impacts, refer to Impact 4.9-5, below.

- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

As discussed in the Setting subsection above, none of the proposed project sites are located on, or within one mile of, a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur.

POTENTIAL IMPACTS AND MITIGATION MEASURES

Public or Environmental Hazards

4.9-1 THE PROPOSED PROJECT MAY CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS.

Level of Significance Before Mitigation: Less Than Significant Impact

Impact Analysis

Implementation of the proposed project may result in the routine transport of hazardous materials during construction (i.e., ACMs, LBPs, and/or contaminated soils, etc.) and at buildout of the proposed project. However, handling measures would be required by the City, County (NCCFD and DEH), and the Northern Sierra Air Quality Management District throughout the life of the project. These measures include standards and regulations regarding the storage, handling and use of these materials.

Approval of the proposed project would allow for the implementation of high-density residential uses. No significant hazards to the public or environment are anticipated during the occupancy of the proposed project. Use of hazardous materials on the project site may include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and upkeep of the proposed uses. With proper use and disposal, as required by local, state, and federal laws and regulations, these chemicals are not expected to result in hazardous or unhealthful conditions for those that would utilize and reside within the proposed project area. A less than significant impact would occur in this regard after compliance with applicable federal, state, and local regulations.

Mitigation Measures: No mitigation is required.

Level of Significance After Mitigation: Not applicable.

Hazardous Materials

4.9-2 THE PROPOSED PROJECT MAY CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENTAL CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT.

Level of Significance Before Mitigation: Less Than Significant Impact

Impact Analysis

Accidental releases of hazardous materials are those releases that are unforeseen or that result from unforeseen circumstances, while reasonably foreseeable upset conditions are those release or exposure events that can be anticipated and planned for. As discussed under Impact 4.9-1 above, the proposed project does not include land uses that would involve the routine transportation, use, and disposal of large amounts of hazardous materials. Therefore, the proposed project would not result in the accidental release of hazardous materials into the environment.

Implementation of the proposed project would result in an increase in population of approximately 2,960 residents in Grass Valley and 2,438 residents in the County (see Section 4.12 [Population and Housing]) and therefore could increase exposure of the public to accidental or reasonably foreseeable releases of hazardous materials offsite. However, there are no hazardous material sites within one mile of the project site. Furthermore, the transport, storage, and use of hazardous materials by developers, contractors, business owners, and others would be required to be in compliance with local, state, and federal regulations designed to avoid hazardous waste releases. These regulations provide a comprehensive regulatory system for handling, using, and transporting hazardous materials in a manner that protects human health and the environment. As such, both accidental and reasonably foreseeable hazardous materials releases would be expected to occur infrequently and result in minimal hazard to the public or to the environment.

The project site is in the vicinity of SR 49 and SR 20, along which hazardous materials may be transported. The federal Hazardous Materials Regulations (HMR) address hazardous material transportation via classification, packaging, hazard communication, emergency response information, and training requirements. HMR emergency response requirements include initial emergency actions regarding evacuation isolation of the affected area, firefighting, leaking containers, spill containment, and first aid. These requirements would

also reduce the number of persons exposed to any hazmat incidents. Furthermore, hazardous materials spills on state highways are the responsibility of the California Department of Transportation (Caltrans) and the California Highway Patrol (CHP). These agencies provide on-scene management of the spill site and coordinate with the California Environmental Health Department, California Emergency Management Agency (formerly known as the California Office of Emergency Services), and applicable local agencies. As such, accidental and reasonably foreseeable hazardous materials releases associated with the transport of hazardous materials in the vicinity of the project site would result in a less than significant hazard to residents of the proposed project.

Furthermore, data resources that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements were reviewed to determine if any of the proposed project sites are identified as hazardous waste sites. Four databases in total were reviewed (included in Appendix H), including:

- Department of Toxic Substances Control (DTSC) EnviroStor database – List of Hazardous Waste and Substances sites
- Water Board GeoTracker database – List of Leaking Underground Storage Tank Sites by County and Fiscal Year
- Water Board – List of solid waste disposal sites identifies by Water Board with waste constituents above hazardous waste levels outside the waste management unit
- Water Board – List of "active" CDO and CAO

Based on the review of the four databases, none of the sites are known to be listed as a site with known hazardous materials waste or spills. As such, none of the project sites would be developed on a hazardous waste site, in which the development of would result in the release of hazardous materials. Therefore, no impacts were identified in this regard.

Mitigation Measure: No mitigation required.

Level of Significance After Mitigation: Not applicable.

School Sites

4.9-3 THE PROPOSED PROJECT MAY EMIT HAZARDOUS EMISSIONS OR RESULT IN THE HANDLING OF HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL SITE.

Level of Significance Before Mitigation: Less Than Significant Impact

Impact Analysis

Construction of the proposed project sites would occur within one-quarter mile of existing schools; refer to Table 4.9-2, *Nearby School Sites*. Emissions from construction equipment could result in the project emitting hazardous emissions within one-quarter mile of an existing school. However, the emissions would be temporary and would cease upon the completion of construction activities. As discussed under Impact 4.9-1 above, the proposed project does not include land uses that would involve the routine transportation, use, and disposal of large amounts of hazardous materials. Prior to the construction of any project site within one-quarter mile of an existing school, all requirements of *CEQA Guidelines* Section 15186 and Division 20 of the Health and Safety Code would be met. Based on the

above and with adherence to state guidelines and regulations, a less than significant impact would occur in this regard.

Table 4.9-2
Nearby School Sites

Project Area	School Name and Distance from Project Site
Grass Valley Sphere of Influence	
Site 1	Tall Pines Nursery School, approximately 750 feet to the northeast.
Site 2	Muir Charter School, approximately 430 feet to the west.
Sites 3-9	No schools identified within one-quarter mile.
Penn Valley	
Sites 10 and 11	Ready Springs Elementary, approximately 490 feet to the east.
Site 12	Ready Springs Elementary, approximately 1,220 feet to the south.
Site 13	No schools identified within one-quarter mile.
Lake of the Pines	
Site 14	No schools identified within one-quarter mile.
Sites 15 and 16	No schools identified within one-quarter mile.
Site 17	No schools identified within one-quarter mile.
Site 18	Forest Lake Christian School, approximately 570 feet to the west.

Mitigation Measure: No mitigation required.

Level of Significance After Mitigation: Less than Significant Impact

Airport Land Use Plan / Public Airport

4.9-4 THE PROPOSED PROJECT WOULD BE LOCATED WITHIN AN AIRPORT LAND USE PLAN AND COULD RESULT IN A SAFETY HAZARD FOR PEOPLE RESIDING OR WORKING IN THE PROJECT AREA.

Level of Significance Before Mitigation: Potentially Significant Impact

Impact Analysis

The Nevada County Airport is located approximately 0.50 mile to the east/southeast of Sites 3-9. Sites 3 through 9 are also located within the Air Influence Area, specifically in the Urban Overlay Zone of Compatibility Zone D. In Urban Overlay Zone D, the maximum residential density is 20 dwelling units per acre. A proposal for development of 21 or more residential dwelling units per acre would require review from the Airport Land Use Commission. According to the 2011 Nevada County Airport Land Use Compatibility Plan (ALUCP), highly noise-sensitive uses are prohibited in Compatibility Zone D*-Urban Overlay Zone; however, the proposed project sites are located outside of the 55 dB CNEL contour and therefore it is unlikely that aircraft noise will impact the project. Hazards to flights, which are defined as physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations, and land use development that may cause the attraction of birds to increase are also prohibited. Although residential uses are discouraged in this Zone, the

proposed project sites are outside the Safety Areas referenced in the ALUCP and Safety Element of the 2020 General Plan.

The proposed project has taken these constraints into account to ensure that proposed development is compatible with state and airport regulations. Future development would be required to adhere to all policies established by the ALUCP pertaining to safety hazards on a project-by-project basis. With implementation of Mitigation Measure 4.9-4 and state and airport regulations, impacts to people working or residing in the area to airport-related hazards would be reduced to a less than significant level.

Mitigation Measure:

The following mitigation measure applies to Sites 3 through 9.

4.9-4 All future development in the proposed project within Safety Areas, as designated by the 2011 Nevada County Airport Land Use Compatibility Plan (ALUCP), shall comply with all policies pertaining to safety hazards (including density standards) set forth in the ALUCP on a project-by-project basis, and the recordation of an Avigation Easement.

Level of Significance After Mitigation: Less Than Significant Impact

Emergency Response / Evacuation Plan

4.9-5 THE PROPOSED PROJECT MAY IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN.

Level of Significance Before Mitigation: Less Than Significant Impact

Impact Analysis

The proposed project would be subject to the Nevada County Hazardous Waste Management Plan (HWMP) in order to minimize safety hazards associated with hazardous materials and hazardous waste incidents. The NCCFD has published the Cascade Shores Evacuation Plan, which, although tailored to the Cascade Shores area, contains applicable information to all parts of the NCCFD. Applicable information includes the importance of preparation of homes and property for self-defense (i.e., home ignition zone, defensible space zone); possible evacuation destinations; how to stay informed; and a checklist to create and/or review family emergency plans.

Implementation of the Local Hazard Mitigation Plan mitigation actions and multi-hazard mitigation strategies, such as the installation of fire hydrants, vegetation and tree management, and creation of defensible space around the project sites, will reduce the impacts from wildfires and overall impact related to large-scale wildfire emergency events.

Section L-II 4.3.18 of the County's Land Use Development code states that all discretionary and Administrative Development Permit projects within a very high fire hazard zone shall submit a Fire Protection Plan to be approved by the Nevada County Fire Marshal and/or his/her designee, which includes identification of a feasible evacuation plan and/or safe evacuation routes for use by future occupants of the project.

Section 8.12.080 of the City's Municipal Code states that the City Disaster Council is responsible for the development of a City Emergency Plan, which would provide for the effective mobilization of all of the resources of the City to meet any condition constituting a

local emergency, state of emergency, or state of war emergency, and should provide for the organization, powers and duties, services, and staff of the emergency organization. However, a City Emergency Plan has not yet been prepared and is, therefore, not available at this time. Also, the proposed project would be required to adhere to recognized standards used by the Grass Valley Fire Department in planning for new development to prevent access constraints to fire equipment and improve emergency evacuation capabilities, as identified in the 2020 General Plan. The 2020 General Plan also addresses fire hazard reduction considerations and ways of preventing interference with emergency response or evacuation through established goals, objectives, policies and implementation strategies.

Implementation of the HWMP and the policies pertaining to hazards and hazardous materials set forth in the Nevada County General Plan and Land Use Development Code and the City of Grass Valley 2020 General Plan, and the implementation of the Local Hazard Mitigation Plan mitigation strategies, would ensure a less than significant impact to the adopted emergency or evacuation plans.

Mitigation Measures: No mitigation required.

Level of Significance After Mitigation: Not applicable.

Wildland Fires

4.9-6 THE PROPOSED PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDLAND FIRES, INCLUDING WHERE WILDLANDS ARE ADJACENT TO URBANIZED AREAS OR WHERE RESIDENCES ARE INTERMIXED WITH WILDLANDS.

Level of Significance Before Mitigation: Potentially Significant Impact

Impact Analysis

As stated in the Nevada County General Plan and the City of Grass Valley 2020 General Plan, the region has a generally high potential for wildland fires of devastating intensity. Fire protection services are jointly provided to the project site by the Grass Valley Fire Department, the NCCFD, and local fire districts. Also, the CAL FIRE provides fire protection for the wildland areas, and are legally responsible for wildland fires during the fire season. The proposed project areas currently consists of timber, woodland, heavy brush species, grass lands, and contains areas of moderate slopes, making the project site subject to wildfires. Project implementation would result in a development of high-density multi-family residential land uses that are surrounded in some areas by sparsely developed and undeveloped, wooded land.

Based on the CAL FIRE Severity Maps, the proposed project sites are designated as a "moderate," "high" and "very high" fire severity zone; refer to Table 4.9-3, *Fire Severity Zone Designation*. The 2010 California Fire Code, Section 4906, requires that all unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Areas (SRA) and are designated as "moderate," "high," or "very high" fire severity zones are required to maintain defensible space of a minimum of 100 feet from each side and from the front and rear of the structure, but not beyond the property line unless otherwise specified by an agency having jurisdiction over the property. Section 51182 of the California Government Code requires properties within a Local Responsibility Area, LRA, (not an SRA) designated as Very High Fire Hazard Severity Zone, to maintain defensible

space of a minimum of 100 feet from each side and from the front and rear of the structure, but not beyond the property line unless otherwise specified by an agency having jurisdiction over the property. Although development of the proposed project would place all proposed uses within one of these zones, the proposed project would include extensive defensible space, as required by the 2010 California Fire Code, where significant fuel reduction and management can occur to separate and minimize the effect of wildland fires within the project areas. Additionally, the project would include hydrants, fire sprinklers, vegetation management plans, and building materials, as required by Chapter 7A of the California Building Code. Consistency with required defensible space, impacts would be less than significant.

Table 4.9-3 Fire Severity Zone Designation

Name	State Responsibility Area (SRA)/Local responsibility Area (LRA)	Hazard Code	Hazard Class	Required Defensible Space from Structures
SITE 1	SRA	3	Very High	100 feet
SITE 2	SRA	3	Very High	100 feet
SITE 3	LRA	3	Very High	100 feet
SITE 4	LRA	3	Very High	100 feet
SITE 5	LRA	3	Very High	100 feet
SITE 6	LRA	3	Very High	100 feet
SITE 7	SRA	3	Very High	100 feet
SITE 8	SRA	3	Very High	100 feet
SITE 9	LRA	3	Very High	100 feet
SITE 10	SRA	1	Moderate	100 feet
SITE 11	SRA	1	Moderate	100 feet
SITE 12	SRA	1	Moderate	100 feet
SITE 13	SRA	1 and 2	Moderate and High	100 feet
SITE 14	SRA	1 and 2	Moderate and High	100 feet
SITE 15	SRA	1 and 2	Moderate and High	100 feet
SITE 16	SRA	1 and 2	Moderate and High	100 feet
SITE 17	SRA	1 and 2	Moderate and High	100 feet
SITE 18	SRA	1 and 2	Moderate and High	100 feet

Source: Cal Fire Severity Maps, 2007 and 2008

The Nevada County General Plan and 2020 General Plan include specific goals, objectives, policies and implementation strategies that address fire hazard reduction considerations and ways of reducing risk from wildland fires. Existing standards for development provide adequate access, fire flows, and other facilities to maintain an appropriate level of fire protection, and are derived from the California Building Code, the California Fire Code, and the California Mechanical Code. Additionally, the project would be required to comply with NCCFD's Fuel Management and Hazard Reduction Program. This program includes NCCFD inspections of developed and undeveloped parcels to ensure compliance with Public Resources Code 4291, which was developed to minimize a fire extending from a structure to wildlands, and now contains defensible space regulations. Project adherence to County and City wildland fire-related codes, policies and programs would reduce potential risk of loss, injury, or death involving wildland fires. Also, implementation of Mitigation Measures 4.13-

1b and 4.13-1c, requiring preparation of vegetation fuel management plans and a requirement of adequate fire service availability, would ensure wildland fire-related impacts would be reduced to less than significant levels.

Mitigation Measures:

The following mitigation measures apply to all sites.

Implement Mitigation Measures 4.13-1b and 4.13-1c.

Level of Significance After Mitigation: Less Than Significant Impact.

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