
14.0 PUBLIC SERVICES AND UTILITIES

This section describes the public services and utilities that would be required to serve the proposed projects, including public safety (fire protection, emergency medical, and law enforcement services), schools, parks, water, wastewater, storm drainage, and solid waste. The reader is referred to Section 10.0, Hazards and Hazardous Materials, for a discussion of wildland fire hazards, which includes an analysis of fire flow requirements, and to Section 11.0, Hydrology and Water Quality, for a discussion on groundwater resources. Energy use and conservation are evaluated in Subsection 17.5, Energy Conservation, in Section 17.0, Other CEQA Considerations.

14.0 GENERAL ENVIRONMENTAL CONDITIONS AND REGULATIONS

The following description of regional environmental conditions and applicable regulations, policies, and standards applies to each of the project sites.

14.0.1 REGIONAL ENVIRONMENTAL SETTING

Public Safety

Fire Protection

The Alta Sierra and Rough and Ready Highway project sites are served by the Nevada County Consolidated Fire District (NCCFD), and the Penn Valley project site is served by the Penn Valley Fire Protection District (PVFPD). These fire districts are discussed in detail in the project-specific settings in the following subsections.

Law Enforcement

The Nevada County Sheriff's Office (NCSO) provides law enforcement services in all the unincorporated areas of Nevada County, with a service area in excess of 900 square miles. Services include patrol, dispatch, investigations, search and rescue, boat patrol, correctional facilities, coroner, and court security services. The NCSO's main office is located at 950 Maidu Avenue (Eric Rood Administration Center) in Nevada City. A substation is located in Truckee, which contains a small jail facility. The NCSO also has a satellite jail located on the campus of the main governmental/administrative complex, along with a satellite court-holding facility in downtown Nevada City. Sheriff's deputies are dispatched and patrols initiated from these locations (NCSO 2016).

NCSO facilities also include two satellite volunteer service centers: one in the business center across from the main gate to Lake Wildwood and the other in a business complex near Lake of the Pines in the southern part of Nevada County. Both centers are staffed during certain days and hours by citizen volunteers and are used by patrol staff to meet with citizens and to complete their law enforcement reports.

The NCSO has approximately 175 employees, including sworn and civilian personnel. During 2014, the NCSO Patrol Division received 37,575 calls for service, which resulted in 3,720 incident reports and 1,184 arrests (NCSO 2014).

The NCSO patrol areas align with the boundaries of the county's five supervisorial districts. The Alta Sierra project site is located in District 2 and the patrol area known as Beat 2, which extends from the Alta Sierra community south to the county border. The Penn Valley project site is located in District 4 and the patrol area known as Beat 4, which includes the area west of Grass Valley and north of Nevada City. The Rough and Ready Highway project site is located in District 3 and the patrol area known as Beat 3, which includes Grass Valley and the immediately surrounding area.

14.0 PUBLIC SERVICES AND UTILITIES

The NCSO has mutual assistance agreements with the California Highway Patrol (CHP), which provides police protection on all state and county roadways in Nevada County. The CHP and the NCSO have reciprocal backup agreements.

Schools

The Alta Sierra project site is located in the Pleasant Ridge Union School District, the Penn Valley project site is located in the Penn Valley Union Elementary School District, the Rough and Ready Highway project site is located in the Grass Valley School District, and all three sites are located in the Nevada County Joint Union High School District (Nevada County 2014).

Parks and Recreation

Nevada County does not directly provide parks or recreational facilities. Instead, the County coordinates with other government and nongovernmental entities that own, plan, build, and manage recreation resources in the county. In the vicinity of the Alta Sierra project site, recreation resources are managed by the Bear River Recreation and Park District. In the vicinity of the Penn Valley project site, recreation resources are managed by the Western Gateway Recreation and Park District. Developed parks and recreational opportunities in the vicinity of the Rough and Ready Highway project site are located east of the site in Grass Valley.

In addition, regional recreational facilities located throughout the county are provided by the Nevada Irrigation District, California Department of Parks and Recreation, California Department of Fish and Wildlife, US Bureau of Land Management, US Forest Service, and numerous nonprofit organizations (Nevada County 2016a).

Water Supply

Potable water for all three project sites would be supplied by the Nevada Irrigation District (NID). NID is an independent special district providing water to approximately 24,500 customers in a 287,000-acre service area that covers portions of Nevada, Placer, and Yuba counties. NID operates and maintains an extensive system of canals, reservoirs, and pipelines throughout the county including ten reservoirs, seven water treatment plants, over 300 miles of pipeline, and over 450 miles of canals (NID 2016).

Water Supply

NID's water supply is primarily derived from mountain snowpack from Northern California's Sierra Nevada range. The water is stored in the district's system of reservoirs, which currently has a total storage capacity of 279,985 acre-feet. In addition, contract water purchases are available each year through NID's 1963 agreement with the Pacific Gas and Electric Company (PG&E). During normal water years, the maximum amount available is 54,361 acre-feet, with reductions during dry years (NID 2016). NID is also supplied recycled water blended with surface water from four municipal wastewater treatment plants; however, this water is used exclusively for agricultural irrigation. NID's actual and projected water supply volumes through 2035 are shown in **Table 14.0-1**.

**TABLE 14.0-1
HISTORICAL AND PROJECTED NORMAL YEAR WATER SUPPLIES (ACRE-FEET PER YEAR)**

Water Supply Source	2015	2020	2025	2030	2035	2040
Wholesaler – Contract Purchase (PG&E)	54,361	54,361	54,361	54,361	54,361	54,361
Supplier-produced Surface Water						
Watershed Runoff	221,500	221,500	221,500	221,500	221,500	221,500
Carryover Storage	201,985	201,985	201,985	201,985	201,985	201,985
Recycled Water	2,500	1,900	1,900	1,900	1,900	1,900
Total Water Supplies	480,346	479,746	479,746	479,746	479,746	479,746

Source: NID 2016, Tables 5-8 and 5-9

Water Demand

Agricultural water uses accounts for approximately 92 percent of NID’s total water use, with the remaining portion supplied to urbanized land uses (NID 2016, Table 3-1). NID’s service area population grew at a rate of approximately 1.3 percent per year between 2000 and 2010 and is projected to grow at a rate of approximately 2.4 percent through 2035. NID’s actual and projected water use volumes through 2035 are shown in **Table 14.0-2**.

**TABLE 14.0-2
ACTUAL AND PROJECTED TOTAL WATER USE (ACRE-FEET PER YEAR)**

Water Distributed	2015	2020	2025	2030	2035	2040
Total Water Deliveries	122,831	179,128	186,536	190,568	196,724	203,038
Sales to Other Water Agencies	2,752	4,310	5,126	5,992	6,808	6,808
Additional Water Uses and Losses	1,070	1,267	1,444	1,640	1,860	2,085
Total Water Use	126,653	184,704	193,106	198,200	205,392	211,931

Source: NID 2016, Tables 3-1 and 3-2

Supply and Demand Comparison

Normal Water Year

As shown in **Table 14.0-3**, under normal water year conditions, projected water supplies would exceed projected demands each year through 2035.

**TABLE 14.0-3
PROJECTED NORMAL WATER YEAR SUPPLY AND DEMAND COMPARISON (ACRE-FEET PER YEAR)**

	2020	2025	2030	2035	2040
Supply Totals	360,800	360,800	360,800	360,800	360,800
Demand Totals	184,704	193,106	198,199	205,391	211,930
Difference (supply minus demand)	176,096	167,694	162,601	155,409	148,870

Source: NID 2016, Table 6-4

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Single Dry Year

As shown in **Table 14.0-4**, during a single dry year, projected water demand would exceed projected supplies, resulting in a water supply deficit beginning in 2035. However, implementation of the district's adopted water supply contingency plan would temporarily reduce demands in response to drought conditions. Furthermore, NID is planning to construct the new 110,000 acre-foot Centennial Reservoir by 2023, which would increase total supplies and eliminate the projected deficit (NID 2016).

TABLE 14.0-4
SINGLE DRY YEAR WATER SUPPLY AND DEMAND COMPARISON (ACRE-FEET PER YEAR)

	2020	2025	2030	2035	2040
Supply Totals	202,611	202,611	202,611	202,611	202,611
Demand Totals	184,704	193,106	198,199	205,391	211,930
Difference (supply minus demand)	17,907	9,505	4,412	-2,780 ¹	-9,319 ¹

Source: NID 2016, Table 6-5

1. With the completion of Centennial Reservoir in the future, surface water supply in both the watershed runoff and carryover storage will be increased to eliminate this projected deficit. The district is in the early stage of evaluating the Centennial water supply, and the quantified capacity will be included in a future update of the Urban Water Management Plan.

Multiple Dry Years

As shown in **Table 14.0-5**, under multiple-year dry conditions, projected water demands would exceed projected supplies, resulting in a water supply deficit during the fourth dry year by 2035. However, as previously noted, implementation of the district's adopted water supply contingency plan would temporarily reduce demands in response to drought conditions and the new 110,000 acre-foot Centennial Reservoir would increase total supplies and eliminate the projected deficit (NID 2016).

TABLE 14.0-5
MULTIPLE DRY YEAR WATER SUPPLY AND DEMAND COMPARISON (ACRE-FEET PER YEAR)

	2020	2025	2030	2035	2040
First Year					
Supply Totals	368,161	368,161	368,161	368,161	368,161
Demand Totals	184,704	193,106	198,199	205,391	211,930
Difference (supply minus demand)	183,457	175,055	169,962	162,770	156,231
Second Year					
Supply Totals	233,225	233,225	233,225	233,225	233,225
Demand Totals	184,704	193,106	198,199	205,391	211,930
Difference (supply minus demand)	48,521	40,119	35,026	27,834	21,295
Third Year					
Supply Totals	253,185	253,185	253,185	253,185	253,185
Demand Totals	184,704	193,106	198,199	205,391	211,930
Difference (supply minus demand)	68,481	60,079	54,986	47,794	41,255

	2020	2025	2030	2035	2040
Fourth Year					
Supply Totals	202,611	202,611	202,611	202,611	202,611
Demand Totals	184,704	193,106	198,199	205,391	211,930
Difference (supply minus demand)	17,907	9,505	4,412	-2,780	-9,319

Source: NID 2016, Table 6-6

Water Conservation

NID conducts an ongoing water conservation program including managing water supplies to improve the overall system efficiency and reduce waste and by encouraging water conservation by consumers. In addition, NID adopted a water shortage contingency plan in December 1992 that would be implemented when there is a need to reduce demands significantly on a short-term basis (NID 2016).

Water Treatment

NID operates seven water treatment plants with a combined capacity of 33.4 million gallons. The reader is referred to the project-specific setting discussions in the following subsections for further discussion of water treatment.

Wastewater

Wastewater treatment and disposal for the Alta Sierra project site would occur via an on-site septic tank on the store parcel and off-site tight line and leach field on the two parcels north of the store site (APNs 25-430-10 and -12). Wastewater treatment and disposal would be via on-site septic systems at the Rough and Ready Highway site, and the Penn Valley site would connect to the Nevada County Sanitation District #1–Penn Valley public sewer system. The reader is referred to the project-specific setting discussions in the following subsections for further discussion of wastewater.

Stormwater Drainage

The project sites are not currently served by a public stormwater drainage system and do not contain any existing drainage infrastructure. The reader is referred to the project-specific setting discussions in the following subsections for descriptions of the existing drainage patterns at each of the project sites.

Solid Waste

The Nevada County Department of Public Works manages the County's solid waste and recycling programs. The project sites are located in the department's western Nevada County service area. Waste Management, Inc., contracts with the County to provide solid waste and recyclable materials collection, transfer, and disposal services to its customers, including residential, commercial, and industrial. In accordance with County standards, Waste Management provides recycling services and collects the recycling materials via its curbside collection operations (Nevada County 2016b).

Residents also have the option to self-haul their refuse to the McCourtney Road, North San Juan, or Washington transfer stations (Nevada County 2016b; Waste Management 2016). Nevada

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County does not have an active landfill. All refuse collected at the transfer stations is transported via trailer trucks to the Ostrom Road Landfill in Yuba County, California.

Ostrom Road Landfill

The Ostrom Road Landfill is projected to have a remaining life of 50 years at maximum daily throughput of 3,000 tons. Of its 43.5 million cubic yard capacity, an estimated 90 percent was available as of 2007 (CalRecycle 2016).

14.0.2 REGULATORY FRAMEWORK

Public Safety

State

California Health and Safety Code

Additional fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations for building standards, fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child-care facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with the California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Fighting Equipment, the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Fire Code

The 2013 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California (CBSC 2011). The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

Local

Nevada County General Plan

The Public Facilities and Services Element and the Safety Element of the General Plan contain the following policies (or relevant excerpts thereof) concerning public safety services:

Public Facilities and Services Element

Policy 3.1 The levels of service and provision of public facilities in Community Regions shall be based upon improving the capacity of public facilities to serve higher levels of development directed to Community Regions. The levels of service and provision of public facilities in Rural Regions shall be based upon limiting the amount of development to ensure that adequate facilities are available. Planning for future public facilities and services in Community and Rural Regions shall be based upon the following criteria:

COMMUNITY REGIONS

- a. public water and sewer
- b. retention of existing emergency response time
- c. intercommunity-transit

RURAL REGIONS

Rural Centers

- a. public or on-site community water and sewer systems
- b. decreased emergency response times

Rural Areas

- a. individual septic and wells or on-site community water and sewer systems
- b. decreased emergency response time
- c. limited transit

Policy 3.10 The following specific level of service standards shall be applicable to Community Regions and Rural Regions for public facilities which the County has responsibility for providing:

Overall County Services and Human Services

- a. For Community and Rural Regions: 2,500 square feet for each increase of 1,000 persons in county-wide population County Jail
- b. For Community and Rural Regions: 1 inmate bed per 1,000 of the county-wide population

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Policy 3.14 In order to ensure that capacity of public facilities is coordinated with the timing of development, the County shall require for any development requiring a discretionary permit, and for any General Plan amendment, a determination of the adequacy of public facilities, or an impact fee program, to serve the proposed development.

The adequacy of public facilities shall be determined upon the available capacity in existing facilities, plus the net additional capacity to support new development resulting from construction of the improvements in the Five-Year CIP of the County and other affected local agencies, the County 5-Year Road Improvement Program, and the State Transportation Improvement Program.

Additional capacity provided by such improvements to resolve existing deficiencies shall not be counted in the basis for determining capacity available to serve new development. Where adequate public facilities are planned, but not yet available to serve a proposed development, the County may require that mitigating measures be undertaken by the proponent of the development. Such measures shall not be in lieu of development impact fees; such measures may include, but are not limited to, alteration in the timing or phasing of the proposed development, construction of temporary improvements, or construction of off-site improvements necessary to serve that development.

Safety Element

Policy SF-10.6.2 County public safety facilities shall be included in the County's development impact fee program, as provided in Policy 3.8 to provide for new facilities or upgrading of existing facilities necessary to serve new development.

Policy SF-10.6.3 The following shall be included in the adopted Comprehensive Site Development Standards as the basis for site plan review:

- a. Standards to enhance the ability of the County law enforcement personnel to protect multi-family, commercial, industrial, and business park uses, including but not limited to:
 - (1) exterior building and parking area lighting; and
 - (2) trimming and maintenance of on-site vegetation to provide adequate view of parking areas, building entrances, and other areas accessible to the public.
- b. Standards to ensure adequate site and building access for fire and emergency medical access.

Nevada County Land Use and Development Code

Chapter XVI – Fire Safety Regulations

The regulations establish the necessary minimum wildfire protection standards to minimize public safety effects with the establishment of land uses and buildings in State Responsibility Area (SRA)

lands in Nevada County. The regulations are intended to mitigate effects of wildland fire exposure to such land uses in the State Responsibility Areas, and they are further adopted to equal, exceed, or provide the same practical effect contained in the California State Board of Forestry's Fire Safe Regulations adopted on November 7, 1990. The fire safety regulations include measures for emergency access, street name and building address signage, water reserves for emergency fire use, and vegetation modification.

Section L-II 4.3.18 – Wildland Fire Hazard Areas

Section L-II 4.3.18 includes 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. Additional information is presented in Section 10.0.2, Regulatory Framework, in Section 10.0, Hazards and Hazardous Materials.

Schools

State

Leroy Green School Facilities Act

The Leroy F. Greene School Facilities Act of 1998, also known as Senate Bill 50 (Stats. 1998, Ch. 407), governs a school district's authority to levy school impact fees.

Senate Bill (SB) 50 and Proposition 1A provide a comprehensive school facilities financing and reform program by primarily authorizing a \$9.2 billion school facilities bond issue, school construction cost containment provisions, and an eight-year suspension of the Mira, Hart, and Murrieta court cases. Specifically, the bond funds are to provide \$2.9 billion for new construction and \$2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstate the school facility fee cap for legislative actions (e.g., general plan amendments, specific plan adoption, zoning plan amendments). According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be full and complete school facilities mitigation. These provisions were written to be in effect until 2006 and will remain in place as long as subsequent state bonds are approved and available.

SB 50 establishes three levels of developer fees:

1. Level One fees are the base statutory fees of \$2.05 per square foot of assessable space for residential development and \$0.31 per square foot of chargeable, covered and enclosed commercial/industrial development.
2. Level Two fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The State would match the 50 percent funding if funds are available.
3. Level Three fees apply if the State runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school moneys.

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In order to levy the alternate (Level Two) fee and qualify for 50 percent state-matching funds, a school district must prepare and adopt a School Facilities Needs Analysis, apply and be eligible for state funding, and satisfy two of the four specified criteria after January 1, 2000: (1) 40 percent of pupils are enrolled on multitrack year-round schedule; (2) a general obligation bond to finance new school facilities has been placed on the ballot in the past four years and passed with 50 percent plus 1 vote; (3) at least 20 percent of teaching stations are portable classrooms; or (4) the school district has issued debt or incurred obligations for capital outlay in an amount equal to 15 percent of school district's local bonding capacity including property taxes, parcel taxes, the district's general fund, redevelopment agency funds, and special taxes from community facilities districts approved prior to November 1998 (or 30 percent if post-November 1998 landowner-approved Mello-Roos bonds are counted). The ability of a city or county to impose fees is limited to the statutory and potential additional charges allowed by the act, as described above.

Local

Nevada County General Plan

The Education Element of the General Plan contains the following policy concerning schools:

- Policy 7.5 The County will cooperate with the school districts and municipalities in the County, to the extent feasible, to explore methods for securing adequate funding of new school facilities. This may include the development of local funding mechanisms, as well as the utilization of state funds when available. Local resources to be considered may include the reservation or dedication of school sites, developer fees, development agreements, Mello-Roos CFDs, assessment districts, redevelopment funds, general obligation bond proceeds, special taxes, and other legal funding mechanisms.

Parks and Recreation

State

Quimby Act

The goal of the 1975 Quimby Act (California Government Code Section 66477) was to require developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The act gave authority for passage of land dedication ordinances only to cities and counties, thus requiring special districts to work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid and land conveyed directly to the local public agencies that provide parks and recreation services communitywide. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities.

Originally, the Quimby Act was designed to ensure "adequate" open space acreage in jurisdictions adopting Quimby Act standards (e.g., 3–5 acres per 1,000 residents). In some California communities, the acreage fee was very high where property values were high, and many local governments did not differentiate on their Quimby fees between infill projects and greenbelt developments.

In 1982, the act was substantially amended via Assembly Bill (AB) 1600. The amendments further defined acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be

closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. In other words, AB 1600 requires agencies to clearly show a reasonable relationship between the public need for the recreation facility or park land and the type of development project upon which the fee is imposed.

Cities or counties with a high ratio of parkland to inhabitants can set a standard of 5 acres per 1,000 residents for new development. Cities or counties with a lower ratio can require only the provision of up to 3 acres of parkland per 1,000 residents. The calculation of a city's or county's parkland-to-population ratio is based on a comparison of the population count of the last federal census to the amount of city- or county-owned parkland.

Local

Nevada County General Plan

The Public Services and Facilities Element and the Recreation Element of the General Plan contain the following policies (or relevant excerpt thereof) concerning parks and recreation:

Public Facilities and Services Element

- Policy 3.10 The following specific level of service standards shall be applicable to Community Regions and Rural Regions for public facilities which the County has responsibility for providing:
- d. For Community and Rural Regions: 3.0 acres of land for each increase of 1,000 persons in county-wide population (Local parks to be provided by municipalities or local districts; Regional parks may be separate from local parks or an expansion of such facilities)

Recreation Element

- Policy 5.9 Park and recreation facilities shall be included in the County's comprehensive impact fee program. The comprehensive development fees shall be in amounts sufficient to offset the costs identified as the appropriate share of the park and recreation facility improvements necessary to serve future development. The comprehensive development fee structure shall ensure that future growth fully mitigates its direct and cumulative impacts upon the County.

Water Supply

Federal

Environmental Protection Agency

The US Environmental Protection Agency (EPA) is the federal agency assigned to maintain safe air and water throughout the United States. Nevada County is in EPA Region 9, which includes Arizona, California, Hawaii, Nevada, the Pacific Islands, and over 140 Tribal Nations. The State Water Resources Control Board (SWRCB) works with the EPA to control and reduce pollutants from entering drinking water sources.

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State

Urban Water Management Planning Act

The Urban Water Management Planning Act (Water Code Sections 10608–10656) requires every urban water supplier that either provides over 3,000 acre-feet of water annually or serves more than 3,000 connections to assess the reliability of its water sources over a 20-year planning horizon, and report its progress on 20 percent reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 SBX7-7. These plans must be prepared every five years and submitted to the Department of Water Resources (DWR) for review to ensure compliance with the Water Code (DWR 2016).

Local

Nevada Irrigation District Urban Water Management Plan

NID's 2015 Urban Water Management Plan (UWMP) was adopted in 2016. The UWMP allows the District to compare its water supplies with existing and anticipated water demands, identify and implement urban water conservation practices, analyze the possibility of drought-induced urban water shortages, and plan various management procedures for implementation during normal and emergency conditions.

NID also produces several brochures to assist its customers in voluntary water conservation to protect and preserve the district's water supply. The brochures include tips for personal activities such as showering and bathing, as well as household hints for washing dishes, laundry, and gardening and landscaping care. Properties outside the NID boundaries are served by private well systems.

Nevada County General Plan

The Public Services and Facilities Element and the Water Element of the General Plan contain the following policies concerning water supply:

Public Facilities and Services Element

- Policy 3.5 Within Community Regions with existing public sewer and water systems, all new residential land divisions shall be required to connect to public sanitary sewer and water systems. Temporary use of private on-site systems may be allowed where public systems are not yet available but where a specific improvement plan and funding mechanisms are in place. A legally binding mechanism shall be required to insure that the development will connect to the public systems when available, and that the private systems will be discontinued.

Water Element

- Policy 11.1 Adopt water conservation standards, consistent with State guidelines, for multi-family, commercial and industrial development encouraging installation and use of low-flow plumbing fixtures, drip irrigation systems, and drought-tolerant landscape plantings.

Wastewater

Federal

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the act, the EPA has implemented pollution control programs such as setting wastewater standards for industry and water quality standards for all contaminants in surface waters.

The CWA made it unlawful to discharge any pollutant from a point source (direct discharge) into navigable waters. The EPA's National Pollutant Discharge Elimination System permit program controls direct and non-point discharges through the applicable Regional Water Quality Control Board (EPA 2016a).

State

Porter-Cologne Water Quality Control Act

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Control Act to preserve, enhance, and restore the quality of the state's water resources. The act established the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) as the principal state agencies with the responsibility for controlling water quality in California. Under the act, water quality policy is established, water quality standards are enforced for both surface water and groundwater, and the discharges of pollutants from point and nonpoint sources are regulated. The act authorizes the Central Valley RWQCB to establish water quality principles and guidelines and permits for long-range resource planning including groundwater and surface water management programs and control and use of recycled water (USDOE 2016).

State Water Resources Control Board

The SWRCB) was created by the legislature in 1967 and is responsible for implementing the Clean Water Act and the Porter-Cologne Water Quality Control Act. The SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards located in the major watersheds of the state. The SWRCB also issues National Pollutant Discharge Elimination System (NPDES) permits to cities and counties through the RWQCBs.

Waste Discharge Requirements Program

State regulations pertaining to the treatment, storage, processing, or disposal of solid waste are found in Title 27, California Code of Regulations Section 20005 et seq. In general, the waste discharge requirements (sometimes referred to as the Non Chapter 15 [Non 15] Program) regulate point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the federal Clean Water Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the waste discharge requirement (WDR) program also includes the discharge of wastes classified as inert, pursuant to Section 20230 of Title 27. Several SWRCB programs are administered under the WDR program, including the Sanitary Sewer Order and recycled water programs.

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If the operation or discharges from a property or business affect California's surface water, coastal waters, or groundwater, the discharger is required to obtain a permit from the appropriate RWQCB to discharge waste. For those discharging pollutants (or proposing to) into surface waters, a federal NPDES permit must be obtained. For other types of discharges, such as those affecting groundwater or in a diffused manner (e.g., erosion from soil disturbance or waste discharges to land), a Report of Waste Discharge must be filed with the appropriate Regional Water Quality Control Board.

Sanitary Sewer Overflow Reduction Program

A sanitary sewer overflow (SSO) is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease and can pollute surface waters and groundwater, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. To provide a consistent, statewide regulatory approach to address SSOs, the SWRCB adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (Sanitary Sewer Order) on May 2, 2006. The Sanitary Sewer Order requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all sanitary sewer overflows to the SWRCB's online SSO database. All public agencies that own or operate a sanitary sewer system that comprises more than 1 mile of pipes or sewer lines which convey wastewater to a publicly owned treatment facility must apply for coverage under the Sanitary Sewer Order.

Local

Central Valley Regional Water Quality Control Board

The Central Valley Regional Water Quality Control Board (Central Valley RWQCB) is the regional governing agency for water quality. The board's primary duty is to protect the quality of the waters in the region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific groundwater or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. The Central Valley RWQCB also issues National Pollutant Discharge Elimination System permits.

Nevada County General Plan

The Public Facilities and Services Element and the Water Element of the General Plan contain the following policies concerning wastewater:

Public Facilities and Services Element

- Policy 3.5 Within Community Regions with existing public sewer and water systems, all new residential land divisions shall be required to connect to public sanitary sewer and water systems. Temporary use of private on-site systems may be allowed where public systems are not yet available but where a specific improvement plan and funding mechanisms are in place. A legally binding mechanism shall be required to insure that the development will connect to the public systems when available, and that the private systems will be discontinued.

- Policy 3.17 The use of community sewer and/or water systems are encouraged where such systems are economically feasible for the intended service area.

Water Element

- 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 groundwater. 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).

Nevada County Land Use and Development Code

Chapter XVII Article 5 of the Nevada County Land Use and Development Code provides detailed methodologies for preparing drainage analyses for development projects. The Article also provides minimum standards for culverts, open ditches, and closed conduit storm sewers.

Stormwater Drainage

Local

Nevada County General Plan

The Public Services and Facilities Element of the General Plan contains the following policies concerning stormwater drainage:

- Policy 3.19A For all discretionary development, increases in stormwater runoff due to new development, which could result in flood damage to downstream residences, commercial, industrial, active natural resource management uses (i.e., farming, ranching, mining, timber harvesting, etc.), public facilities, roads, bridges, and utilities shall not be permitted. Required retention/detention facilities, where necessary, shall be designed such that the water surface returns to its base elevation within 24 hours after the applicable storm event. The sizing of such facilities, when needed, shall be based upon the protection of downstream facilities.
- Policy 3.19B The County shall strongly encourage the use of geographically limited independent or dependent entities (Community Service Area, County Service Area, special district or equivalent entities) for the purpose of maintaining drainage facilities to handle stormwater runoff.
- Policy 3.19C For all discretionary projects, the County shall require that maintenance of all onsite drainage facilities and all offsite facilities constructed as part of the project is assured through a permanent, legally-enforceable mechanism such as, but not limited to, a CSA or CSD.

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Solid Waste

State

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989, or AB 939 (Public Resources Code Sections 42900–42927), required all California cities and counties to reduce the volume of waste deposited in landfills by 50 percent by the year 2000 and continue to remain at 50 percent or higher for each subsequent year. The purpose of this act is to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible.

AB 939 requires each California city and county to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element that demonstrates how the jurisdiction will meet the Integrated Waste Management Act's mandated diversion goals. Each jurisdiction's source reduction and recycling element must include specific components, as defined in Public Resources Code Sections 41003 and 41303. In addition, the source reduction and recycling element must include a program for management of solid waste generated in the jurisdiction that is consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. Included in this hierarchy is the requirement to emphasize and maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of by transformation and land disposal (Public Resources Code Sections 40051, 41002, and 41302) (CalRecycle 1997).

California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327 was signed into law on October 11, 1991. This bill added Chapter 18 (commencing with Section 42900) to Part 3 of Division 30 of the Public Resources Code. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991. Chapter 18 required CalRecycle to develop a model ordinance for adoption of recyclable materials in development projects by March 1, 1993. Local agencies were then required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects by September 1, 1993. If by that date a local agency had not adopted its own ordinance, the model ordinance adopted by CalRecycle took effect and was to be enforced by the local agency (CalRecycle 2012).

Local

Nevada County General Plan

The Public Services and Facilities Element of the General Plan contains the following policy concerning solid waste:

- Policy 3.24 The County, in cooperation with other affected agencies, shall continue to implement the County Integrated Waste Management Plan. Preparation of a comprehensive long-range facilities plan for the County shall consider the need for transfer stations, composting sites, hazardous waste collection facilities, and other solid waste disposal facilities.

IMPACT METHODOLOGY

Standards of Significance

The impact analysis below is based on the following State CEQA Guidelines Appendix G thresholds of significance, which state that a project would have a significant impact if it would:

Public Safety

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection or law enforcement services.

Schools

- 2) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools.

Parks and Recreation

- 3) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks.
- 4) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- 5) Not include recreational facilities, or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Water Supply

- 6) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- 7) Have insufficient water supplies available to serve the project from existing entitlements and resources, or necessitate new or expanded entitlements.

Wastewater

- 8) Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board.
- 9) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

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- 10) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Stormwater Drainage

- 11) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Solid Waste

- 12) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- 13) Not be in compliance with federal, state, and local statutes and regulations related to solid waste.

Methodology

Public Safety

The public safety analyses are based primarily on information obtained from the public safety agencies that serve the project sites and a review of project plans.

Water Supply

The water supply analyses are based primarily on the data provided in NID's 2015 Urban Water Management Plan (UWMP) as well as water use estimates for similar projects in the area.

Wastewater

The Alta Sierra site and the Rough and Ready Highway site would be served by septic systems constructed for the projects and therefore would not generate wastewater that would contribute demand for new or expanded wastewater conveyance or treatment. Consequently, Standards of Significance 8 through 10 are not addressed for the Alta Sierra or Rough and Ready Highway sites. The Penn Valley wastewater analysis is based on a review of project plans and information obtained from the Nevada County Public Works Department related to the Penn Valley and Lake Wildwood wastewater treatment plants.

Stormwater Drainage

The stormwater drainage analyses are based primarily on proposed infrastructure plans submitted by the project applicant.

Solid Waste

The solid waste analyses are based on information obtained from CalRecycle and Nevada County regarding the solid waste facilities that would serve the proposed projects and solid waste generation rates for similar projects.

Thresholds Not Evaluated

Schools

As commercial uses, the proposed developments would not generate a substantial number of new students or otherwise affect local area schools. The Alta Sierra project site is located in the Pleasant Ridge Union School District, the Penn Valley project site is located in the Penn Valley Union Elementary School District, the Rough and Ready Highway project site is located in the Grass Valley School District; and all three sites are located in the Nevada County Joint Union High School District (Nevada County 2014). Each project would be required to pay current developer impact fees for commercial uses in effect at the time of building permit application. The respective districts would use these fees to pay for facility expansion and upgrades needed to serve new students. Pursuant to California Government Code Section 65996, payment of these fees is considered full mitigation for potential impacts to the districts. Therefore, there would be no impact relative to Standard of Significance 2, and this impact is not further evaluated for any of the project sites.

Parks and Recreation

As commercial uses, the proposed developments would not generate a substantial number of new residents and would not adversely affect local area parks or recreational facilities. Furthermore, the proposed projects would not include the construction of any new parks or recreational facilities. Therefore, there would be no impact relative to Standards of Significance 3 through 5, and these impacts are not further evaluated for any of the project sites.

14.1 ALTA SIERRA SITE

14.1.1 PROJECT-SPECIFIC SETTING

Public Safety

Fire Protection and Emergency Medical Services

The Alta Sierra project site is served by the Nevada County Consolidated Fire District, which has four staffed fire stations located throughout western Nevada County. In addition, the district has one joint-staffed station with the Grass Valley Fire Department (GVFD). The NCCFD, the GVFD, and the Nevada City Fire Department have entered into a joint operational agreement to provide a higher level of service in the region (NCCFD 2016).

The NCCFD stations located nearest to the Alta Sierra project site are Station 88, located on SR 49 approximately 1.6 road miles north of the site, and Station 89, located on Tammy Way approximately 2.3 road miles southeast of the site, near the Alta Sierra Country Club and Golf Course. Station 88 has full time staffing 24 hours per day, seven days per week, and is equipped with one Type I engine and a 650-gallon water tank. Station 89 has full-time staffing 24 hours per day, seven days per week, and is equipped with one Type I engine, one Type III engine used for vegetation fires and areas with limited access, one OES water tender used at the request of the California Office of Emergency Services, and one golf cart used for emergencies at the golf course and for special events (NCCFD 2016).

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Law Enforcement Services

No additional law enforcement services setting information pertains to the Alta Sierra site other than as described in Subsection 14.0.1, above.

Water Supply

There is an existing 6-inch water line in Alta Sierra Drive, adjacent to the Alta Sierra project site.

Wastewater

The Alta Sierra project site is currently undeveloped and is not served by a public wastewater system.

Stormwater Drainage

The Alta Sierra project site generally slopes from the northwest to the southeast; the change in grade over the entire site is approximately 30 feet. A subtle ridge bisects the site, allowing runoff generated on-site to flow overland toward both Alta Sierra Drive and Little Valley Road. Both roads have roadside ditches to convey runoff parallel to the roadway (TTG Engineers 2014).

Solid Waste

No additional solid waste setting information pertains to the Alta Sierra site other than as described in Subsection 14.0.1, above.

14.1.2 REGULATORY FRAMEWORK

There are no additional regulations, policies, or standards that pertain to the Alta Sierra site other than those described in Subsection 14.0.2, above.

14.1.3 IMPACTS AND MITIGATION MEASURES

Increase Demand for Public Safety Services (Standard of Significance 1)

Impact 14.1.1(AS) Development of the Alta Sierra project site as proposed would not substantially increase demand for public safety services and would not trigger the need for any new or expanded facilities. **(Less than Significant)**

Development of the Alta Sierra project site as proposed could result in increased demand for law enforcement, fire protection, and emergency medical services. However, as a small retail store, the proposed use is not anticipated to generate a substantial number of new calls for service and would not by itself trigger the need to construct new or expanded facilities. Furthermore, the proposed project would be conditioned by the Nevada County Consolidated Fire District to provide adequate design and provisions for structural fire prevention needs, such as a fire sprinkler system, a smoke detection system, fire protection fees, and fire flow requirements and hydrants. These project conditions would minimize the potential for fire, reducing the project's demand for fire protection services. Therefore, this impact would be **less than significant**.

The reader is referred to Section 10.0, Hazards and Hazardous Materials, for a discussion of emergency response and evacuation plans, as well as to Section 15.0, Traffic and Transportation, for a discussion of emergency access to the site.

Mitigation Measures

None required.

Increased Water Demand and Construction of Water Conveyance Improvements (Standards of Significance 6 and 7)

Impact 14.1.2(AS) The Alta Sierra project would increase demand for water supplies and water treatment capacity and would require construction of on- and off-site water conveyance improvements. **(Less than Significant)**

Based on a water consumption rate of 130 gallons per day (gpd) per 1,000 square feet of building space (Nevada County 2007), the proposed 9,100-square-foot Alta Sierra project would have a water demand of 1,183 gpd, or 1.3 acre-feet per year (afy). NID issued a will-serve letter for the proposed Alta Sierra project stating that the project is within the NID service area and that treated water service would be available to the site from the Loma Rica Water Treatment Plant (NID 2014; see **Appendix 14.0-A**).

In 2015, NID had water supply rights totaling 480,346 acre-feet. The proposed project's water demand of 1.3 afy represents 0.0003 percent of NID's total water supplies. During normal water years, NID would have sufficient available capacity to serve the proposed project through 2035 (see **Table 14.0-3**). Currently, under single dry year conditions, NID projects a water supply deficit in 2035 and subsequent years. Under multiple dry year conditions, a water supply deficit is projected in the fourth year in 2035 (see **Tables 14.0-4** and **14.0-5**). However, NID is planning to construct a new 110,000-acre-foot reservoir on the Bear River by 2023, which would increase total supplies and eliminate these projected deficits (NID 2016). In addition, the district's adopted water shortage contingency plan would temporarily reduce water demands to address drought conditions. Therefore, NID would have sufficient water supplies to serve the proposed project and no new or expanded entitlements would be needed.

The Loma Rica Water Treatment Plant has a current capacity of 8.3 million gallons per day (mgd), which is sufficient to accommodate anticipated growth through 2020, at which time the plant is planned for expansion to 12.3 mgd (NID 2016). The proposed project would result in a negligible increase in demand for treated water from this plant (0.014 percent of current capacity¹) and would not accelerate expansion plans. Therefore, no new or expanded water treatment facilities would be required to serve the project.

The County has determined that the existing water supply infrastructure that would serve the proposed Alta Sierra project may have insufficient water volume and pressure for fire suppression purposes. However, as required under mitigation measure **MM AS-10.1.4** (see Impact 10.1.4(AS) in Section 10.0, Hazards and Hazardous Materials, the project would be required to include installation of on-site features to ensure adequate fire protection water supply and pressure at the site. No off-site facilities or infrastructure or any other improvements by NID would be required to

¹ 1,183 gallons per day project demand/8,300,000 gallons per day plant capacity = 0.00014%

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ensure adequate fire suppression flows. There would be no impact with regard to water supply utilities, and no additional mitigation would be required.

There is an existing 6-inch water line in Alta Sierra Drive adjacent to the project site. The project would include connection to this line, requiring minimal off-site construction within the existing roadway. Impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce construction-related impacts to less than significant levels. No additional mitigation measures would be required to reduce effects related to water supply or treatment. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Construction of On-Site Wastewater System (Standards of Significance 8, 9, and 10)

Impact 14.1.3(AS) The proposed Alta Sierra project includes a septic system, the construction of which could result in environmental impacts. **(Less than Significant)**

Wastewater treatment and disposal on the Alta Sierra site would be via a new septic system that would consist of an on-site septic tank and pump/dosing tank on APN 25-430-08, an off-site tight line through APN 25-430-10 to the north, and a leach field continuing north to APN 25-430-12. Soils testing has been conducted and an adequate area for system and repair area identified. The Nevada County Environmental Health Department has indicated that a sewage disposal permit would be required for the installation of the septic system. The type of system required would be determined by the Environmental Health Department after the sewage disposal permit is applied for in compliance with a condition of approval on the project. Additionally, a septic line easement through the off-site parcels must be finalized prior to issuance of the septic disposal permit. The applicant has provided a "letter of intent" to record this easement from the property owner of all three properties included in the Alta Sierra project, including a draft "Declaration of Easement" to be recorded should the project be approved. The project's conditions of approval would require the finalization and recordation of the easement prior to issuance of any grading or building permits.

Impacts associated with construction of the Alta Sierra site sewage disposal improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures have been identified in this Draft EIR to reduce these impacts to less than significant levels. Therefore, this impact would be less than significant. The reader is also referred to Impact 8.1.4(AS) for further discussion of the project's proposed wastewater system.

Mitigation Measures

No additional measures required.

Construction of On-Site Stormwater Drainage Improvements (Standard of Significance 11)

Impact 14.1.4(AS) The proposed Alta Sierra project includes an on-site stormwater drainage system, construction of which could result in impacts to the physical environment. **(Less than Significant)**

As discussed in Impact 11.1.1(AS) (see Section 11.0, Hydrology and Water Quality), the project would include construction of an on-site drainage system that would manage stormwater runoff and ensure compliance with applicable state and local water quality standards. This system would generally include routing runoff along concrete gutters or asphalt pavement to catch basins and curb openings. Flows from the west side of the site (between the store and Alta Sierra Drive) would be directed toward the southwest corner of the site (low point), where they would pass through a stormwater filter prior to discharge into a catch basin that would be connected to underground detention pipes. An 18-inch culvert would be installed under the driveway on Alta Sierra Drive. The remainder of the site's runoff would be conveyed to a surface bioretention basin. Runoff would pass through the engineered subsurface layers of the basin to an underground perforated pipe system. The percolated runoff would then be conveyed to an underground detention system before discharging to the roadside ditch along Little Valley Road.

Impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce these impacts to less than significant levels. No additional mitigation measures would be required to reduce effects related to stormwater drainage. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Increased Demand for Solid Waste Collection and Disposal Services (Standards of Significance 12 and 13)

Impact 14.1.5(AS) Construction and operation of the Alta Sierra project would generate solid waste requiring collection and disposal. **(Less than Significant with Mitigation Incorporated)**

The proposed project includes construction and operation of a 9,100-square-foot commercial retail store. Using a solid waste generation rate of approximately 3.12 pounds of solid waste per 100 square feet per day (CalRecycle 2013), the proposed 9,100-square-foot building would generate a total of 284 pounds of solid waste per day, or 52 tons per year, during operation. The project would also generate solid waste during the construction phase. However, the majority of construction waste generated nationwide is attributed to demolition and renovation (EPA 2016b). The Alta Sierra project site is currently undeveloped, requiring no demolition. Thus, the project is not expected to generate substantial volumes of construction waste.

Solid waste generated at the Alta Sierra site would be transported to the McCourtney Road Transfer Station and Recycling Center for processing where a portion of the materials would be diverted for recycling. The remaining materials would be transferred to the Ostrom Road Landfill in Yuba County. Household hazardous waste materials are processed at the onsite Household

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Hazardous Waste facility, where certain materials are made available for reuse by the public and the remainder is disposed of properly off-site. According to CalRecycle (2016), the Ostrom Road Landfill is projected to have a remaining life of 50 years and an estimated remaining capacity of 39.2 million cubic yards. Thus, the landfill would have adequate permitted capacity to accept solid waste generated during both construction and operation of the proposed Alta Sierra project. Implementation of mitigation measure **MM AS-14.1.5** would ensure that toxic materials, which are not accepted at the McCourtney Road facility, are disposed of properly.

The Nevada County Department of Transportation and Sanitation would condition the project to comply with the following waste collection and recycling services requirements: participate in the recycling program offered through the County's franchised waste collection company; divert all "green waste" material generated at the project area to the County's franchised waste collection company's green waste collection program, or an equivalent method; provide adequate space for waste and recycling containers; undertake a program of reuse of waste materials generated at the project; and during construction of the project, divert and recycle all recyclable materials (Nevada County 2012). Implementation of these measures would maximize diversion of recyclable materials generated at the Alta Sierra site. With implementation of mitigation measure **MM AS-14.1.5**, this impact would be **less than significant**.

Mitigation Measures

MM AS-14.1.5 Prior to issuance of grading or building permits, the following shall be included as a Note on those plans: Toxic waste materials (ammunition, asbestos, biohazards, compressed gas cylinders, explosives, radioactive materials, treated wood waste, and medications) are not accepted at the McCourtney Road Transfer Station and if encountered during construction, shall be properly disposed of in compliance with existing regulations and at appropriate facilities. The County Department of Public Works-Solid Waste Division (organic waste) and Environmental Health Department (industrial toxic waste) are the local agencies with oversight over the disposal of these materials. Should the developer encounter these materials during grading or construction activities, the developer shall consult with these agencies to determine the appropriate methods for disposal and the appropriate facilities where these materials can be disposed.

Timing/Implementation: Prior to issuance of grading or building permits

Enforcement/Monitoring: Nevada County Planning Department and Environmental Health Department 14.2 Penn Valley Site

14.2 PENN VALLEY SITE

14.2.1 PROJECT-SPECIFIC SETTING

Public Safety

Fire Protection and Emergency Medical Services

The Penn Valley project site is provided fire protection services by the Penn Valley Fire Protection District (PVFPD). The PVFPD has three fire stations: Station 43 located at 10513 Spenceville Road, Station 44 located at 18989 Lake Forest Drive, and Station 45 located at 12370 Bitney Springs Road.

Stations 43 and 44 are staffed 24 hours a day with a minimum of two personnel, while Station 45 relies on off-duty personnel for staffing. The PVFPD is equipped with two frontline fire engines, two reserve fire engines, two frontline ambulances, one reserve ambulance, one water tender, two staff vehicles, one rescue vehicle, and one utility vehicle (PVFPD 2016).

Law Enforcement Services

No additional law enforcement services setting information pertains to the Penn Valley site other than as described in Subsection 14.0.1, above.

Water Supply

The Penn Valley project site is connected to existing NID water supply infrastructure in the adjacent roadway.

Wastewater

The Penn Valley project site is located in the Nevada County Sanitation District #1 (NCSD-1). The Nevada County Public Works Department, Wastewater Division administers and maintains sewage collection systems and treatment facilities for NCSD-1, which provides sewer service to approximately 5,230 accounts in western Nevada County with a total population of 14,000. Currently, there are ten zones in NCSD-1 with facilities that collect and treat approximately 1,245,000 gallons of wastewater each day. The Penn Valley project site is located in Zone 6 (Penn Valley).

Zone 6 is currently served by the Penn Valley Wastewater Treatment Plant (Penn Valley WWTP) located south of the Penn Valley community. The Penn Valley collection system conveys septic tank effluent from individual septic tanks through a network of force mains to the Penn Valley WWTP. The plant currently serves 347 active connections and has a design capacity of 0.1256 mgd. The plant's average flow volume is 0.0897 mgd, but peak flow in the last year was 0.1915 mgd. The plant consists of aerated lagoons, a storage reservoir, and 33 acres of pastureland for spray irrigation. The plant has multiple deficiencies, including an inadequate holding pond and surface discharge area. As a result, the plant violated its waste discharge requirements (WDRs) in 2006 and was issued a Cease and Desist Order (CDO) by the Central Valley Regional Water Quality Control Board. The CDO limits the plant's monthly average dry weather inflow to 0.06 mgd until facility improvements are made or another means of sewer treatment is developed (Central Valley RWQCB 2009). Upon completion of a Facilities Improvement Design Report in December 2011, the construction of a pipeline from Penn Valley to the Lake Wildwood WWTP was determined to be the most cost-effective way to address the CDO. The pipeline is also planned to connect to Zone 12 (Valley Oak Court). Construction of the pipeline and an associated lift station is currently under way and is expected to be completed in 2017 (Brenner 2015). Once completed, the Penn Valley WWTP will be decommissioned and Zones 1 and 6 will be consolidated into Zone 1 (Lake Wildwood).

The Lake Wildwood WWTP is located at 12622 Pleasant Valley Road in Penn Valley and currently provides treatment services to a population of approximately 8,100. Treated wastewater from the plant is discharged to Deer Creek, a tributary to the Yuba River. The Lake Wildwood WWTP has a design capacity of 1.12 mgd during wet weather and 0.69 mgd during dry weather. Average dry weather flows are 0.38 mgd, well under the design capacity. A flow study conducted by Kennedy/Jenks Consultants in 2011 determined that the Lake Wildwood WWTP is sized to meet anticipated growth for the next 5 to 10 years in the Lake Wildwood and Penn Valley communities (Nevada LAFCO 2015). Twelve (12) equivalent dwelling units (EDUs) have been allocated to the

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project parcel to serve future development. Flow data indicate that only three EDUs would be needed to serve the proposed development. Therefore, there is sufficient capacity at the Lake Wildwood WWTP to serve the project. There is existing wastewater infrastructure in Penn Valley Drive adjacent to the project site.

Stormwater Drainage

The Penn Valley project site is currently undeveloped and is not served by a public stormwater drainage system. The site generally slopes from the southeast to the northwest; the change in grade over the entire site is approximately 7 feet. Existing drainage structures currently discharging off-site runoff to the site include three culverts crossing Penn Valley Drive, a culvert crossing the existing drive near the southeast property corner, and an 18-inch storm drain pipe located at the southwest property corner. On- and off-site flows are ultimately conveyed in an existing wash with an upstream end located at the existing culverts crossing the Penn Valley Drive discharge point. The wash continues along the southern and western property boundaries and exits the site near the northwest property corner. An existing berm is located along the eastern property boundary, preventing off-site flows from entering the site (TTG Engineers 2015a).

Solid Waste

No additional solid waste setting information pertains to the Penn Valley site other than as described in Subsection 14.0.1, above.

14.2.2 REGULATORY FRAMEWORK

No additional regulations, policies, or standards pertain to the Penn Valley site other than those described in Subsection 14.0.2, above.

14.2.3 IMPACTS AND MITIGATION MEASURES

Increase Demand for Public Safety Services (Standard of Significance 1)

Impact 14.2.1 (PV) Development of the Penn Valley project site as proposed would not substantially increase demand for public safety services and would not trigger the need for any new or expanded facilities. **(Less than Significant)**

Development of the Penn Valley project site as proposed could result in increased demand for law enforcement, fire protection, and emergency medical services. However, as a small retail store, the proposed use is not anticipated to generate a substantial number of new calls for service and would not by itself trigger the need to construct new or expanded facilities. Furthermore, the proposed project would be conditioned by PVFPD to provide adequate design and provisions for structural fire-prevention needs, such as a fire sprinkler system, a smoke detection system, fire protection fees, and fire flow requirements and hydrants. These improvements would reduce the potential for fire and the need for additional fire protection facilities. Therefore, this impact would be **less than significant**.

The reader is referred to Section 10.0, Hazards and Hazardous Materials, for a discussion of emergency response and evacuation plans, as well as to Section 15.0, Traffic and Transportation, for a discussion of emergency access to the site.

Mitigation Measures

None required.

Increased Water Demand and Construction of Water Conveyance Improvements (Standards of Significance 6 and 7)

Impact 14.2.2 (PV) The Penn Valley project would increase demand for water supplies and water treatment capacity and would require construction of on- and off-site water conveyance improvements. **(Less than Significant)**

Based on a water consumption rate of 130 gallons per day (gpd) per 1,000 square feet of building space (Nevada County 2007), the proposed 9,100-square-foot Penn Valley project would have a water demand of 1,183 gpd, or 1.3 acre-feet per year (afy). NID issued a will-serve letter for the proposed Penn Valley project stating that the project is within the NID service area and that adequate capacity is available to serve the proposed project (NID 2015a; see **Appendix 14.0-A**).

In 2015, NID had water supply rights totaling 480,346 acre-feet. The proposed project's water demand of 1.3 afy represents 0.0003 percent of NID's total water supplies. During normal water years, NID would have sufficient available capacity to serve the proposed project through 2035 (see **Table 14.0-3**). Currently, under single dry year conditions, NID projects a water supply deficit in 2035 and subsequent years. Under multiple dry year conditions, a water supply deficit is projected in the fourth year in 2035 (see **Tables 14.0-4** and **14.0-5**). However, NID is planning to construct a new 110,000-acre-foot reservoir on the Bear River by 2023, which would increase total supplies and eliminate these projected deficits (NID 2016). In addition, the district's adopted water shortage contingency plan would temporarily reduce water demands to address drought conditions. Therefore, NID would have sufficient water supplies to serve the proposed project and no new or expanded entitlements would be needed.

The Lake Wildwood Water Treatment Plant has a current capacity of 4 mgd, which is sufficient to accommodate anticipated growth through 2019, at which time the plant is planned for expansion to 8 mgd (NID 2016). The proposed project would result in a negligible increase in demand for treated water (0.03 percent of current capacity²) from this plant (and would not accelerate expansion plans. Therefore, no new or expanded water treatment facilities would be required to serve the project.

The County has determined that the existing water supply infrastructure that would serve the proposed Penn Valley project may have insufficient water volume and pressure for fire suppression purposes. However, as required under mitigation measure **MM PV-10.2.4** (see Impact 10.2.4 (PV) in Section 10.0, Hazards and Hazardous Materials, the project would include installation of an on-site underground water storage tank and pump system that would ensure adequate fire protection water supply and pressure at the site. No off-site facilities or infrastructure or any other improvements by NID would be required to ensure adequate fire suppression flows. There would be no impact with regard to water supply utilities, and no additional mitigation would be required.

There is existing water supply infrastructure in the roadway adjacent to the Penn Valley site. Thus, no off-site improvements would be required to provide water service to the proposed project. Minor on-site improvements would be required; however, impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical

² 1,183 gallons per day project demand/4,000,000 gallons per day plant capacity = 0.00029%

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analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce construction-related project impacts to less than significant levels. No additional mitigation measures would be required to reduce effects related to water supply or treatment. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Wastewater Impacts (Standards of Significance 8, 9, and 10)

Impact 14.2.3(PV) The proposed Penn Valley project would connect to a public sewer system, but would include an on-site effluent holding tank and associated improvements, the construction of which could result in impacts to the physical environment. **(Less than Significant)**

Wastewater treatment and disposal for the Penn Valley project would be provided through a combination of on-site storage and treatment and the NCSD-1 Penn Valley sewer system. Wastewater generated by the project would enter an on-site combination septic/effluent holding tank for temporary storage and initial treatment by microorganisms. Wastewater would then be pumped into the existing force main in Penn Valley Drive adjacent to the site and conveyed to the Lake Wildwood WWTP for further treatment and disposal. As discussed previously in this section, the Lake Wildwood WWTP has sufficient available capacity to serve the proposed project and no new or expanded treatment facilities would be required. The Lake Wildwood WWTP complies with all applicable wastewater treatment requirements of the Central Valley RWQCB, and the addition of project wastewater would not cause the plant to exceed these requirements.

Impacts associated with construction of the proposed on-site septic/effluent holding tank and associated improvements to connect to the public sewer system are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce construction-related project impacts to less than significant levels. No additional mitigation measures would be required to reduce effects related to construction of wastewater facilities. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Construction of On-Site Stormwater Drainage Improvements (Standard of Significance 11)

Impact 14.2.4(PV) The proposed Penn Valley project includes an on-site stormwater drainage system, construction of which could result in impacts to the physical environment. **(Less than Significant)**

As discussed in greater detail in Impact 11.2.1 (PV) (see Section 11.0, Hydrology and Water Quality), the Penn Valley project would include construction of an on-site drainage system that would

manage stormwater runoff and ensure compliance with applicable state and local water quality standards. This system would generally include features routing runoff along concrete gutters or asphalt pavement to catch basins and curb openings. Flows in the southern part of the site would be directed southwest to a catch basin connected to a stormwater detention system. In the northern part of the site, flows would be directed to a catch basin located at a low point near the northeast corner. Both catch basins would connect to a 24-inch storm drain detention system that would discharge flows to the on-site wash in the northwest corner of the site.

Impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce these impacts to less than significant levels. No additional mitigation measures would be required to reduce effects related to stormwater drainage. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Increased Demand for Solid Waste Collection and Disposal Services (Standards of Significance 12 and 13)

Impact 14.2.5(PV) Construction and operation of the Penn Valley project would generate solid waste requiring collection and disposal. **(Less than Significant with Mitigation Incorporated)**

The proposed project includes construction and operation of a 9,100-square-foot commercial retail store. Using a solid waste generation rate of approximately 3.12 pounds of solid waste per 100 square feet per day (CalRecycle 2013), the proposed 9,100-square-foot building would generate a total of 284 pounds of solid waste per day, or 52 tons per year, during operation. The project would also generate solid waste during the construction phase. However, the majority of construction waste generated nationwide is attributed to demolition and renovation (EPA 2016B). The Penn Valley project site is currently vacant, requiring no demolition. Thus, the project is not expected to generate substantial volumes of construction waste.

Solid waste generated at the Penn Valley site would be transported to the McCourtney Road Transfer Station and Recycling Center for processing where a portion of the materials would be diverted for recycling. The remaining materials would be transferred to the Ostrom Road Landfill in Yuba County. Household hazardous waste materials are processed at the onsite Household Hazardous Waste facility, where certain materials are made available for reuse by the public and the remainder is disposed of properly off-site. According to CalRecycle (2016), the Ostrom Road Landfill is projected to have a remaining life of 50 years and an estimated remaining capacity of 39.2 million cubic yards. Thus, the landfill would have adequate permitted capacity to accept solid waste generated during both construction and operation of the proposed project. Implementation of mitigation measure **MM PV-14.2.5** would ensure that toxic materials, which are not accepted materials at the McCourtney Road facility, are disposed of properly.

Furthermore, the Nevada County Department of Transportation and Sanitation would condition the project to comply with the following waste collection and recycling services requirements: participate in the recycling program offered through the County's franchised waste collection

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company; divert all “green waste” material generated at the project area to the County’s franchised waste collection company’s green waste collection program, or an equivalent method; provide adequate space for waste and recycling containers; undertake a program of reuse of waste materials generated at the project; and during construction of the project, divert and recycle all recyclable materials (Nevada County 2012). Implementation of these measures would maximize diversion of recyclable materials generated at the site. With implementation of mitigation measures **MM PV-14.2.5**, this impact would be **less than significant**.

Mitigation Measures

MM PV-14.2.5 Prior to issuance of grading or building permits the following shall be included as a Note on those plans: Toxic waste materials (ammunition, asbestos, biohazards, compressed gas cylinders, explosives, radioactive materials, treated wood waste, and medications) are accepted at the McCourtney Road Transfer Station and if encountered during construction, shall be properly disposed of in compliance with existing regulations and at appropriate facilities. The County Department of Public Works-Solid Waste Division (organic waste) and Environmental Health Department (industrial toxic waste) are the local agencies with oversight over the disposal of these materials. Should the developer encounter these materials during grading or construction activities, the developer shall consult with these agencies to determine the appropriate methods for disposal and the appropriate facilities where these materials can be disposed.

Timing/Implementation: Prior to issuance of grading or building permits

Enforcement/Monitoring: Nevada County Planning Department and Environmental Health Department

14.3 ROUGH AND READY HIGHWAY SITE

14.3.1 PROJECT-SPECIFIC SETTING

Public Safety

Fire Protection and Emergency Medical Services

As described previously, the Rough and Ready Highway project site is served by the NCCFD, which has four staffed fire stations located throughout western Nevada County. In addition, the district has one jointly staffed station with the Grass Valley Fire Department (GVFD). The NCCFD, the GVFD, and the Nevada City Fire Department have entered into a joint operational agreement to provide a higher level of service in the region (NCCFD 2016).

The nearest fire station to the site is NCCFD Station #1, located at 472 Brighton Street, approximately 2.7 miles west of the project site. Station #2 is approximately 3.2 miles away, at 213 Sierra College Drive. Station 1 has full-time staffing 24 hours per day, seven days per week, and is equipped with one Type I engine (NCCFD 2016). Station 2 has full-time staffing 24 hours per day, seven days per week, and is staffed by the Grass Valley Fire Department.

The project site is also served by the Rough and Ready Volunteer Fire Protection District (RRVFPD) and its station is located approximately 2.1 miles west of the project site. This station is staffed by

volunteer firefighters and is equipped with two fire apparatuses, a rescue truck, a water tender and two utility trucks (RRVFPD 2016).

Law Enforcement Services

No additional law enforcement services setting information pertains to the Rough and Ready Highway site other than as described in Subsection 14.0.1, above.

Water Supply

The Rough and Ready Highway site is currently provided water service by NID via existing water supply infrastructure in the adjacent roadway.

Wastewater

The Rough and Ready Highway site is currently served by an on-site septic system.

Stormwater Drainage

The Rough and Ready Highway site slopes from the southeast to the northwest with a total elevation change of approximately 9 feet. Currently, runoff sheet flows across the site to the northwest across an impervious asphalt parking lot before exiting the site at an existing roadside drainage ditch on the south side of Rough and Ready Highway (TTG Engineers 2015b).

Solid Waste

No additional solid waste setting information pertains to the Rough and Ready Highway site other than as described in Subsection 14.0.1, above.

14.3.2 REGULATORY FRAMEWORK

No additional regulations, policies, or standards pertain to the Rough and Ready Highway site other than those described in Subsection 14.0.2, above.

14.3.3 IMPACTS AND MITIGATION MEASURES

Increase Demand for Public Safety Services (Standard of Significance 1)

Impact 14.3.1(RR) Development of the Rough and Ready Highway project site as proposed would not substantially increase demand for public safety services and would not trigger the need for any new or expanded facilities. **(Less than Significant)**

Development of the Rough and Ready Highway project site as proposed could result in increased demand for law enforcement, fire protection, and emergency medical services. However, as a small retail store, the proposed use is not anticipated to generate a substantial number of new calls for service and would not by itself trigger the need to construct new or expanded facilities. Furthermore, the proposed project would be conditioned by NCCFD to provide adequate design and provisions for structural fire prevention needs, such as a fire sprinkler system, a smoke detection system, fire protection fees, and fire flow requirements and hydrants. These project conditions would minimize the potential for fire, reducing the project's demand for public safety services. Therefore, this impact would be **less than significant**.

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The reader is referred to Section 10.0, Hazards and Hazardous Materials, for a discussion of emergency response and evacuation plans, as well as to Section 15.0, Traffic and Transportation, for a discussion of emergency access to the site.

Mitigation Measures

None required.

Increased Water Demand and Construction of Water Conveyance Improvements (Standards of Significance 6 and 7)

Impact 14.3.2(RR) Operation of the proposed Rough and Ready Highway project would increase demand for water supplies as well as water treatment capacity and would require construction of on-site water conveyance improvements. **(Less than Significant)**

Based on a water consumption rate of 130 gallons per day (gpd) per 1,000 square feet of building space (Nevada County 2007), the proposed 9,100-square-foot Rough and Ready Highway project would have a water demand of 1,183 gpd, or 1.3 acre-feet per year (afy). NID issued a will-serve letter for the proposed Rough and Ready Highway project stating that the project is currently served by NID and treated water would be provided to the project from the Elizabeth George Treatment Plant (NID 2015b; see **Appendix 14.0-A**).

In 2015, NID had water supply rights totaling 480,346 acre-feet. The proposed project's water demand of 1.3 afy represents 0.0003 percent of NID's total water supplies. During normal water years, NID would have sufficient available capacity to serve the proposed project through 2035 (see **Table 14.0-3**). Currently, under single dry year conditions, NID projects a water supply deficit in 2035 and subsequent years. Under multiple dry year conditions, a water supply deficit is projected in the fourth year in 2035 (see **Tables 14.0-4** and **14.0-5**). However, NID is planning to construct a new 110,000-acre-foot reservoir on the Bear River by 2023, which would increase total supplies and eliminate these projected deficits (NID 2016). In addition, the district's adopted water shortage contingency plan would temporarily reduce water demands to address drought conditions. Therefore, NID would have sufficient water supplies to serve the proposed project and no new or expanded entitlements would be needed.

The Elizabeth George Treatment Plant has a current capacity of 18 mgd, which is sufficient to accommodate anticipated growth through 2030, at which time the plant is planned for expansion to 24 mgd (NID 2016). The proposed project would result in a negligible increase in demand for treated water (0.007 percent of current capacity³). Therefore, no new or expanded water treatment facilities would be required to serve the project.

The County has determined that the existing water supply infrastructure that would serve the proposed Rough and Ready Highway project may have insufficient water volume and pressure for fire suppression purposes. However, as required under mitigation measure **MM RR-10.3.4** (see Impact 10.3.4 (RR) in Section 10.0, Hazards and Hazardous Materials, the project would include installation of an on-site underground water storage tank and pump system that would ensure adequate fire protection water supply and pressure at the site. No off-site facilities or infrastructure or any other improvements by NID would be required to ensure adequate fire suppression flows.

³ 1,183 gallons per day project demand/18,000,000 gallons per day plant capacity = 0.000065

There would be no impact with regard to water supply utilities, and no additional mitigation would be required.

The Rough and Ready Highway site is currently connected to existing water supply infrastructure in the adjacent roadway. Thus, no off-site improvements would be required to provide water service to the proposed project. Minor on-site improvements would be required; however, impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce all construction-related project impacts to less than significant levels. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Construction of On-Site Wastewater System (Standards of Significance 8, 9, and 10)

Impact 14.3.3(RR) The proposed Rough and Ready Highway project includes an on-site septic system, the construction of which could result in environmental impacts. **(Less than Significant)**

Wastewater treatment and disposal on the Rough and Ready Highway site would be via a new on-site septic system. The existing septic tank and leach field would be abandoned to accommodate the project. The proposed septic system would be accommodated entirely within the site; thus, no off-site improvements are proposed. Impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce these impacts to less than significant levels. Therefore, this impact would be less than significant. The reader is also referred to Impact 8.3.4(RR) for further discussion of the project's proposed wastewater system.

Mitigation Measures

No additional measures required.

Construction of On-Site Stormwater Drainage Improvements (Standard of Significance 11)

Impact 14.3.4(RR) The proposed Rough and Ready Highway project includes on-site stormwater drainage improvements, the construction of which could result in environmental impacts. **(Less than Significant)**

As discussed in greater detail in Impact 11.3.1 (RR) (see Section 11.0, Hydrology and Water Quality), the project would include construction of an on-site drainage system that would manage stormwater runoff and ensure compliance with applicable state and local water quality standards. Stormwater from the site would be routed via sheet flow along concrete gutters or asphalt pavement toward a series of curb openings located near the northern property line and

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two trench drains crossing the proposed drive aisles. The curb openings would allow runoff to enter a bioretention basin. Runoff would pass through engineered subsurface layers to an underground system of perforated pipe. The percolated runoff would be conveyed to an underground detention system. Treated flows would then be discharged to the existing roadside ditch along Rough and Ready Highway.

Impacts associated with construction of these improvements are assumed as part of the project and are addressed in the technical analysis sections of this EIR (Sections 4.0 through 15.0). Potential impacts include disturbance of biological and/or cultural resources, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary construction noise, and temporary construction traffic. Where necessary, mitigation measures are included to reduce these impacts to less than significant levels. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional measures required.

Increased Demand for Solid Waste Collection and Disposal Services (Standards of Significance 12 and 13)

Impact 14.3.5(RR) Construction and operation of the proposed Rough and Ready Highway project would generate solid waste requiring collection and disposal services.
(Less than Significant with Mitigation Incorporated)

The proposed project includes construction and operation of a 9,100-square-foot commercial retail store. Using a solid waste generation rate of approximately 3.12 pounds of solid waste per 100 square feet per day (CalRecycle 2013), the proposed 9,100-square-foot building would generate a total of 284 pounds of solid waste per day, or 52 tons per year, during operation. The project would also generate solid waste during the construction phase associated with demolition of the existing building on the site, as well as construction of the proposed building and associated improvements.

Solid waste generated at the Rough and Ready Highway site would be transported to the McCourtney Road Transfer Station and Recycling Center for processing, where a portion of the materials would be diverted for recycling. The remaining materials would be transferred to the Ostrom Road Landfill in Yuba County. Household hazardous waste materials are processed at the onsite Household Hazardous Waste facility where certain materials are made available for reuse by the public and the remainder is disposed of properly off-site. According to CalRecycle (2016), the Ostrom Road Landfill is projected to have a remaining life of 50 years and an estimated remaining capacity of 39.2 million cubic yards. Thus, the landfill would have adequate permitted capacity to accept solid waste generated during both construction and operation of the proposed project. Implementation of mitigation measure **MM RR-14.3.5** would ensure that toxic materials and tree stumps, which are not accepted materials at the McCourtney Road facility, are disposed of properly.

The Nevada County Department of Transportation and Sanitation would condition the project to comply with the following waste collection and recycling services requirements: participate in the recycling program offered through the County's franchised waste collection company; divert all "green waste" material generated at the project site to the County's franchised waste collection company's green waste collection program, or an equivalent method; provide adequate space for waste and recycling containers; undertake a program of reuse of waste materials generated

at the project; and during construction of the project, divert and recycle all recyclable materials (Nevada County 2012). Implementation of these measures would maximize diversion of recyclable materials generated at the site. With implementation of mitigation measure **MM RR-14.3.5**, this impact would be **less than significant**.

Mitigation Measures

MM RR-14.3.5 Prior to issuance of grading or building permits the following shall be included as a Note on those plans: Toxic waste materials (ammunition, asbestos, biohazards, compressed gas cylinders, explosives, radioactive materials, treated wood waste, and medications) are not accepted at the McCourtney Road Transfer Station and if encountered during construction, shall be properly disposed of in compliance with existing regulations and at appropriate facilities. The County Department of Public Works-Solid Waste Division (organic waste) and Environmental Health Department (industrial toxic waste) are the local agencies with oversight over the disposal of these materials. Should the developer encounter these materials during grading or construction activities, the developer shall consult with these agencies to determine the appropriate methods for disposal and the appropriate facilities where these materials can be disposed.

Timing/Implementation: Prior to issuance of grading or building permits

Enforcement/Monitoring: Nevada County Planning Department and Environmental Health Department

14.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting for public services and utilities consists of the service boundaries of the various public agencies that would serve the proposed projects. This area generally consists of western Nevada County.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Public Safety Impacts

Impact 14.4.1 The proposed projects, in combination with existing, approved, proposed, and reasonably foreseeable development in nearby areas of Nevada County, could result in the need to expand or construct new public safety facilities in order to maintain adequate service levels. However, the proposed projects' contribution to this impact would be less than significant. **(Less than Cumulatively Considerable)**

The project sites would be served by the Nevada County Sherriff's Office, the NCCFD, and the PVFPD. Each of these public agencies would expand services as necessary to accommodate future growth in western Nevada County. This may include the need for new or expanded law enforcement or fire protection facilities in order to maintain adequate service levels. The construction of such facilities would result in physical environmental impacts, which could be considered significant. However, as described in Impacts 14.1.1(AS), 14.2.1(PV), and 14.3.1(RR),

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the proposed projects would not generate a significant number of calls for emergency services and would be required to incorporate adequate design and provisions for structural fire prevention needs that would further minimize demand for emergency services. The proposed projects would not trigger the need to construct any new or expanded facilities. Therefore, the proposed projects' contribution to this cumulative impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

Cumulative Water Supply Impacts

Impact 14.4.2 Sufficient water supplies and water treatment facility capacity would be available to serve projected cumulative growth in western Nevada County. (**Less than Cumulatively Considerable**).

Each of the project sites would be provided domestic water service by the Nevada Irrigation District. NID's (2016) Urban Water Management Plan projects the district's water supplies and anticipated water demands through 2040 based on an annual average growth rate of 2.5 percent. NID staff developed this growth rate based on historical growth, planned development within the district's service area, and the assumption that some existing development currently served by on-site groundwater wells will eventually become NID customers. Given these assumptions, NID projects its 2040 service population at 94,586.

As shown in **Table 14.0-3**, in normal water years, NID would have sufficient water supply to meet the demands of its projected service population through 2040. As shown in **Tables 14.0-4** and **14.0-5**, NID projects a water supply deficit in 2035 and subsequent years under single dry and multiple dry year conditions. However, implementation of the district's adopted water shortage contingency plan would temporarily reduce water demands to address drought conditions, and a new 110,000 acre-foot reservoir on the Bear River would increase district supplies and eliminate projected deficits. In 2014, NID submitted an application to the State Water Resources Control Board for the annual appropriation of 221,400 acre-feet from the Bear River for the project. NID expects the project to be implemented by 2023. Therefore, NID would have sufficient water supplies to meet projected demands.

Wastewater from each of the project sites would be treated at a different water treatment plant. The Alta Sierra project would be served by the Loma Rica Water Treatment Plant, the Penn Valley project would be served by the Lake Wildwood Wastewater Treatment Plant, and the Rough and Ready Highway project would be served by the Elizabeth George Treatment Plant. NID has plans to expand each of these treatment plants to accommodate future growth. Expansion projects would be funded by new connection fees and would be subject to the CEQA review of project impacts.

Therefore, this cumulative impact would be less than significant and the projects would not combine to create additional effects. The projects' contributions to cumulative effects would be **less than cumulatively considerable**.

Mitigation Measures

None required.

Cumulative Wastewater Treatment Impacts

Impact 14.4.3 Implementation of the proposed projects, in combination with existing, approved, proposed, and reasonably foreseeable development in nearby areas of Nevada County, could result in the need to construct new water, wastewater, storm drainage, or solid waste facilities in order to maintain adequate service levels. However, the proposed project would not contribute substantially to this impact. **(Less than Cumulatively Considerable)**

Cumulative growth in western Nevada County would likely require construction of new and expanded wastewater treatment facilities as the region transitions from a reliance on individual on-site septic systems to the various public wastewater treatment facilities, which have limited capacity. However, as described previously in this section, the Alta Sierra and Rough and Ready Highway projects would be served by on-site septic systems requiring only minor improvements. As described in Impact 14.2.3(PV), the Penn Valley site would be served by a combination of an on-site septic tank and connection to the Lake Wildwood WWTP, which has sufficient available capacity to serve anticipated growth in the Lake Wildwood and Penn Valley communities for the next 5 to 10 years (Nevada LAFCO 2015). Thus, there would not be a significant cumulative effect related to wastewater treatment. The proposed projects' contribution to this impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

Cumulative Solid Waste Impacts

Impact 14.4.4 Existing solid waste transfer and disposal facilities have sufficient capacity to accommodate anticipated growth in western Nevada County. **(Less than Cumulatively Considerable)**

As described previously, solid waste generated in western Nevada County is transferred to the Ostrom Road Landfill in Yuba County for disposal. The landfill has a remaining life projection of 50 years and an estimated remaining capacity of 39.2 million cubic yards. Thus, the landfill would have adequate permitted capacity to serve future development in western Nevada County. This cumulative impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

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REFERENCES

- Brenner, Keri. (2015 June 25). Penn Valley Fire Mulls Land Sale to Nevada County. *The Union* (Nevada County, CA). Retrieved from <http://www.theunion.com/news/16955899-113/penn-valley-fire-mulls-land-sale-to-nevada>.
- CalRecycle (California Department of Resources Recycling and Recovery). 1997. History of California Solid Waste Law, 1985–1989. Accessed January 29, 2016. <http://www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989.htm>.
- . 2012. Local Jurisdiction Sample Documents Ordinances, Resolutions, and Policies. Accessed January 29, 2016. <http://www.calrecycle.ca.gov/LGCentral/Library/localdocs/policy.htm>.
- . 2013. Commercial Sector: Estimated Solid Waste Generation and Disposal Rates <http://www.calrecycle.ca.gov/wastechar/wastegenrates/Commercial.htm>.
- . 2016. Facility/Site Summary Details: Recology Ostrom Road LF Inc. (58-AA-0011). Accessed January 29. <http://www.calrecycle.ca.gov/SWFacilities/Directory/58-AA-0011/Detail/>.
- CBSC (California Building Standards Commission). 2011. *California Fire Code, California Code of Regulations, Title 24, Part 9, California Building Standards Commission*. Published 2010. Effective January 1, 2011.
- Central Valley RWQCB (Regional Water Quality Control Board). 2009. *Penn Valley Wastewater Treatment Facility, Nevada County Sanitation District No. 1, Nevada County*. Accessed May 24, 2016. http://www.waterboards.ca.gov/rwqcb5/board_decisions/tentative_orders/0908/penn_valley_cdo/ncsd_penn_valley_buff.pdf.
- DWR (California Department of Water Resources). 2016. *Urban Water Management*. Accessed January 29. <http://www.water.ca.gov/urbanwatermanagement/>.
- EPA (US Environmental Protection Agency). 2016a. *Summary of the Clean Water Act*. Accessed January 29, 2016. <http://www.epa.gov/laws-regulations/summary-clean-water-act>.
- . 2016b. *Construction and Demolition Materials*. Accessed May 20. <https://www3.epa.gov/epawaste/nonhaz/industrial/cd/index.htm>.
- Holdrege and Kull. 2014. Letter from Chuck Kull, C.E.G., to Dan Biswas, CJS Development II, LLC. Reference: 10166 Alta Sierra Drive, APN 25-430-08, Nevada County, California; Subject: Response to County Comments Regarding Sewage Disposal.
- NCCFD (Nevada County Consolidated Fire District). 2016. District website. Accessed January 26. <http://www.nccfire.com/>.
- NCSO (Nevada County Sheriff's Office). 2014. *Nevada County Sheriff's Office Annual Report 2014*. Accessed January 26, 2016. [https://www.mynevadacounty.com/nc/sheriff/docs/Annual%20Publication%20\(Public\)/Annual%20Report%202014.pdf](https://www.mynevadacounty.com/nc/sheriff/docs/Annual%20Publication%20(Public)/Annual%20Report%202014.pdf).
- . 2016. Sheriff-Coroner-Public Administrator. Accessed January 26. <https://www.mynevadacounty.com/nc/sheriff/Pages/Home.aspx>.

- Nevada County. 2007. *Nevada County Higgins Marketplace Draft Environmental Impact Report SCH# 2005022022*.
- . 2009. *Higgins Marketplace Final Environmental Impact Report*.
- . 2012. *Nevada County Rincon del Rio Continuing Care Retirement Community Draft Environmental Impact Report*.
- . 2014. Nevada County Elementary School Districts & Nevada Joint Union High School District. Accessed January 26, 2016. file:///W:/Nevada%20County/Dollar%20General%20EIR/Work%20Product/Admin%20Record/All_School_Districts.pdf.
- . 2016a. Recreation Planning Division. Accessed January 27. <https://www.mynevadacounty.com/nc/cda/planning/Pages/Recreation-Planning.aspx>.
- . 2016b. Solid Waste. Accessed January 29. <https://www.mynevadacounty.com/nc/cda/pw/sw/Pages/Home.aspx>.
- Nevada LAFCO (Local Agency Formation Commission). 2015. *Wastewater Services, Western Nevada County, Final Second Round Municipal Services Review*.
- NID (Nevada Irrigation District). 2014. *NID Begins Planning for a New Reservoir*. Accessed May 25, 2016. <http://nidwater.com/2014/08/nid-begins-planning-for-a-new-reservoir/>.
- . 2014. *Letter from Shannon Matteoni, Business Services Technician to Joseph Scarbrough, Assistant Planner, Nevada County, Community Development Agency Re: File No.'s: DP14-001; EIS14-005 Nevada County APN: 25-430-08 Site Address: 10166 Alta Sierra Drive, Grass Valley, CA*.
- . 2015a. *Letter from Shannon Matteoni, Business Services Technician to Mr. Jared Atkisson, Simon CRE/Dollar General Re: Penn Valley Dollar General – Water Availability Letter (APN: 51-120-06)*.
- . 2015b. *Letter from Shannon Matteoni, Business Services Technician to Mr. Andrew Mizerek, TTG Engineers Re: Treated Water Service at: 12345 Rough & Ready Hwy, Grass Valley, CA Nevada County APN: 52-122-03*.
- . 2016. *Nevada Irrigation District 2015 Urban Water Management Plan*.
- PVFPD (Penn Valley Fire Protection District). 2016. District website. Accessed January 29. <http://pennvalleyfire.com/home.html>.
- RRVFPD (Rough and Ready Volunteer Fire Protection District). 2016. *Apparatus*. Accessed September 13. <http://rrvfd.com/apparatus.html>.
- TTG Engineers. 2014. *Drainage Report for Dollar General, 10166 Alta Sierra Dr., Grass Valley, CA 95945*.
- . 2015a. *Preliminary Drainage Report for Dollar General, 17652 Penn Valley, Penn Valley, CA*.
- . 2015b. *Preliminary Drainage Report for Dollar General, 12345 Rough and Ready Highway, Rough and Ready, CA*.

14.0 PUBLIC SERVICES AND UTILITIES

USDOE (US Department of Energy). 2016. Regulations. Accessed January 29.
<http://www.eteenergy.gov/About/Regulations.html>.

Waste Management, Inc. 2016. Nevada County Locations. Accessed May 24.
https://www.wm.com/location/california/nevada_county/locations/index.jsp.