

4.6 HUMAN HEALTH/RISK OF UPSET

This section evaluates the potential hazardous material and public health impacts from implementation of the Sierra Colina Village Project. The analysis is based on existing and past uses of the project site, and the U.S. Environmental Protection Agency (EPA) EnviroMapper database for Stateline (EPA 2006a).

4.6.1 REGULATORY SETTING

Hazards and hazardous materials are subject to numerous laws and regulations at the federal, state, regional, and local levels. A summary of applicable regulations that guide assessment of human health/ risk of upset effects of the proposed project is provided below.

HAZARDOUS MATERIALS MANAGEMENT

Federal

Federal laws require planning to ensure that hazardous materials are properly handled, used, stored and disposed of, and if such materials are accidentally released, to prevent or to mitigate injury to health or the environment. The Federal Emergency Planning and Community Right to Know Act of 1986 defines hazardous materials planning requirements to help protect local communities in the event of accidental release.

State

In compliance with the Community Right to Know Act of 1986, the Nevada State Emergency Response Commission (SERC) was established in 1987. SERC coordinates and supervises the activities of the Local Emergency Planning Committees to ensure that each committee has an approved Hazardous Materials Emergency Response Plan. SERC also collects chemical inventory reports, provides funds through grants, and processes information requests from the public.

Local

Douglas County Code, Title 20, Section 20.690.030 (I) requires projects and/or businesses that store hazardous materials, to prepare a spill management plan and containment systems to the satisfaction of the fire district with appropriate jurisdiction.

WORKER SAFETY

Federal

The federal Occupational Safety and Health Administration (Fed-OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals in the Occupational Safety and Health Act of 1970. Fed-OSHA has adopted numerous regulations pertaining to worker safety, contained in the Code of Federal Regulations Title 29 (29 CFR). These regulations set standards for safe workplaces and work practices, including standards relating to hazardous material handling.

State

The Nevada Occupational Safety and Health Act (Nev-OSHA) promotes safe and healthful working conditions to provide job safety and health protection for workers in the State of Nevada. This Act provides the Nevada Occupational Safety and Health Administration (Nevada OSHA) the power to issue citations for conditions inspected and found to be unsafe.

The Nev-OSHA poster (to be displayed in Nevada workplaces) states: Each employer shall furnish to each of his employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees; and shall comply with occupational safety and health standards adopted under the Act (Nevada OSHA 2004).

HAZARDOUS MATERIALS TRANSPORT

Federal

The U.S. Department of Transportation regulates hazardous materials transportation between states. The federal hazardous materials transportation law (federal hazmat law), 49 U.S.C. Section 5101 et seq., (formerly the Hazardous Materials Transportation Act, 49 App. U.S.C. Section 1801 et seq.) is the basic statute regulating hazardous materials transportation in the United States. Hazardous Material Regulations are enforced by the federal Highway Administration, the U.S. Coast Guard, the federal Railroad Administration and the federal Aviation Administration.

State

Nevada Revised Statute NRS 459.7052 requires motor carriers to register and obtain a permit for the transportation of hazardous materials before transporting a hazardous material upon a public highway of the state. As part of this statute the Nevada Department of Motor Vehicles (NDMV) requires anyone applying for a permit to transport hazardous waste to have a commercial driver's license and to undergo a background check that includes a fingerprint based Security Threat Assessment (NDMV).

State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the officers of the Nevada Highway Patrol (NRS 459.250).

HAZARDOUS WASTE MANAGEMENT

Federal

The federal Resource Conservation and Recovery Act (RCRA) (EPA 2006b) requires a comprehensive regulatory system for handling hazardous waste in a manner that protects human health and the environment. This regulatory system includes tracking all generators of hazardous waste. Applicable to facilities in the Sierra Colina project area are those RCRA rules related to Small Quantity Generators of hazardous waste and Conditionally Exempt Small Quantity Generators of hazardous waste. Small Quantity Generators (SQG) generate more than 100 kilograms, but less than 1,000 kilograms of hazardous waste per month. Conditionally Exempt Small Quantity Generators (CESQG) generate 100 kilograms or less per month of hazardous waste, or 1 kilogram or less per month of acutely hazardous waste.

State

The Nevada Division of Environmental Protection, Bureau of Waste Management manages a Hazardous Waste Program that is responsible for enforcing state hazardous waste statutes and regulations in lieu of the U.S. EPA. With some modifications, Nevada adopts the federal hazardous waste regulations. The Hazardous Waste Program is responsible for permitting and inspecting hazardous waste generators and disposal, transfer, storage and recycling facilities.

SOLID WASTE MANAGEMENT

State

The Nevada Division of Environmental Protection Bureau of Waste Management also manages a solid waste management program, the purpose of which is to regulate the collection and disposal of solid waste. Included in this solid waste management program is a recycling program. Generally the solid waste is required to be collected and disposed of in a manner that will:

- ▶ protect public health and welfare,
- ▶ prevent water or air pollution,
- ▶ prevent the spread of disease and the creation of nuisances,
- ▶ conserve natural resources, and
- ▶ enhance the beauty and quality of the environment.

County

Chapter 8 of the Douglas County Code discusses health and safety issues. In regards to solid waste County Code declares the existence of waste matter upon public and/or private roads or parcels of land (both public and private) subject to Code Enforcement Action (County Code Section 8.14.020).

Douglas County Code also declares it unlawful for any person to dump on any parcel of land, lot, street, highway, gutter or alley, or in any water within Douglas County any waste matter (including abandoned vehicles) (County Code Section 8.14.030). Further, Douglas County declares it unlawful for any person to drive any vehicles on any roadways without properly securing its contents to prevent them from escaping from the vehicle. In vehicles that contain garbage, Douglas County declares it unlawful for any person to drive the vehicle unless the garbage is covered (Sections 8.28.020 and 8.28.030).

FIRE HAZARD MANAGEMENT

Tahoe Regional Planning Agency

Regional Plan for the Lake Tahoe Basin

Tahoe Regional Planning Agency's (TRPA's) *Regional Plan for the Lake Tahoe Basin* lists the following goals and policies related to hazards and hazardous materials that are applicable to the proposed project (TRPA 1987):

Chapter 2, Land Use Element, Natural Hazards, Policy 3: Inform residents and visitors of the wildfire hazard associated with occupancy in the Basin. Encourage use of fire resistant materials and fire preventative techniques when constructing structures, especially in the highest fire hazard areas. Manage forest fuels to be consistent with state laws and other goals and policies of this plan.

The TRPA Code of Ordinances, Section IX, Chapter 75, Section 75.3 includes the following regulation related to fire hazards (TRPA 2004b):

Vegetation Management to Prevent the Spread of Wildfire: Within areas of significant fire hazard, as determined by local, state, or federal fire agencies, flammable or other combustible vegetation may be removed, thinned, or manipulated up to 30 feet from any structure to prevent the spread of wildfire. Sufficient quantities of residual vegetation should remain in this 30 foot zone to stabilize the soil and prevent erosion. Whenever possible, vegetation in this zone should be thinned, tapered, cut back, or otherwise selectively manipulated, rather than removed entirely. Revegetation with approved species may be required where vegetative ground cover has been eliminated or where erosion problems may occur.

4.6.2 AFFECTED ENVIRONMENT

As described in Chapter 2, Project Description, the 18-acre project site is bounded by U.S. Highway 50 (U.S. 50) to the west; Lake Village Drive/Echo Drive to the north; a U.S. Forest Service (USFS) parcel to the east; and a mixture of urban development to the south (see Exhibits 2-2 and 2-3 in Chapter 2, *Project Description*).

The project site has never been developed; therefore, no potentially hazardous conditions related to past uses are present. Two overhead electrical lines traverse the site: a 120 kilovolt (kV) transmission line and a 14.4 kV distribution line.

The project site is located within the Burke Creek Watershed. Burke Creek crosses the Sierra Colina parcel in two locations – the southeast corner and along a portion of the southern boundary line. Numerous established but unauthorized and unmaintained foot trails traverse through the property, including within the Burke Creek SEZ.

The project site is located within the Douglas County Unified School District. The closest school is Kingsbury Middle School, less than one-quarter mile northeast of the project site. This school is scheduled for closure following the end of the 2007- 2008 school year, and the School District has announced no new user for the Kingsbury Middle School buildings. The closest airports are located in Reno, Nevada; Minden, Nevada; Carson City, Nevada; and South Lake Tahoe, California. These airports are located approximately 55 miles, 29 miles, 17 miles and 8 miles from the project site, respectively. The project site is approximately a 5 minute walk to the Stateline Public Transit Center and the Stateline Medical Clinic. The project's potential affect on emergency access routes and plans are discussed below and in Section 4.11, Public Services and Utilities, in this document.

The EPA's EnviroMapper Database indicated the presence of seven facilities within one mile of the project site that produce emissions of hazardous materials or other pollutants and report to the EPA (EPA 2006a). Only one of these facilities, Kingsbury Auto Supply, is currently in operation. Kingsbury Auto Supply, located at 180 Shady Lane, Stateline, NV, is listed as a CESQG of hazardous waste. As described above in Section 4.6.1, CESQGs generate 100 kilograms or less per month of hazardous waste, or 1 kilogram or less per month of acutely hazardous waste.

MOSQUITO/VECTOR CONTROL

The climate, topography, and plant communities of the Tahoe Basin provide an abundance and variety of larval mosquito habitats. The restoration of stream environment zones has created additional habitat sources. The mosquito population in the Tahoe Basin is most active in the spring and early summer. All mosquito species are potential vectors of organisms that can cause disease to pets, domestic animals, wildlife, or humans.

The project site, while not part of the Douglas County Mosquito Abatement District (MAD), is serviced by MAD employees as part of the MAD Program. The district has one full-time employee and utilizes additional seasonal employees. As a unit, these employees are responsible for the prevention, elimination or control of mosquitoes and other potential carriers of infectious diseases, or public nuisances.

Areas of standing water are often breeding grounds for mosquitoes. Standing water west of the project site in Rabe Meadow and southwest of the project site, behind Lakeside Inn, are sites recognized as mosquito breeding areas by MAD. Biological larvicides, including *Bacillus thuringiensis israelensis*, a naturally occurring bacterium, have been introduced via briquettes to standing water bodies near Kahle Drive and in the pond behind Lakeside Inn within the past two years by both the MAD Program and by employees of Kingsbury General Improvement District (Lynch, pers. comm., 2006). Only mosquitoes, black flies, and certain midges are susceptible to these bacteria; other aquatic invertebrates and non-target insects are unaffected. The District has also used pyrethrins and pyrethroids for its adult mosquito fogging program in and around the Tahoe Shores Mobile Home Park (located less than one-half mile west of the project site, across U.S. 50 at the end of Kahle Drive) and in the residential community of Glenbrook (located north along U.S. 50, approximately seven and one-

half miles north of the project site). Pyrethrins are insecticides that are derived from an extract of chrysanthemum flowers, and pyrethroids are synthetic forms of pyrethrins. These are generally applied by truck mounted or hand held foggers. All of these mosquito abatement techniques have been approved for use by the TRPA.

In July of 2006 a mosquito sample taken by employees of MAD in the Kahle Meadow area tested positive for the West Nile Virus (Lynch, pers. comm., 2006).

WILDLAND FIRE HAZARDS

The Tahoe Basin is considered at high risk for catastrophic wildfire by the TRPA and by other land use agencies in the area (TRPA 2006). Currently all fire protection districts in the basin have prepared Community Wildfire Prevention Plans (CWPP). In 2006 the *Draft Fuel Reduction and Forest Restoration Plan for the Tahoe Basin* (FRFRP) was released. Both the CWPPs and the FRFRP stress the high risk of wildfire, particularly high intensity wildfire, in the basin and identify fuel reduction treatments as an important action for reducing the fire risk.

The project site is located within the service area of the Tahoe Douglas Fire Protection District (TDFPD). The TDFPD CWPP classifies the hazard category of the Stateline area in which the Sierra Colina site is located as moderate. Compared to the other communities within the TDFPD CWPP this is a relatively low hazard classification which the CWPP attributes to good defensible space and moderate slopes.

Much of the Stateline community is surrounded by USFS land. Vegetation in Stateline generally consists of a Jeffrey pine/white fir tree layer with some willow, aspen, and mountain alder in the stream zones. The understory shrub component is composed of Manzanita, snowbrush, whitethorn, rabbitbrush, and some sagebrush along roads and disturbed areas. Ground fuels are a thick layer of pine needles and cones, dead and down woody fuels, squaw carpet, and annuals including cheatgrass. Fuel loading is heavy, estimated at 6 tons per acre. Stateline has a high potential for ignition from U.S. 50 and Kingsbury Grade.

The TDFPD CWPP divides the District's service area into specific polygons for treatment. The most densely forested area near the project site is the forest service land adjacent and uphill to the east. The CWPP rates the risk/hazard of this polygon in relation to the other polygons in the TDFPD service area as #6 because of heavy fuels. In 2006, the Sierra Colina parcel (excluding the SEZ) underwent fuels treatment by the Nevada Division of Forestry (NDF) under the supervision of a registered professional forester and in accordance with the terms of a TRPA Forest Health and Fuels Reduction Permit (TRPA Permit #2005-1729) to remove diseased trees and hazardous fuels to promote long-term health and growth in the stand and to reduce fire hazard.

4.6.3 ENVIRONMENTAL CONSEQUENCES AND RECOMMENDED MITIGATION MEASURES

CRITERIA OF SIGNIFICANCE

TRPA Criteria

Based on TRPA's Initial Environmental Checklist, the proposed project would result in a significant hazards and hazardous materials impacts if it would:

- ▶ involve the use or disposal of hazardous materials that pose a substantial hazard to people or the environment.
- ▶ create a health or hazard or potential health hazard, or
- ▶ expose people to potential health hazards.

METHODOLOGY

The following reports and databases documenting potential hazardous conditions at the project site were reviewed for this analysis:

- ▶ preliminary site plans for the project;
- ▶ applicable elements from the Douglas County General Plan and TRPA Plan Area Statement 073;
- ▶ David E. Early, Registered Professional Forester, letter dated May 11, 2007 (see Appendix M);
- ▶ David E. Early, Registered Professional Forester, letter dated May 20, 2007 (see Appendix M);
- ▶ Community Wildfire Risk and Hazard Assessment (TDFPD 2004); and
- ▶ U.S. Environmental Protection Agency's EnviroMapper Database (EPA 2006a).

Project activities were evaluated against the hazardous materials information gathered from the above sources to determine whether any risks to public health and safety or other conflicts would occur.

IMPACT ANALYSIS

Alternative 1 – Proposed Project

IMPACT 4.6.1-1 **Expose the Public or Environment to Hazardous Materials.** *Alternative 1 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. However, use of hazardous materials at the site would be typical of such a construction project and would occur in compliance with local, state, and federal regulations. There are no nearby sources of hazardous materials or wastes that would pose a significant health risk for people at the project site. Therefore, impacts related to exposure of the public or environment to significant hazards would be **less than significant**.*

Construction of the proposed project would involve the short-term use and storage of hazardous materials (e.g., asphalt, fuel, lubricants, paint) typical of a residential construction project. All materials would be used, stored, and disposed of in accordance with applicable federal, state, and local laws including Nev-OSHA, and Nevada's Hazardous Waste Management Program regulations, as well as manufacturer's instructions. Transportation of hazardous materials on area roadways is regulated by the Nevada Highway Patrol. These protective regulations are sufficient to insure that any hazardous materials used on the project site would be in compliance with local, state, and federal regulations.

A search of the EPA's EnviroMapper database did not reveal any nearby sources of hazardous materials or waste that would pose a health hazard for residents or construction workers at the project site. Furthermore, there are no facilities adjacent to the project site that produce hazardous materials that could cause human health hazards on the project site. Only one facility, Kingsbury Auto Supply, is listed by the EPA as an emitter of hazardous materials or other pollutants within one mile of the site. Kingsbury Auto Supply is separated from the project site by Douglas County's Kahle Park and Community Center. As a CESQG of hazardous material, Kingsbury Auto Supply is required to obtain permits and comply with appropriate regulatory standards designed to avoid hazardous waste releases and provide for appropriate cleanup measures in the event of accidental spill or release.

For the reasons described above, the project would not create a significant health hazard to the public or the environment or expose the public or the environment to additional hazards. Therefore, this would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required

IMPACT 4.6.1-2 **Increased Risk of Health Hazards From Vector-borne Diseases.** *Alternative 1 includes the construction of two stormwater detention basins which could serve as potential breeding areas for mosquitoes. The project would also increase the number of people living in an area recognized as containing several mosquito breeding sites and therefore would increase the number of people potentially exposed to vector-borne diseases carried by mosquitoes. The Tahoe portion of Douglas County is currently serviced by the Douglas County MAD. Over the past two years MAD employees and employees of the Kingsbury General Improvement District have employed TRPA-approved mosquito abatement measures in the project area and would continue to do so. No substantial increase in risk of health hazards from vector-borne diseases would occur. This would be a **less-than-significant** impact.*

Alternative 1 includes the construction of two stormwater detention basins (permanent BMPs designed to collect, manage and infiltrate stormwater) that could serve as potential breeding grounds for mosquitoes. While creating potential mosquito breeding ground could increase mosquitoes in the area and therefore increase the possibility of vector-borne diseases transmitted by mosquitoes, this condition would be tempered by the actions of Douglas County Mosquito Abatement Program employees who have been active in monitoring mosquito activity, testing mosquitoes for vector-borne illnesses and utilizing mosquito abatement techniques in the project area over the past two years. Program employees have also taught staff at the Kingsbury General Improvement District (KGID) how to use abatement control substances such as the briquettes containing *Bacillus thuringiensis israelensis*. The continued mosquito abatement actions of the Douglas County Mosquito Abatement Program, assisted by the actions of staff at the KGID, would reduce the potential increase in vector-borne disease carried by mosquitoes created by the stormwater detentions basins. Furthermore, as the techniques employed in mosquito abatement are considered safe and appropriate for human exposure by TRPA and by Douglas County there would be no new risk of adverse health affects associated with mosquito control.

People already live and recreate in the project area and therefore project development would not result in any new risk of exposure to vector-borne diseases. However, implementation of Alternative 1 would increase the number of people living in an area recognized as containing several mosquito breeding sites and therefore would increase the number of people routinely exposed to vector-borne diseases carried by mosquitoes. This increase in human exposure would be addressed by the existing activities of Douglas County Mosquito Abatement Program and KGID. Impacts related to vector-borne diseases carried by mosquitoes would be **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.1-3 **Increased Exposure to Wildland Fire Hazard.** *The project site is located in a moderate fire hazard area and received forest health and fuel reduction treatments during summer 2006 in accordance with an approved TRPA permit. Treatments were performed by NDF and under the supervision of a registered professional forester to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to wildfire. The residential units proposed for the site would incorporate fire resistant roofs and defensible space, and adequate fire protection services are available to serve the project. A portion of the existing 14.4 kV power line that crosses the project site would be placed underground. These measures reduce the project's potential to increase exposure of people or structures to wildland fires. This would be a **less-than-significant** impact.*

The TDFPD classifies the fire hazard rating in the Stateline area as moderate due to moderate slopes and good defensible space. The Sierra Colina parcel abuts U.S. 50 and therefore is described as having a high risk of ignition due to cigarette butts or accidents along U.S. 50. The project site received fuels reduction and forest health treatments by NDF under the supervision of a registered professional forester and in accordance with the terms of a TRPA Forest Health and Fuels Reduction Permit in summer 2006 to reduce some of the hazardous fuels and diseased trees outside the SEZ on the property that had potential to contribute to a wildfire. No forest

health or fuels reduction work on the parcel took place in the SEZ. The residential units proposed for the site would incorporate fire resistant^a roofs and defensible space, and adequate fire protection services are available to the serve the project^b. A portion of the existing 14.4 kV power line that crosses the western portion of the site would be placed underground, reducing the potential for wildfire ignition associated with downed power lines. These project-related measures reduce the risk of wildfire affecting the project site.

The most heavily forested area near the project site is adjacent and uphill to the east. This area is USFS land classified as treatment priority #6 in the TDFPD CWPP for fuels treatment. Reducing fuel loads on this land would further reduce the risk of exposure of people or structures to wildfire on the project site and in the project area, however there is no set date for the treatment of this parcel and so the potential of the treatment to reduce fire risk is not factored into this assessment.

Fuels reduction measures already implemented on the project site, the adequate fire protection services available to the project site and the defensible space measures planned for the residential units reduce the proposed project's potential to increase exposure of people or structures to wildland fires. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

Alternative 2 – Grand Private Estate

IMPACT 4.6.2-1 **Expose the Public or Environment to Hazardous Materials.** *This impact is the same as Impact 4.6.1-1 for Alternative 1. Construction of Alternative 2 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. Such use would be typical of a residential construction project, and would occur in compliance with local, state, and federal regulations. This impact would be less than significant.*

This impact is the same as Impact 4.6.1-1 for Alternative 1. See full discussion above.

Alternative 2 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. However, use of hazardous materials at the site would be typical for a residential construction project and would occur in compliance with local, state, and federal regulations. There are no nearby sources of hazardous materials or wastes that would pose a significant health risk for people at the project site. Therefore, impacts related to creation of significant hazards to the public or the environment from hazardous materials would be **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.2-2 **Increased Risk of Health Hazards From Vector-borne Diseases.** *This impact is essentially the same as Impact 4.6.1-2 for Alternative 1. Alternative 2 includes the construction of one stormwater detention basin. Vector control activities of the Douglas County Mosquito Abatement Program and KGID would continue. This would be a less-than-significant impact.*

This impact is essentially the same as Impact 4.6.1-2 for Alternative 1. See full discussion above.

^a i.e., asphalt shingles or other fire resistant material

^b See Section 4.11, *Public Services and Utilities*, of this document for discussion about fire protection services.

Alternative 2 includes the construction of one stormwater detention basin, and would result in substantially fewer people occupying the project site. As with Alternative 1, Alternative 2 would not create an increased risk of exposure to vector-borne diseases carried by mosquitoes because of mosquito control abatement techniques employed by the Douglas County Mosquito Abatement Program and KGID. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.2-3 **Increased Exposure to Wildland Fire Hazard.** *This impact is the same as Impact 4.6.1-3 as described above for Alternative 1. The project site is located in a moderate fire hazard area and received forest health and fuel reduction treatments during summer 2006 per an approved TRPA permit. Treatments were performed by NDF and under the supervision of a registered professional forester to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to a wildfire. The structures proposed for the grand private estate would incorporate fire resistant roofs and defensible space and adequate fire protection services are available to serve the project. A portion of the existing 14.4 kV power line that crosses the project site would be placed underground. These measures reduce the project's potential to increase exposure of people or structures to wildland fires. This would be a **less-than-significant** impact.*

This impact is the same as Impact 4.6.1-3 for Alternative 1. See full discussion above.

The project site is located in a moderate fire hazard area and received fuel reduction and forest health treatments by NDF under the supervision of a registered professional forester and per the terms of a TRPA Forest Health and Fuel's Reduction Permit during the summer of 2006 to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to a wildfire. All structures proposed for the site under Alternative 2 would incorporate fire resistant roofs and defensible space, and adequate fire protection services are available to the serve the project. A portion of the existing 14.4 kV power line that crosses the western portion of the site would be placed underground, reducing the potential for wildfire ignition associated with downed power lines. These measures would reduce the potential for Alternative 2 to increase exposure of people or structures to wildland fires. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

Alternative 3 – Reduced Density Alternative

IMPACT 4.6.3-1 **Expose the Public or Environment to Hazardous Materials.** *This impact is the same as Impact 4.6.1-1 for Alternative 1. Construction of Alternative 3 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. Such use would be typical of a residential construction project, and would occur in compliance with local, state, and federal regulations. This impact would be **less than significant**.*

This impact is the same as Impact 4.6.1-1 for Alternative 1. See full discussion above.

Alternative 3 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. However, use of hazardous materials at the site would be typical of a residential construction project and would occur in compliance with local, state, and federal regulations. There are no nearby sources of hazardous materials or wastes that would pose a significant health risk for people at the project site. Therefore, impacts related to creation of significant hazards to the public or the environment from hazardous materials would be **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.3-2 **Increased Risk of Health Hazards From Vector-borne Diseases.** *This impact is the same as Impact 4.6.1-2 for Alternative 1. Alternative 3 includes the construction of two stormwater detention basins. Vector control activities of the Douglas County Mosquito Abatement Program and KGID would continue. This would be a less-than-significant impact.*

This impact is the same as Impact 4.6.1-2 for Alternative 1. See full discussion above.

As with Alternative 1, Alternative 3 includes the construction of two stormwater detention basins. While Alternative 3 would result in an increase in population to the area, the increase would be slightly lower than that expected under Alternative 1 because fewer residential units would be constructed. Alternative 3 would not create an increased risk of exposure to vector-borne diseases carried by mosquitoes because of mosquito control abatement techniques employed by the Douglas County Mosquito Abatement Program and KGID. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.3-3 **Increased Exposure to Wildland Fire Hazard.** *This impact is the same as Impact 4.6.1-3 as described above for Alternative 1. The project site is located in a moderate fire hazard area and received forest health and fuels reduction treatments during the summer of 2006 per an approved TRPA permit. Treatments were performed by NDF and under the supervision of a registered professional forester to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to a wildfire. The residential units proposed for the site would incorporate fire resistant roofs and defensible space and adequate fire protection services are available to serve the project. A portion of the existing 14.4 kV power line that crosses the project site would be placed underground. These measures reduce the project's potential to increase exposure of people or structures to wildland fires. This would be a less-than-significant impact.*

This impact is the same as Impact 4.6.1-3 as described above for Alternative 1. See full discussion above.

As with Alternative 1, the project site is located in a moderate fire hazard area and received forest health and fuels reduction treatments by the NDF under the supervision of a registered professional forester and in accordance with the terms of a TRPA Forest Health and Fuel's Reduction Permit during the summer of 2006 to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to a wildfire. All structures proposed for the site under Alternative 3 would incorporate fire resistant roofs and defensible space, and adequate fire protection services are available to the serve the project. A portion of the existing 14.4 kV power line that crosses the western portion of the site would be placed underground, reducing the potential for wildfire ignition associated with downed power lines. These measures would reduce the potential for Alternative 3 to increase exposure of people or structures to wildland fires. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

Alternative 4 – Increased Density Alternative

IMPACT 4.6.4-1 **Expose the Public or Environment to Hazardous Materials.** *This impact is the same as Impact 4.6.1-1 for Alternative 1. Construction of Alternative 4 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. Such use would be typical of a residential construction project, and would occur in compliance with local, state, and federal regulations. This impact would be **less than significant**.*

This impact is the same as Impact 4.6.1-1 for Alternative 1. See full discussion above.

As with Alternative 1, Alternative 4 would involve the storage, use, and transport of hazardous materials at the project site during construction activities. However, use of hazardous materials at the site would be typical of such a construction project and in compliance with local, state, and federal regulations. There are no nearby sources of hazardous materials or wastes that would pose a significant health risk for people at the project site. Therefore, impacts related to creation of significant hazards to the public or the environment from hazardous materials would be **less than significant**.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.4-2 **Increased Risk of Health Hazards From Vector-borne Diseases.** *This impact is the same as Impact 4.6.1-2 for Alternative 1. Alternative 4 includes the construction of two stormwater detention basins. Vector control activities of the Douglas County Mosquito Abatement Program and KGID would continue. This would be a **less-than-significant** impact.*

This impact is the same as Impact 4.6.1-2 for Alternative 1. See full discussion above.

As with Alternative 1, Alternative 4 includes the construction of two stormwater detention basins. Alternative 4 would result in a higher number of residential units and a slightly higher onsite population than Alternative 1. However, this increase would not be substantial. Alternative 4 would not create an increased risk of exposure to vector-borne diseases carried by mosquitoes because of mosquito control abatement techniques employed by the Douglas County Mosquito Abatement Program and KGID. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

IMPACT 4.6.4-3 **Increased Exposure to Wildland Fire Hazard.** *This impact is the same as Impact 4.6.1-3 for Alternative 1. The project site is located in a moderate fire hazard area and received forest health and fuel reduction treatments during summer 2006 per an approved TRPA permit. Treatments were performed by NDF and under the supervision of a registered professional forester's supervision to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to a wildfire. The residential units proposed for the site would incorporate fire resistant roofs and defensible space and adequate fire protection services are available to serve the project. A portion of the existing 14.4 kV power line that crosses the project site would be placed underground. These measures reduce the project's potential to increase exposure of people or structures to wildland fires. This impact would be **less than significant**.*

This impact is the same as Impact 4.6.1-3 as described above for Alternative 1. See full discussion above.

The project site is located in a moderate fire hazard area and received fuel reduction treatments by the NDF under the supervision of a registered professional forester and per the terms of a TRPA Forest Health and Fuel's Reduction Permit during the summer of 2006 to remove some of the hazardous fuels and diseased trees outside the SEZ that could contribute to a wildfire. All structures proposed for the site under Alternative 4 would incorporate fire resistant roofs and defensible space, and adequate fire protection services are available to the serve the project. A portion of the existing 14.4 kV power line that crosses the western portion of the site would be placed underground, reducing the potential for wildfire ignition associated with downed power lines. These measures would reduce the potential for Alternative 4 to increase exposure of people or structures to wildland fires. This would be a **less-than-significant** impact.

Mitigation Measures

No mitigation is required.

Alternative 5 – No Project/No Action

Under Alternative 5, there would be no changes to existing conditions on the project site. There would be no project-related changes to human health risks or risks related to the use or transport of hazardous materials, vector-borne diseases, or increased exposure of people or structures to wildland fires. Therefore, there would be no impacts related to human health, hazards or hazardous materials associated with Alternative 5.