
4.5 PUBLIC SAFETY AND HAZARDS

This section provides a qualitative discussion of the risks to human health and safety that could result from development associated with the implementation of the Updated Plan. Specifically, potential risks associated with wildland and structural fires, aircraft hazards, and snow-related hazards, including avalanches are addressed. In addition, this section describes the means by which hazardous materials are regulated from a federal, state and local perspective and discusses the potential adverse impacts to human health and the environment due to exposure of such hazards.

4.5.1 EXISTING CONDITIONS

The following provides a discussion of the various hazard areas that have been identified within the Planning Area. Hazards related to earthquakes and volcanoes are discussed in Section 4.4, Geology, Seismicity and Mineral Resources.

4.5.1.1 Snow Hazards

Winters in the Mammoth Lakes region can produce 20 feet or more of snow in the Town and double that in the mountains. This amount of snow can cause serious hazards and structural problems. The characteristics of snow that have hazardous implications include weight, instability on slopes, snowmelt, snow creep, adhesive tendency, slickness, ice damming, and avalanches. In addition, some storm events temporarily isolate the community due to excessive snowfall and the management of road closures.

Avalanches

Avalanches are the most devastating and sudden of mountain winter hazards. An avalanche is defined as a mass of snow moving rapidly downslope that sometimes contains rocks, soil, and ice. Avalanches can break in slabs or in a flume of loose powder snow. Factors contributing to unstable snow conditions include snow pack structure, snow density, temperature fluctuations, wind speed and direction, and precipitation intensity. Avalanche danger can generally be assumed for any slope that has a gradient between 30 and 45 degrees, whether or not timber is present. Steeper gradients would rarely accumulate enough snow to be hazardous. These 30 to 45 degree gradients, however, apply only to the starting zone. The track gradient is not necessarily as steep at 25 to 35 degrees, and the runout zone can be gentle or even flat.

Structures typically can be built to withstand moderate avalanche hazard by utilizing structural design measures such as reinforced concrete walls without windows, or with shuttered windows, or by constructing wedge-shaped structures that face the hazard prone slopes. Additionally, avalanche protection devices such as barriers and sheds can be used to protect existing and proposed structures as long as other properties are not exposed to additional hazards.

Areas in the Town where avalanche potential has been identified have been overlaid with a Snow Deposition Design (SDD) Zone in order to minimize health and safety hazards. The overlay district designates areas located immediately above, adjacent to, or within 150 feet of the 30 degree point of an avalanche starting zone. Any development within this zone shall be permitted by use permit only and requires an Avalanche Risk Assessment certified by a recognized expert in the field of avalanche occurrence.

Snow and Ice Shedding

As new layers of snow are deposited, the upper surface is warmed by radiation, precipitation, and wind. In contrast, the undersurface is warmed only slightly by ground heat unless it is on a warm roof. The middle layer of snow is compressed and changes to granules by means of percolation and diffusing water vapor. The result of this series of transformations is a stratified pack of alternating hard and soft layers. The hard layers become impermeable to percolating meltwater, which spread horizontally and lubricates the attachment between layers. The resulting tendency to shear and slip along these planes can be as dangerous on a high roof as on a known avalanche track. In cases where the snow slides toward pedestrian areas, parking lots, or other structures, it poses a significant hazard.

Another snow related problem is ice shedding that results from ice damming, which occurs when ice obstructs runoff. The most common ice dam forms at building eaves where meltwater running under the snow on the roof encounters cold air at the edge of the roof and then freezes. Ice damming can also occur on decks, outside patios, or any other place where melted snow contacts freezing air. The lower front edge of a snowbank can also function like an ice dam, preventing water from flowing as intended to drains and gutters. If the damming occurs along a sidewalk, it can impede pedestrian passage, as well as create trip and fall hazards.

4.5.1.2 Fire Hazards

The Town's development characteristics (narrow roadways, closely spaced dwellings and businesses, and limited points of entry/exit) and location within a forest present unique fire hazard problems.

Wildland Fires

The Town's location relative to National Forest lands and the large areas of urban interface with forest vegetation increase the susceptibility of the Town to wildland fire. The combination of highly flammable fuel, long dry summers, and steep slopes create the potential for wildland fires in the Planning Area. Wildland fires in the National Forest can be attributed almost exclusively to either lightning strikes or human activity. Ninety-nine percent of fires within the Sierra Nevada National Forests have been contained to less than 100 acres. The one percent of wildfires that exceeded 100 acres in the last quarter century accounted for almost 98 percent of the total acres burned.

Wildfires can result in death, injury, economic loss, and heavy public investment in fire fighting efforts. Woodlands and other natural vegetation can be destroyed, resulting in loss of timber, wildlife habitat, scenic quality, and recreational resources. Soil erosion, sedimentation of fisheries and reservoirs, and downstream flooding can also result from wildland fires.

Fire has been and remains a natural and important component of the Sierra Nevada landscape and ecosystem. Wildlands must burn or otherwise be managed periodically through controlled burns to maintain ecological viability. Fuel maintenance, such as controlled burning, is an effective means of mitigating uncontrolled wildland fires, thereby protecting human habitation and development.

Fire hazard and risk are measured by the amount of fuel available to burn at any given time in a given area and the likelihood that an ignition would occur. Rankings within the USFS Fire Risk and Hazard Index are based on expected fire behavior, the length of time that fuels are available to burn during the fire season, and the likelihood that a fire would occur based on ignition history. The risk factors are used to provide a relative ranking of fire risk, hazard, and susceptibility to large severe fire. Fire hazard severity has been mapped by the California Department of Forestry (CDF). The Planning Area has been rated as having a very high fire potential. The Town, the Mammoth Lakes Fire Protection District (MLFPD), the USFS, and Mono County continually strive to minimize wildland fire risks.

In response to the 2002 fire season, the Eastern Sierra Regional Fire Safe Council (ESRFSC), which is based in Bishop, prepared a handbook called the Fire Safe Plan. This handbook is designed to help east side residents of Inyo and Mono Counties improve their defense against wildland fires. The ESRFSC is comprised of private citizens advised by the USFS, CDF, and BLM. The ESRFSC collaborates with local volunteer fire departments and assists CDF as they train fire prevention volunteers to perform residential fire hazard inspections within Eastern Sierra communities. Volunteers work with homeowners to raise awareness concerning wildland fire risks and methods of home hazard reduction.

The California Public Resource Code (Section 4291) requires property owners to reduce fire hazards by removing dead vegetation, creating a ten-foot clearance around propane tanks, removing tree limbs that are within ten feet of the residence, removing leaves and pine needles from roofs and rain gutters, installing a half-inch mesh screen on stovepipes or chimneys, installing spark arresters on all internal combustion engines, and by obtaining burn permits. ESRFSC suggests that Section 4291 offers insufficient protection for a residence built on a slope and/or on property surrounded by flammable continuous vegetation, such as forest with understory or brush. In most cases in the Eastern Sierra, more defensible space is necessary to create a safety zone. ESRFSC has included a section entitled Firescaping in its plan. This section includes numerous lists of firesmart plants as well as a list of where to purchase plants locally.

In response to management direction from the Sierra Nevada Forest Plan Amendment (SNFPA) ~~(2001)~~–(2004) and the National Fire Plan (NFP) (2000), USFS crews began constructing the Mammoth Lakes Fuelbreak on August 1, 2002. This project is designed to protect the north end of Mammoth Lakes from fire and treat approximately 400 acres of urban interface (the 0.25 mile Defense Zone defined in the NFP). The \$400,000 project is funded by the NFP. The most critical 350 acres were contracted out for mowing in the spring of 2003 with completion of the fuel break project in 2004. Mowing was completed using uneven edges to minimize visual effects as well as impacts to locally important resources such as terrestrial and aquatic animals, heritage resource sites, watershed function and spread of undesired plant species. The fuelbreaks are monitored annually by the USFS and depending on regrowth of brush, may be re-mowed in five years.

Structural Fires

The Mammoth Lakes Fire Protection District (MLFPD) provides fire protection to the entire Planning Area including the Lakes Basin, Camp High Sierra, and Mammoth Mountain Ski Area (MMSA). The MFPD also provides fire prevention services through such activities as education and development review. Efforts include implementation of fire-safe regulations such as ensuring adequate clearance of flammable vegetation around individual structures to prevent the spread of fire between wildlands and structures. Adequate road widths and load capacities are provided and maintained to ensure the ready movement of fire engines, bulldozer transport units, and other heavy firefighting equipment. According to the Mammoth Lakes Fire Department, the department responds to an average of 4 to 5 significant fires a year, 8 to 10 smaller fires and 10 smoke related calls (people not aware of how to work stove dampers).¹⁸ Please refer to Section 4.10 for additional information concerning the MFPD.

¹⁸ Information provided by Tom Heller of Mammoth Lakes Fire Department. This annual average is based on a survey of the last five years of fire data.

4.5.1.3 Hazardous Materials

A hazardous material is defined by the California Department of Toxic Substances Control as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 CCR 25501). Hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive CCRs, Title 22, Chapter 11, Article 3). Toxicity, ignitability, corrosivity, and reactivity are defined in the CCR, Title 22, Sections 66261.2066261.24. Common hazardous materials include petroleum hydrocarbons, pesticides, volatile organic chemicals, and certain metals.

The risk of environmental or human exposure to hazardous materials depends on the type, location, and quantity of the material released. Hazardous materials are defined as those that are a potential threat to human health, having the capacity to cause serious illness or death. The term hazardous materials includes radioactive waste and explosives, as well as substances such as gasoline, pesticides, and household cleaning products. The Town has some businesses and activities that involve the transport, storage, or use of toxic or hazardous chemicals, which includes businesses in the industrial park, high school and college laboratories, gasoline and service stations, Mammoth Yosemite Airport, and the MMSA.

There are no sites listed on the Comprehensive Environmental Response, Compensation, Liability Information System database in the Planning Area (Web search October 19, 2005).

4.5.1.4 Mammoth Yosemite Airport

The Mammoth Yosemite Airport lies to the east of the main portion of the Town. The Federal Aviation Administration (FAA) defines the most critical areas as those immediately beyond the runway ends, and the initial departure and final approach sectors since these are the areas in which the highest concentration of aircraft accidents occur. Studies indicate that about half of all airport accidents occur on airport property and an additional 15 percent of accidents occur within one mile outside the airport property. This suggests that areas immediately off the ends of the runway and under the airport traffic pattern should be carefully evaluated for developed land use. All of the land outside of the Runway Protection Zone where it extends beyond the ends of the runway are under the land use jurisdiction of Mono County and are governed by the County and must be consistent with the Airport Land Use Plan. The Mono County Airport Land Use Commission must approve the Airport Land Use Plan and any town development at the airport must be consistent with this plan.

4.5.1.5 Evacuations

Several scenarios are described in the Town’s Emergency Operations Plan (2001) that would result in the evacuation of the town’s residents and visitors. The following scenarios would result in evacuation of the Town’s affected population:

- An Eruption Alert is issued by the United States Geological Survey to warn the Town’s population that volcanic activity is underway
- A volcanic eruption spreads hot ash onto square miles of snowpack, causing instant melting and severe flooding. This is monitored by the United States Geological Survey and notification is based on the Caldera Unrest Levels and Notification System.
- A large hazardous materials spill, chlorine leak, or propane leak.
- An earthquake triggers a large avalanche trapping skiers on slopes and on lifts (people stranded on the mountain would be evacuated).
- A blizzard causes the closure of U.S. Highway 395 and SR 203 (people stranded in their vehicles would be evacuated on buses or snowcats).

4.5.2 REGULATORY FRAMEWORK

4.5.2.1. Snow-Related (Avalanche) Regulations

The Town Municipal Code Chapter 15.24.040 provides requirements concerning snow loads/snow design under the Uniform Building Code--Section 2305(d). The Code sets forth minimum design requirements to withstand snow loads and any additional effects created by snow. The design requirements include parameters for: minimum setbacks; protection of required entries/exits, parking, and driveways; building projections; utility locations; roof systems, as well as other structural requirements to minimize impacts from snow-related hazards.

Municipal Code Chapter 17.04.010 outlines objectives for the purpose of promoting and protecting the public health, safety, and welfare of the people of the town, to safeguard and enhance the appearance and quality of development of the town, and to provide for the social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources, a zoning title establishing classifications of zones and regulations within these zones is established and adopted by the town council. Under this title is a “permissive title” whereby any use not listed as a permitted use or a use requiring a use permit within the various zone classifications is deemed to be prohibited. (Ord. 90-06 Section 1(part), 1990: Ord. 89-05 Section 1(part), 1989: prior code Ch. 19.01).

In addition to the objectives outlined above, the SDD zone is included in this title to provide a zoning overlay district to identify those areas in the Town of Mammoth Lakes where avalanche potential has been found to exist after specific investigation and minimize health and safety hazards related to avalanche potential.

4.5.2.2 Fire Regulations

As described below, various federal and state laws for the regulatory framework for the exercise prevention and management of fires.

State Fire Regulations

Assembly Bill 337 (the Bates Bill, adopted September 29, 1992) was a direct result of the great loss of lives and homes in the Oakland Hills “Tunnel Fire” of 1991. The Bates Bill Process is used to identify Very High Fire Hazard Severity Zones in Local Responsibility Areas. Government Code Section 51178 specifies that the Director of the CDF, in cooperation with local fire authorities, shall identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria and the expected severity of fire hazard. State Responsibility Areas (SRAs) include all lands regardless of ownership, except for cities and federal lands. Although the state has financial responsibility for SRAs, it is not the state’s responsibility to provide fire protection services to any building or structure located within a wildland area, unless the CDF has entered into a cooperative agreement with a local agency for those purposes pursuant to Public Resources Code Section 4142. Under Assembly Bill 3819, passed in 1994 (AB 3819 Willie Brown), “Class A” roofing, minimum clearances of 30 feet around structures, and other fire defense improvements are required in VHFHSZs.

Government Code Section 51178 states that a local agency may, at its discretion, exclude from the requirements of Section 51182 an area identified as a VHFHSZ by the CDF. This requires a finding, supported by substantial evidence, that the requirements of Section 51182 are not necessary for effective fire protection within the area. Conversely, local agencies may include areas not identified as a VHFHSZ by the CDF, following a finding that the requirements of Section 51182 are necessary for effective fire protection. According to Section 51182, such changes made by a local agency shall be final and cannot be rebutted by the CDF.

Wildland areas require disclosure for real-estate transactions. Specifically, Assembly Bill 6 (AB6) requires that both types of fire hazard areas (SRAs and VHFHSZs) be disclosed in real estate transactions. Civil Code Section 1103(c)(6) also requires real estate sellers to inform prospective buyers whether or not a property is located within a wildland area that could contain substantial fire risks and hazards.

Public Resources Code Section 4290 requires minimum statewide fire safety standards pertaining to the following:

- Road standards for fire equipment access;
- Standards for signs identifying streets, roads, and buildings;
- Minimum private water supply reserves for emergency fire use; and
- Fuel breaks and greenbelts.

Wildland fire areas are also subject to Public Resources Code Sections 4291 through 4299, which require property owners in such areas to conduct maintenance in order to reduce the fire danger.

The California Emergency Services Act, (Government Code (GC), Title 2, Division 1, Chapter 7, Section 8550 et. seq.), states that “the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provision thereof.” The act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager.

Local Fire Regulations

Chapter 15.04.010 of the Town of Mammoth Lakes Municipal Code “Uniform Building Code--Section 102” was enacted for the purpose of adopting rules and regulations pursuant to the state housing law and the Health and Safety Code, for the protection of the public health, safety and general welfare of the occupants and the public; governing the creation, construction, enlargement, conversion, alteration, repair, moving, removal, demolition, occupancy, use, height, fire protection, sanitation, ventilation, and maintenance of any building used for human habitation. The State Uniform Fire Code, as adopted by the International Conference of Building Officials and the National Fire Protection Association, is the fire code of the town.

4.5.2.3 Hazardous Materials

As described below, various federal and state agencies exercise regulatory authority over the use, generation, transport, and disposal of hazardous substances.

Federal Hazardous Materials Regulations

The primary federal regulatory agency is the Environmental Protection Agency (EPA). The EPA granted the state primary oversight responsibility to administer and enforce hazardous waste management programs.

Resources Conservation and Recovery Act

The Resources Conservation and Recovery Act (RCRA) established a federal hazardous substance “cradle-to-grave” regulatory program that is administered by the EPA. Under RCRA, the EPA regulates the generation, transportation, treatment, storage and disposal of hazardous substances. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle-to-grave” system of regulating hazardous substances. The HSWA specifically prohibits the use of certain techniques for the disposal of some hazardous substances. Under RCRA, individual states may implement their own hazardous substance management programs as long as they are consistent with, and at least as strict as, RCRA. The EPA must approve state programs intended to implement the RCRA requirements.

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 is a regulatory or statute law developed to protect the water, air, and land resources from the risks created by past chemical disposal practices. The purpose of CERCLA was to provide authorities the ability to respond to uncontrolled releases of hazardous substances from inactive hazardous waste sites that endanger public health and the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at such sites, and established a trust fund to provide for cleanup when no responsible party could be identified. In addition, CERCLA provided for the revision and republishing of the National Contingency Plan (NCP) that provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also provides for the National Priorities List, a list of national priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action.

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. This amendment increased the size of the Hazardous Response Trust Fund, expanded U.S. EPA’s response authority, strengthened enforcement activities at Superfund sites; and broadened the application of the law to include federal facilities. In addition, new provisions were added to the law that dealt with emergency planning and community right to know. SARA also required the EPA to revise the Hazard Ranking System (HRS) to ensure that the HRS accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review for listing on the NPL.

Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) created the state hazardous waste management program, which is similar to, but more stringent than, the federal program under RCRA. The Hazardous Waste Control Act is implemented by regulations contained in 26 CCR, which describe the following aspects of hazardous waste management: identification and classification; sources; transport; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities, including staff training; closure of facilities; and liability issues.

Regulations in 26 CCR list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of them. Under the Hazardous Waste Control Act and 26 CCR, hazardous waste generators must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. The manifest describes the waste, its intended destination, and other regulatory information about the waste. Copies must be filed with the DTSC. Generators must also match copies of waste manifests with receipts from the treatment, storage or disposal facility to which it sends waste.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a hazardous materials business plan that describes their facilities, inventories, emergency response plans, and training programs. Under the Business Plan Act, hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste, although the health concerns pertaining to the release or inappropriate disposal of these materials are similar to those relating to hazardous waste. The California Environmental Protection Agency oversees the Hazardous Materials Plan, which is enforced jointly by Mono County and Mammoth Lakes Fire Protection District. The MLFPD manages hazardous materials within their jurisdiction. However, since Mono County is the funded agency they are responsible for all reporting.

Hazardous Substances Worker Safety Requirements

The Federal Occupational Safety and Health Administration (Fed/OSHA) is the agency responsible for ensuring worker safety. Fed/OSHA sets federal standards for implementation of training in the work place, exposure limits, and safety procedures in the handling of hazardous substances (as well as other hazards). Fed/OSHA also establishes criteria by which each state can implement its own health and safety program.

Emergency Planning and Community Right-To-Know Act

The primary purpose of the Federal Emergency Planning and Community Right-To-Know Act (EPCRA) is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to state and local agencies the locations and quantities of chemicals stored on-site. Section 313 of EPCRA requires manufacturers to report the release to the environment of any of more than 600 designated toxic chemicals. These reports are submitted to the EPA and state agencies and help communities prepare to respond to chemical spills and similar emergencies.

EPCRA mandates that Toxics Release Inventory (TRI) reports be made public. The TRI is a database that contains information on toxic chemical releases and other waste management activities reported annually by certain industry groups as well as federal facilities. This inventory was established in 1986 under the EPCRA and expanded by the Pollution Prevention Act of 1990.

Hazardous Waste Management Plan

Assembly Bill 2948 established procedures for the preparation of a County Hazardous Waste Management Plan (HWMP). The HWMP is intended to serve as the primary planning document for hazardous waste management within a county, and contains goals, policies and recommended programs for the management, recycling and disposal of hazardous wastes. The HWMP principally governs the coordination and planning of hazardous waste disposal capacity between the county and state. The California DHS must give its approval to the plan before the document becomes effective. The HWMP serves as the implementation program for management hazardous waste in order to protect the health, safety, and property of residents.

Hazardous Materials Disclosure Program

As indicated previously, hazardous materials are extensively legislated by the federal, state and city governments. Both the federal government (CFR, EPA, SARA, and Title III) and the State of California (California State Health and Safety Code, Division 20, Chapter 6.95, Sections 25500-25520; CCRs, Title 19, Chapter 2, Sub-Chapter 3, Article 4, Sections 2729-2734) require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials, termed a reporting quantity, to submit a business plan to its local Certified Unified Program Agency (CUPA).

In 1986, Congress passed the SARA. Title III of this legislation requires that each community establish a Local Emergency Planning Committee (LEPC). This committee is

responsible for developing an emergency plan that outlines steps to prepare for and respond to chemical emergencies in that community.

State Hazardous Materials Regulations

The primary California state agency with similar authority and responsibility is the California Environmental Protection Agency (Cal/EPA), which may delegate enforcement authority to other local agencies with which it has agreements. The Cal/EPA and the Office of Emergency Services (OES) of the State of California establish rules governing the use of hazardous substances.

Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California OES. This office coordinates the responses of other agencies, including the EPA, California Highway Patrol (CHP), the nine RWQCBs, the various air quality management districts, and county disaster response offices.

Hazardous Substances Handling Requirements

Within Cal/EPA, the DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the generation, transport and disposal of hazardous substances under the authority of the HWCL. Regulations implementing the HWCL list approximately 791 hazardous chemicals and 20 to 30 more common substances that may be hazardous; establish criteria for identifying, packaging and labeling hazardous substances; prescribe management of hazardous substances; establish permit requirements for hazardous substances treatment, storage, disposal and transportation; and identify hazardous substances that cannot be deposited in landfills.

Hazardous Materials Transportation

The Department of Transportation (DOT) regulates the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act. This act specifies driver-training requirements, load labeling procedures, and container design

and safety specifications.¹⁹ Transporters of hazardous wastes must also meet the requirements of additional statutes such as RCRA.

California law requires that Hazardous Waste (as defined in California Health and Safety Code Division 20, Chapter 6.5) be transported by a California registered hazardous waste transporter that meets specific registration requirements. The requirements include possession of a valid Hazardous Waste Transporter Registration, proof of public liability insurance that includes coverage for environmental restoration, and compliance with California Vehicle Code registration regulations required for vehicle and driver licensing. A complete list of requirements can be found in Title 22 CCR, Chapter 13.

State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the CHP and the Caltrans. Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads.

Hazardous Substances Worker Safety Requirements

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing work place safety regulations within the State. Cal/OSHA standards are more stringent than federal regulations. Cal/OSHA regulations concerning the use of hazardous substances include requirements for safety training, availability of safety equipment, hazardous substances exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous substances, describing the hazards of chemicals, and documenting employee training programs.

Both federal and state laws include special provisions for hazard communication training to employees who work with and/or encounter hazardous materials and wastes. The training must include safe methods for handling hazardous substances, an explanation of Material Safety Data Sheets, use of emergency response equipment, implementation of an emergency response plan and use of personal protective equipment.

Hazardous Materials Disclosure Program

Several California statutes require the emergency notification of a hazardous chemical release. These include: Health and Safety Codes Section 25270.7, Section 25270.8 and Section

¹⁹ *CFR49 Parts 101, 106, 107, and 171-180.*

25507; Vehicle Code Section 23112.5; Public Utilities Code Section 7673; Government Codes Section 51018, Section 8670.25.5(a); Water Codes Section 13271 and Section 13272; and California Labor Code Section 6409.1(b)10. The Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65, and Section 9030 of the California Labor Code also has specific reporting requirements.

Local Hazardous Materials Regulations

Mammoth Yosemite Airport Spill Prevention and Countermeasures Plan

The Spill Prevention, Control, and Countermeasures Plan, which is managed by the Town of Mammoth Lakes, for the Mammoth Yosemite Airport is required by the Oil Pollution Act of 1990, which mandates a spill response system for the proper handling, storage, and transportation of oil in the event a discharge occurs.

4.5.3 THRESHOLDS OF SIGNIFICANCE

Based on Appendix G in the CEQA Guidelines, the project would be considered to have a significant impact on public safety/hazards if the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands; or
- Expose people or structures to a significant risk of loss, injury or death involving other natural conditions.

4.5.4 IMPACTS AND MITIGATION

Issue 4.5-1: Would development associated with implementation of the Updated Plan create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Discussion: The Project would allow for the development of non-residential uses, including additional light industrial and commercial uses in the vicinity of the industrial park and water treatment facility, as well as along Main Street and Old Mammoth Road. This would create the potential to increase the locations of use of hazardous materials and thus the transport of hazardous materials associated with such uses as well as the potential exposure of employees and the public to hazardous materials associated with such uses. The types and quantities of hazardous materials utilized by the various types of businesses that may locate in the City-Town would vary and, as a result, the nature of the potential hazards would also be varied. Since the Updated Plan does not propose any specific development projects, no specific type of hazard associated with the use of hazardous materials can be identified and the likelihood of a hazard presenting a serious health or safety hazard to the public cannot be determined at this time. However, it can be concluded that ~~any additional~~ additional non-residential uses, such as some new commercial and industrial uses, would increase the use and transport of hazardous materials and ~~an~~ increase ~~in~~ the generation of hazardous waste. As such, there would be an increase in the potential for human exposure to these substances.

As described in the Regulatory Framework section, numerous federal, state and local regulations oversee handling, transport and management of hazardous materials and waste. While the risk of exposure of hazardous materials cannot be eliminated, oversight by the appropriate agencies and compliance with the applicable regulations would maintain risks at acceptable levels. In addition, the following implementation measures in the Updated Plan would further ensure that impacts regarding the routine transport, use, or disposal of hazardous materials are reduced to a less than significant level.

Implementation Measures in the Updated Plan

- II.4.C.a.1 The Town shall work to ensure that the Fire Department and other emergency response agencies are adequately prepared to respond to an emergency involving hazardous material.
- II.4.C.a.3 The Town shall work with Mono County and other public agencies to inform businesses and consumers about the proper use and disposal of hazardous materials and waste.

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- II.4.C.a.4 The Town shall require the completion of a Hazard Materials disclosure form for all new development.
- II.4.C.a.5 The Town shall maintain and implement the Spill Prevention, Control, and Countermeasure Plan for the Mammoth Yosemite Airport as required by the Oil Pollution Act of 1990 which mandates a spill response system for the proper handling, storage, and transportation of oil in the event a discharge occurs.
- II.4.C.a.6 The Town shall regulate, specify, and develop sites for the safe collection of hazardous wastes; all facilities shall comply with State and Federal regulations and be designed and located in areas where they pose minimal threat to the environment.
- II.4.C.b.1 The Town of Mammoth Lakes will coordinate with other public agencies and private stakeholders to develop and implement a hazardous waste management and minimization program targeting the primary sources of hazardous waste including but not limited to lead-acid batteries, radioactive smoke detectors, silver cad, metal hybrid, dry cell batteries, cleaning solutions (organic solvents and in-organic liquids), florescent lights, and waste oil.
- II.4.C.b.2 The Town shall cooperate with other governmental agencies in the region and the State in planning for the effective management of hazardous wastes generated in the region and the state in accordance with the hazardous waste management hierarchy.

All projects within the Planning Area would be required to comply with all federal, state and local regulations regarding the handling, transport and management of hazardous materials and waste. In addition, the Updated Plan includes implementation measures to address the routine transport, use, or disposal of hazardous materials. With the federal, state and local regulations and the implementation measures, the impacts regarding the routine transport, use, or disposal of hazardous materials would be reduced to a less than significant level.

Mitigation Measures

The Updated Plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, no mitigation measures are required.

Level of Significance After Mitigation Measures

Impacts related to the routine transport, use, and/or disposal of hazardous materials would be less than significant.

***Issue 4.5-2:** Would development associated with implementation of the Updated Plan create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Discussion: New commercial and industrial development or the expansion of commercial and industrial uses would result in an increase in the use and transport of hazardous materials within the town. The increased use and transport of hazardous materials in the Town increases the potential for accidental releases of hazardous materials. Typical incidents that may result in accidental releases of hazardous materials include leaking underground storage tanks, accidents during transport causing a “spill” of a hazardous material, and/or natural disasters causing unauthorized release of a hazardous material. Accidental releases would most likely occur in the commercial and industrial areas and along transportation routes leading to and from these areas, as well as along the major access routes including U.S. Highway 395, SR 203, Meridian and Minaret Road. Chemical storage and handling activities in Mammoth Lakes have resulted in releases of hazardous materials and petroleum products to soil ~~and ground water~~ in the Mammoth Lakes area (Bill Taylor, Town, Personal communication, February 10, 2005).

Accidental releases of hazardous materials may cause contamination of soils, surface water and groundwater. Depending on the nature and extent of the contamination, natural habitat and wildlife may be impacted and groundwater supplies may become unsuitable for domestic use. Additionally, human exposure to contaminated water or soil may have potential health effects depending on the nature of the contaminant. As described in the Regulatory Framework section above, numerous federal, state and local regulations oversee handling, transport and management of hazardous materials. While the risk of the accidental release of hazardous materials cannot be eliminated, oversight by the appropriate agencies and compliance with the applicable regulations would reduce risks to a less than significant level. Additional information regarding water quality is contained in the Section 4.6, Hydrology and Water Quality.

In addition, the following implementation measures in the Updated Plan would further ensure that impacts regarding reasonably foreseeable upset and accident conditions involving the release of hazardous materials are reduced to a less than significant level.

Implementation Measures in the Updated Plan

- II.4.C.a.1 The Town shall work to ensure that the Fire Department and other emergency response agencies are adequately prepared to respond to an emergency involving hazardous material.
- II.4.C.a.3 The Town shall work with Mono County and other public agencies to inform businesses and consumers about the proper use and disposal of hazardous materials and waste.
- II.4.C.a.4 The Town shall require the completion of a Hazard Materials disclosure form for all new development.
- II.4.C.a.5 The Town shall maintain and implement the Spill Prevention, Control, and Countermeasure Plan for the Mammoth Yosemite Airport as required by the Oil Pollution Act of 1990 which mandates a spill response system for the proper handling, storage, and transportation of oil in the event a discharge occurs.
- II.4.C.a.6 The Town shall regulate, specify, and develop sites for the safe collection of hazardous wastes; all facilities shall comply with State and Federal regulations and be designed and located in areas where they pose minimal threat to the environment.
- II.4.C.b.1 The Town of Mammoth Lakes will coordinate with other public agencies and private stakeholders to develop and implement a hazardous waste management and minimization program targeting the primary sources of hazardous waste including but not limited to lead-acid batteries, radioactive smoke detectors, silver cad, metal hybrid, dry cell batteries, cleaning solutions (organic solvents and in-organic liquids), florescent lights, and waste oil.
- II.4.C.b.2 The Town shall cooperate with other governmental agencies in the region and the State in planning for the effective management of hazardous wastes generated in the region and the state in accordance with the hazardous waste management hierarchy.

All projects within the Planning Area would be required to comply with all federal, state and local regulations regarding the handling, transport and management of hazardous materials and waste. In addition, the Updated Plan includes implementation measures to address the routine transport, use, or disposal of hazardous materials. With the regulations and the implementation measures, the impacts associated with the use of hazardous materials would be reduced to a less than significant level.

Mitigation Measures

The Updated Plan would not result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, no mitigation measures are required.

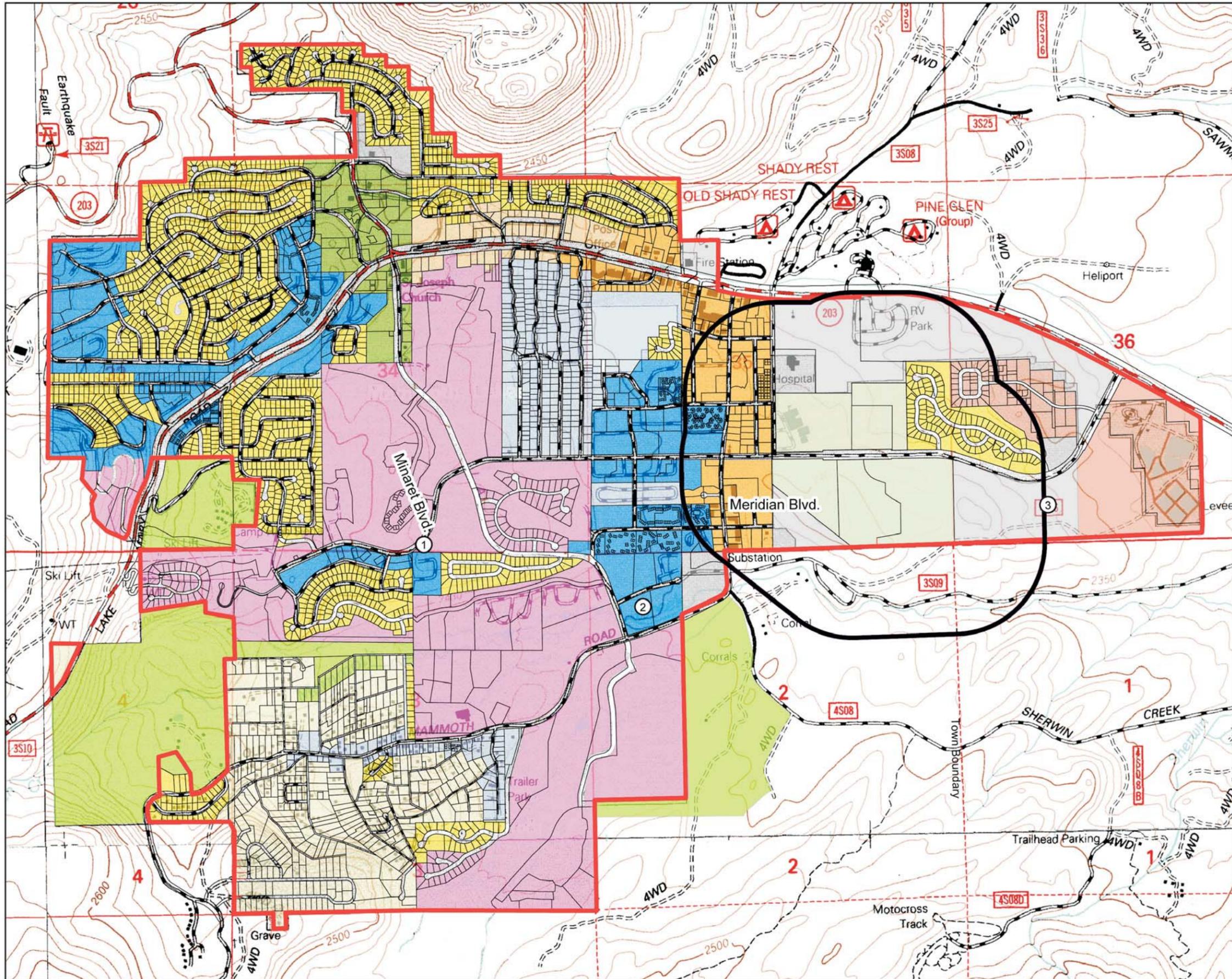
Level of Significance After Mitigation

Impacts related to the accidental release of hazardous materials would be less than significant.

***Issue 4.5-3:** Would development associated with implementation of the Updated Plan emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Discussion: Figure 4.5-1 on page 4-136 identifies the parcels with the existing and planned schools, as well as a line 0.25 miles from the edge of those parcels. Overall 155 parcels of property located within the Commercial and Industrial Land Use Designation are located within 0.25 miles of the existing and planned schools. Although the project would allow for new and expanded development in the Planning Area including services or institutions that may involve the handling or emission of hazardous emissions within one-quarter mile of existing and proposed school facilities in the Town, no additional development could occur that is any different than the development that would occur under the existing General Plan. These services and institutions would include uses such as dry cleaning facilities, gas stations, hospitals, water and sanitation facilities and schools with chemistry labs. The location of new or expanded uses that handle hazardous materials could result in hazardous emissions or the use and storage of hazardous materials within one-quarter mile of an existing or proposed school. In most instances, a buffer in the form of a major street, channel or intervening land use separates residential areas from industrial areas.. The proposed new industrial area is outside of this 0.25 mile radius.

Should new development involving the uses of hazardous materials associated with implementation of the Updated Plan be proposed within one-quarter of an existing or proposed school, site-specific environmental review would be conducted to determine if hazardous emissions would impact the school site. In addition, the Town would consult with the School District pursuant to 14CCR Section 15186(b). The handling, storage and transport of hazardous materials would be to subject to all applicable federal, state and local regulations to ensure that the school site would not be significantly impacted. Compliance with the applicable regulations and oversight by the appropriate agencies would reduce risks to school sites to a less than significant level. In addition, the following implementation measures in the Updated Plan would

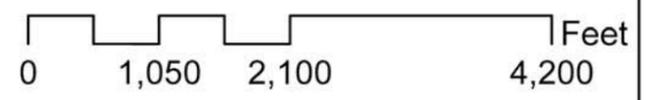


Town of Mammoth Lakes

Explanation

- 0.25 mi. School Buffer
- School Parcel
- Urban Growth Boundary
- Commercial 1
- Commercial 2
- High Density Residential 1
- High Density Residential 2
- Industrial
- Institutional Public
- Low Density Residential 1
- Low Density Residential 2
- Open Space
- Resort
- Specific Plan
- National Forest Lands
- National Forest Lands Outside the Municipal Boundary

- PARCELS**
1. Bell-Shape Parcel
 2. Mammoth Creek Park
 3. Water District
 4. Foundation Parcel



Base Maps: Old Mammoth, Mammoth Mountain, Crystal Crag & Bloody Mountain
 Source: Town of Mammoth Lakes Updated Plan, 2005

Figure 4.5-1 School Parcels and Buffer Map

further ensure that impacts to school sites regarding hazardous materials are reduced to a less than significant level.

Implementation Measures in the Updated Plan

- II.4.C.a.1 The Town shall work to ensure that the Fire Department and other emergency response agencies are adequately prepared to respond to an emergency involving hazardous material.
- II.4.C.a.2 The Town shall establish appropriate evacuation routes, and incorporate them into the Emergency Preparedness and Response Plan.
- II.4.C.a.3 The Town shall work with Mono County and other public agencies to inform businesses and consumers about the proper use and disposal of hazardous materials and waste.
- II.4.C.a.4 The Town shall require the completion of a Hazard Materials disclosure form for all new development.
- II.4.C.a.6 The Town shall regulate, specify, and develop sites for the safe collection of hazardous wastes; all facilities shall comply with State and Federal regulations and be designed and located in areas where they pose minimal threat to the environment.
- II.4.C.b.1 The Town of Mammoth Lakes will coordinate with other public agencies and private stakeholders to develop and implement a hazardous waste management and minimization program targeting the primary sources of hazardous waste including but not limited to lead-acid batteries, radioactive smoke detectors, silver cad, metal hybrid, dry cell batteries, cleaning solutions (organic solvents and in-organic liquids), florescent lights, and waste oil.
- II.4.C.b.2 The Town shall cooperate with other governmental agencies in the region and the State in planning for the effective management of hazardous wastes generated in the region and the state in accordance with the hazardous waste management hierarchy.

While the Updated Plan could result in the location of a use that emits or handles hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, the Town will consult with the School District and any such proposed use would be required to undergo environmental analysis to ensure that the impacts would be less than significant. As per section 17.24.100 “Environmental Standards” the use, storage and disposal of hazardous

materials shall be subject to the approval and conditions of the Mammoth Lakes fire protection district and the Mono County health department. All fifty-five-gallon containers shall be labeled and sealed at all times and shall be stored on impervious surfaces approved by the public works director. Furthermore, no changes are being proposed to the hospital or other hazardous material producers by the Updated Plan and compliance with the applicable regulations and oversight by the appropriate agencies as well as the proposed implementation measures in the Updated Plan would reduce risks to school sites to a less than significant level.

Mitigation Measures

The Updated Plan would not result in impacts to schools from uses that emit or handle hazardous materials, substances, or waste. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts to schools related to hazardous materials would be less than significant.

***Issue 4.5-4:** Would development associated with implementation of the Updated Plan be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, which would result in a safety hazard for people residing or working in the area?*

Discussion: The Mammoth Yosemite Airport is located within the Town's Municipal Boundary and the UGB. Additional development in the vicinity of the airport increases the potential for safety hazards. Impacts to airport safety were discussed in the Mammoth Yosemite Airport Supplement to Subsequent EIR, SCH 2000034005, March 2002 (SSEIR). Mitigation measures in the SSEIR require future development to comply with the adopted land use policies of the Airport Land Use Commission; and development of a complete water supply, storage, and distribution system meeting the requirements of the Long Valley FPD. These measures were implemented through the Mammoth/June Lake Airport Land Use Plan, Town land use approvals, the Long Valley FPD, and building permits. The majority of land within the runway protection zones is under the land use jurisdiction of Mono County and are governed by the county, as well as the Town General Plan. All development related to the Airport must be in compliance with the adopted Airport Land Use Plan. The Airport Land Use Plan (ALUP) was prepared by the Mono County Airport Land Use Commission (ALUC) for land uses in the vicinity of the Mammoth Yosemite Airport. That plan was originally adopted in 1986. The Town's proposed uses on the airport property include aviation uses and visitor accommodations. These uses have been reviewed by the ALUC and found to be consistent with the previously adopted ALUP.

The Updated Plan provides the following implementation measures to ensure that future development is compatible with the Mammoth Yosemite Airport.

Implementation Measures in the Updated Plan

- VII.3.A.a.1 The Town shall promote the maintenance and improvement of general and commercial aviation facilities in a manner that is compatible with surrounding land uses.
- VII.3.A.a.3 Implement airport improvements consistent with the Mammoth Yosemite Airport Master Plan and the Airport Land Use Plan for the Mammoth Yosemite Airport.

With implementation of the implementation measures in the Updated Plan and compliance with the mitigation measures in the SSEIR, compliance with federal regulations and the Airport Land Use Plan, impacts regarding safety for people working or residing in the area of the Mammoth Yosemite Airport would be less than significant.

Mitigation Measures

The project would not result in creating a safety hazard from the Airport for people residing or working in the area. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts regarding safety hazards from the Airport for people residing or working in the area would be less than significant.

Issue 4.5-5: Would development associated with implementation of the Updated Plan impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Discussion: The Town has an adopted Emergency Operations Plan (EOP) (2001) for emergency response within the Town. The Plan meets the state's Standardized Emergency Management System (SEMS) requirements for state law. Threats and emergency response are thoroughly described and outlined in the Town's Emergency Operations Plan. Key points of the plan include the identification of critical areas in the town that represent hazards, areas for meeting and staging in an emergency event, communications, and emergency evacuation. Parks and other large areas are identified as emergency shelter and meeting locations. An Emergency Operation Center (EOC), fully equipped with emergency communication equipment and cooking, showering, and sleeping facilities is provided in Fire Station 1 for seismic or other disaster situations (other EOCs include MCWD office, Fire Station 2, Police Department, Canyon Lodge, etc.). Radio and satellite communication are utilized to maintain communications should other systems fail. Furthermore, local radio and television are also

utilized to notify residents and visitors of an emergency. Development under the Updated Plan will not impair implementation or physically interfere with the EOP, because no circulation changes are being proposed which conflict with the procedures set forth in the plan. The Updated Plan provides the following implementation measures to ensure that proper and adequate emergency response planning is provided as future development occurs within the Town.

Implementation Measures in the Updated Plan

- II.4.C.a.1 The Town shall work to ensure that the Fire Department and other emergency response agencies are adequately prepared to respond to an emergency involving hazardous material.
- II.4.C.a.2 The Town shall establish appropriate evacuation routes, and incorporate them into the Emergency Preparedness and Response Plan.

With implementation of these measures contained in the Updated Plan and compliance with Emergency Operations Plan, development associated with implementation of the Updated Plan would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Thus, impacts would be less than significant.

Mitigation Measures

The Updated Plan would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts with regard to an adopted emergency response plan or emergency evacuation plan would be less than significant.

***Issue 4.5-6:** Would development associated with implementation of the Updated Plan expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Discussion: As noted in the baseline discussion, the Mammoth Lakes Planning Area has been rated as having a very high fire potential. Additional development in the Planning Area would increase the number and variety of potential ignition sources for wildland fires including

illegal or inappropriate burning, fires started by recreational vehicles, improper disposal of cigarettes, barbecues, and other sources. However, this impact is somewhat reduced by the fact that additional development is to be located in the UGB and most of the wildlands areas are located outside the UGB. Still, the potential impact associated with this exposure is considered significant.

As discussed above, in response to the 2002 fire season the ESRFSC prepared a handbook called the Fire Safe Plan, which is designed to help east side residents of Inyo and Mono Counties improve their defense against wildland fires. In addition, the ESRFSC collaborates with local volunteer fire departments and assists CDF as they train fire prevention volunteers to perform residential fire hazard inspections within Eastern Sierra communities. Volunteers work with homeowners to raise awareness concerning wildland fire risks and methods of home hazard reduction.

With regard to property maintenance, Section 4291 of the California Public Resource Code requires property owners to reduce fire hazards by removing dead vegetation, creating a ten-foot clearance around propane tanks, removing tree limbs that are within ten feet of the residence, removing leaves and pine needles from roofs and rain gutters, installing a half-inch mesh screen on stovepipes or chimneys, installing spark arresters on all internal combustion engines, and by obtaining burn permits. ESRFSC suggests that Section 4291 offers insufficient protection.

The Updated Plan provides the following implementation measures to reduce the risks and impacts to urbanized areas associated with wildland fires.

Implementation Measures in the Updated Plan

- II.4.A.e.1 The Town shall require all new construction to comply with at least the minimum wildland fire safety standards, including those established for emergency access, signing and building numbering, private water supply reserves for fire use, and vegetation modification.
- II.4.A.e.2 The Town shall require adequate structural fire protection, and mitigation of all fire hazards through the environmental and project review process.
- II.4.A.e.3 The Fire District should minimize the incidence of structural fires by:
 - Regular inspections by the Fire District;
 - Voluntary residential inspections;

-
- Review of new development and remodeling plans in coordination with the Town’s Development Review Procedures, and;
 - Institution of public fire education programs.
- II.4.A.e.4 The Town shall support the Mammoth Lakes Fire District Master Plan for Fire Protection and assist in the establishment and implementation of appropriate funding sources - such as fees, exactions, charges, and assessments - to facilitate the development of a third fire station, expand the Main Street fire station, construct fire employee housing, and relocate the training tower
- II.4.A.e.5 The Town shall help assure water supply and water flow sufficient to suppress two or more simultaneous fires through requirements in the Town development code.
- II.4.A.e.6 The Town shall review the wildland fire safety standards and develop additional town specific policies that further protect people and property from unreasonable risks of wildland and structural fire hazards if necessary.
- II.4.A.f.1 The Town shall maintain mutual aid agreements with other fire and emergency service agencies for outlying and rural areas of the community.
- II.4.A.f.2 The Town shall assist in the development and maintenance of an up to date GIS based address database and mapping system.
- II.4.A.f.3 The Town shall coordinate with other agencies to provide ongoing fire prevention public education programs.
- II.4.A.f.4 The Town shall research the practicality of instituting a local ordinance that goes beyond the requirements of the State’s Standardized Emergency Management System.
- II.4.A.g.1 The Town shall coordinate and support other agencies in fire prevention activities and the development of a Fire Hazards Response Plan for the urban wildland interface.
- II.4.A.g.2 The Town in coordination with the Inyo National Forest and other land management agencies shall promote the creation and maintenance of natural and artificially constructed firebreaks between development and open space areas through the use of fire resistive landscaping, weed abatement, and other methods.

The Updated Plan includes various measures to address the risk of exposure from wildland fires. Assuming agencies with jurisdiction over surrounding areas susceptible to wildland fires (i.e., USFS, Inyo National Forest, etc) effectively manage fuel sources, the risk of exposure of fires would be reduced to a less than significant level. However, portions of the surrounding areas outside of the Town's jurisdiction are located within very high wildland fire hazard areas. Wildland fires could potentially spread to the Town if appropriate fire control planning and response measures are not undertaken by other agencies. Given that implementation of measures to reduce the impact are not under the control of the Town, the potential impact is considered to be significant and unavoidable.

Mitigation Measures

As indicated above, assuming all agencies manage fuel sources properly, the risk of exposure to wildland fires would be less than significant. However, given that the Town does not have control over the entire area, the impact is considered to be potentially significant. The Town is currently implementing all possible measures, to reduce the risk of exposure from wildland fires, such as collecting Development Impact Fees on behalf of the Mammoth Lakes Fire Protection District to fund the districts development schedule. Based on the Updated Plan and development schedule the Town estimates collecting over three million dollars which will be used to fund the expansion of Fire Station One, and possible for the purchase of new equipment and/or the development of Fire Station Three. No further mitigation measures beyond the implementation measures identified in the Updated Plan are feasible.

Level of Significance After Mitigation

Assuming all agencies manage fuel sources properly, the risk of exposure to wildland fires would be reduced but not eliminated. However, given that the Town does not have control over the entire area and additional feasible mitigation measures have not been identified to reduce the risk, the impact is considered to be potentially significant and unavoidable.

***Issue 4.5-7:** Would development associated with implementation of the Updated Plan expose people or structures to a significant risk of loss, injury or death involving other natural conditions?*

Discussion: Structural fires could result in significant safety risks to people and potential loss of property. However, all future development would be subject to site plan review by the MLFPD to ensure that fire-safe regulations such as ensuring adequate clearance of flammable vegetation around individual structures to prevent the spread of fire between wildlands and structures on a project-by project basis. Additionally, adequate road widths and load capacities would be provided and maintained to ensure the ready movement of fire engines, bulldozer transport units, and other heavy firefighting equipment. All development projects must comply

with the Uniform Fire code and are subject to review by the Mammoth Lakes Fire Protection District. Thus, impacts regarding structural fires would be less than significant.

Development in areas with slope gradients of between 30 and 45 degrees could expose people or property to hazards such as avalanches. However, as stated in the Existing Conditions section, areas in the Town where avalanche potential has been identified have been overlaid with a Snow Deposition Design (SDD) Zone to minimize health and safety hazards. Any development within this zone would be permitted by use permit only and requires an Avalanche Risk Assessment certified by a recognized expert in the field of avalanche occurrence. Furthermore, no critical or permanently occupied facilities within the Planning Area would be located within a high avalanche hazard area. In addition to avalanches, exposure to snow and ice shedding could create hazards that could injure people and damage property.

The Updated Plan provides the following implementation measures to reduce the risks and impacts from snow-related hazards.

Implementation Measures in the Updated Plan

- II.4.A.b.1 The Town shall monitor known and potential avalanche hazard areas and require an Avalanche Risk Assessment on all development proposed within the Snow Deposition Design Zone.
- II.4.A.b.2 The Town shall allow only open space or low density seasonal occupancy in high avalanche hazard zones.
- II.4.A.b.3 The Town shall require developers to implement appropriate mitigation measures in avalanche areas through requirements in the Town development code.
- II.4.A.b.4 The Town shall utilize an emergency notification and information system to inform the public of avalanche hazards and post warning sign on roadways subject to avalanche hazards.
- II.4.A.b.5 The Town shall support and encourage actions by the U.S. Forest Service and Mammoth Mountain Ski Area to abate avalanche hazards which impact the Town of Mammoth Lakes.
- II.4.A.b.6 The Town shall undertake a study to identify the limits of avalanche run out areas.

In addition to policies and implementation measures regarding avalanches, Section 15.24.040, Snow Loads/Sow Design, of the Municipal Code and Section 2305(d) of the Uniform

Building Code, address the design of structures relative to potential snow impact issues. The section requires that since the Town is considered a snow area, all structures within the Town are to be designed to withstand snow loads and any additional effects created by snow. The roof and eaves of all structures are to be designed so that snowshed impact areas will not occur in or on entries/exits, vehicle parking areas, driveways, walkways, and public ways. Further, all eaves of sloped roofs are to maintain setbacks so that snowshed impact areas occur on the property. With regard to sidewalk clearance of snow, the Town is responsible for snow removal of the sidewalks along Old Mammoth Road, which is funded through the Old Mammoth Road Benefit Assessment District. Additional sidewalk snow-removal equipment is programmed in the Master Facility Plan and funded through DIF. Major resort developments with pedestrian areas such as North Village are also required to remove snow from pedestrian areas as a condition in the development approval.

With incorporation of the implementation measures in the Updated Plan as well as the existing regulations, development associated with implementation of the Updated Plan would not expose people or structures to a significant risk of loss, injury or death involving avalanches or snow related issues, such as snow and ice shedding. Thus, impacts would be less than significant in this regard.

Mitigation Measures

With implementation of the implementation measures in the Updated Plan, development associated with implementation of the Updated Plan would not expose people or structures to a significant risk of loss, injury or death involving avalanches. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts regarding natural conditions, including avalanches and structural fires, would be less than significant.