This Safety Element combines the state mandated safety and noise elements. This Element establishes policies and programs to protect the public from risks associated with seismic, geologic, flood, and wildfire hazards. This Element also identifies sources of noise and provides policies addressing existing and foreseeable noise problems.

Monterey County lies within a region of high seismic activity in the form of frequent medium earthquakes with nearby epicenters, as well as infrequent major earthquakes. Earthquakes can cause two types of hazards: primary and secondary. Primary seismic hazards include ground shaking and ground displacement, which in turn can induce secondary hazards. Secondary hazards include ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, seismic induced water waves (tsunamis and seiches), and dam failure. In addition to the hazards from seismic activity, Monterey County's varied landforms (rugged mountains, river-cut valleys, and wetlands) are subject to landslides, erosion and subsidence.

The San Andreas Fault runs through the southeastern portion of the County for approximately 30 miles and poses the single greatest seismic hazard to the County. Two other active faults affecting Monterey County include the Palo Colorado-San Gregorio Fault zone and the Monterey Bay Fault zone. The Palo Colorado-San Gregorio Fault zone connects the Palo Colorado Fault near Point Sur, south of Monterey, with the San Gregorio Fault near Point Ano Nuevo in Santa Cruz County. The Monterey Bay Fault lies seaward of the City of Seaside extending northwesterly to the Pacific Ocean. *Figure 8A* illustrates the general locations of these active faults as well as lesser active faults within Monterey County.

Development in the flood-prone fertile valleys has resulted in flooding conditions mostly in the Salinas Valley, but also in the Carmel, Pajaro, Big and Little Sur River Valleys. Factors that contribute most significantly to potential flooding risk are development within the 100-year floodplain, levee failure, localized drainage problems (e.g.; estuaries, marshes and river basins) and dam failure. In Monterey County, the Salinas River and Carmel River Valleys face the greatest risk from dam failure. The Salinas Valley is influenced by two County-owned dams (Nacimiento and San Antonio), and the Carmel Valley has the Los Padres and San Clemente dams. The Monterey County Water Resources Agency reviews hydrological data, oversees structural development, and implements land use regulations to reduce the risk of flooding.

Monterey County experiences a variety of types of fires: wildland, structural, and chemical. Over half of the land area in Monterey County is mountainous and covered with highly combustible vegetation. Wildland fires are part of the ecosystem that are both a beneficial and destructive force. Monterey County has some older communities (Chualar, Spreckels, San Lucas, Bradley, North County, and Carmel Valley Village) where structural failure could occur as a result of out-dated electrical or mechanical conditions. In addition to wildland and structural fires, Monterey County is subject to fire hazards from oil and natural gas fields, gasoline storage wells and flammable chemicals.

The California Department of Forestry and Fire Protection (CAL FIRE) is charged with wildland fire protection for much of Monterey County. CAL FIRE provides wildland fire protection to 1.3 million acres of State Responsibility Area (SRA) from seven fire stations and one conservation camp located in Monterey County. In addition to the CAL FIRE equipment located within Monterey County, there are two air tankers, an aerial command aircraft and a helicopter located in adjacent San

Benito County. The state funded fire equipment located in Monterey County is sufficient to meet the stated CAL FIRE goal of controlling 95% of SRA wild fires in the first burning period.

Older buildings that do not have adequate fire protection devices pose a high fire hazard risk. Structural fire protection in the county (Local Responsibility Area or LRA) is the responsibility of local government and is provided by various fire protection districts and special districts, of which five have contracts with CAL FIRE to manage and staff their departments. Pebble Beach Community Services District, Cypress Fire Protection District, Carmel Highlands Fire Protection District, Aromas Tri-County Fire Protection District, and South Monterey County Fire Protection District all contract with CAL FIRE.

The Agricultural Commissioner's Office and County Health Department are responsible for enforcing state (Department of Food and Agriculture) and federal (Environmental Protection Agency, Occupational Safety and Health Administration) regulations. The County Office of Emergency Services (OES) maintains and implements the County's emergency response plan, which includes a comprehensive disaster preparedness program. This program describes the organizational framework and respective duties of County departments in order to coordinate separate departments into a cohesive unit during times of emergency.

Miscellaneous hazards occur when toxic chemicals (pesticides, herbicides, and fertilizers) and/or dangerous substances (petroleum, natural gas, and radio-active, flammable or explosive materials) are mismanaged or misused. The leading users of chemicals in Monterey County generally include agriculture, hospitals, heavy industry, laboratories and utilities. As a leader in agricultural production, Monterey County's farm industry is a heavy user of pesticides and fertilizers to control weeds, fungi, rodents, and insects that are harmful to their crops. Production and storage also pose potential hazard where leaks or spills could contaminate air or water, generate fire, or cause an explosion.

Principal noise sources in Monterey County include transportation facilities, several industrial and food-packing plants, several mining operations, Laguna Seca Raceway, and a power-generating plant. The transportation-related noise sources include roadways, railroads and airports (see *Circulation Element*), but for the most part these sources are isolated from noise sensitive areas and do not interfere with sensitive wildlife habitat due to the fact that principle noise sources are located primarily in urbanized or agricultural areas within Monterey County and are expected to remain this way.

Railroad noise is generated by the following lines:

a. Union Pacific Railroad's Coast Line. Spans the length of the county, north to south.
b. Coast Line. Traverses the unincorporated communities of Aromas, Pajaro, Castroville, Chualar, San Lucas, San Ardo, and Bradley and the cities of Salinas, Gonzales, Soledad, Greenfield, and King City. This line is used primarily for freight traffic, though Amtrak operates a daily train in each direction.
c. Monterey Branch Line. A 14-mile length that diverges from the Coast Line in Castroville and serves the Monterey Peninsula. This line is currently inactive.
d. A branch line also diverges off the Coast Line north of Castroville to serve the industrial uses in the Moss Landing area.

GOALS AND POLICIES
SAFETY

SEISMIC AND OTHER GEOLOGIC HAZARDS

GOAL S-1

MINIMIZE THE POTENTIAL FOR LOSS OF LIFE AND PROPERTY RESULTING FROM GEOLOGIC AND SEISMIC HAZARDS.

Policies

S-1.1 Land uses shall be sited and measures applied to reduce the potential for loss of life, injury, property damage, and economic and social dislocations resulting from ground shaking, liquefaction, landslides, and other geologic hazards in the high and moderate hazard susceptibility areas.

S-1.2 A Geologic Constraints and Hazards Database shall be developed and maintained in the County Geographic Information System (GIS). The GIS shall be used to identify areas containing hazards and constraints (see *Policy PS-2.6*) that could potentially impact the type or level of development allowed in these areas (*Policy OS-3.5*). Maps maintained as part of the GIS include:

a. Active Regional Faults
b. Relative Seismic Shaking Hazards
c. Relative Landslide Susceptibility
d. Relative Earthquake-Induced Liquefaction Susceptibility
e. Steep Slope Constraints (see *Policy OS-3.5*)
f. Coastal Erosion
g. Moderate and High Erosion Hazards
h. Highly Erodible Soils

S-1.3 Site-specific geologic studies may be used to verify the presence or absence and extent of the hazard on the property proposed for new development and to identify mitigation measures for any development proposed. An ordinance including permit requirements relative to the siting and design of structures and grading relative to seismic hazards shall be established.

S-1.4 The Alquist-Priolo Earthquake Fault Zoning Act shall be enforced.

S-1.5 Structures in areas that are at high risk from fault rupture, landslides, or coastal erosion shall not be permitted unless measures recommended by a registered engineering geologist are implemented to reduce the hazard to an acceptable level. Development shall be discouraged in the following areas:

a. Areas within 50 feet of active faults. Within State or County Earthquake Fault Zones, trenching or other suitable methodology shall be used to determine the location of the fault.
b. Areas within or adjacent to large active landslides. Large active landslides are those that are economically or technically infeasible to mitigate because of their rate of movement or size and volume.

S-1.6 New development shall not be permitted in areas of known geologic or seismic hazards unless measures recommended by a California certified engineering geologist or geotechnical engineer are implemented to reduce the hazard to an acceptable level. Areas of known geologic or seismic hazards include:

a. Moderate or high relative landslide susceptibility.
b. High relative erosion susceptibility.
c. Moderate or high relative liquefaction susceptibility.
d. Coastal erosion and seacliff retreat.
e. Tsunami run-up hazards.

S-1.7 Site-specific reports addressing geologic hazard and geotechnical conditions shall be required as part of the planning phase and review of discretionary development entitlements and as part of review of ministerial permits in accordance with the California Building Standards Code as follows:

a. Geotechnical reports prepared by State of California licensed Registered Geotechnical Engineers are required during building plan review for all habitable structures and habitable additions over 500 square feet in footprint area. Additions less than 500 square feet and non-habitable buildings may require geotechnical reports as determined by the pre-site inspection.
b. A Registered Geotechnical Engineer shall be required to review and approve the foundation conditions prior to plan check approval, and if recommended by the report, shall perform a site inspection to verify the foundation prior to approval to pour the footings. Setbacks shall be identified and verified in the field prior to construction.
c. All new development and subdivision applications in State- or County-designated Earthquake Fault Zones shall provide a geologic report addressing the potential for surface fault rupture and secondary fracturing adjacent to the fault zone before the application is considered complete. The report shall be prepared by a Registered Geologist or a Certified Engineering Geologist and conform to the State of California's most current Guidelines for evaluating the hazard of surface fault rupture.
d. Geologic reports and supplemental geotechnical reports for foundation design shall be required in areas with moderate or high landslide or liquefaction susceptibility to evaluate the potential on- and off-site impacts on subdivision layouts, grading, or building structures.
e. Where geologic reports with supplemental geotechnical reports determine that potential hazards effecting new development do not lead to an unacceptable level of risk to life and property, development in all Land

Use Designations may be permissible, so long as all other applicable General Plan policies are complied with.

f. Appropriate site-specific mitigation measures and mitigation monitoring to protect public health and safety, including deed restrictions, shall be required.

S-1.8 As part of the planning phase and review of discretionary development entitlements, and as part of review of ministerial permits in accordance with the California Building Standards Code, new development may be approved only if it can be demonstrated that the site is physically suitable and the development will neither create nor significantly contribute to geologic instability or geologic hazards.

S-1.9 A California licensed civil engineer or a California licensed landscape architect can recommend measures to reduce moderate and high erosion hazards in the form of an Erosion Control Plan.

FLOOD HAZARDS

GOAL S-2

REDUCE THE AMOUNT OF NEW DEVELOPMENT IN FLOODPLAINS AND, FOR ANY DEVELOPMENT THAT DOES OCCUR, MINIMIZE THE RISK FROM FLOODING AND EROSION.

Policies

S-2.1 Land Use planning to avoid incompatible structural development in flood prone areas shall be the primary means of minimizing risk from flood hazards. (Refer to *Figure 8b* FEMA Flood Insurance Rate, *Figure 8c* Awareness Floodplain Maps, and *Figure 8d* Dam Inundation Map*)*

S-2.2 Uses such as agriculture, passive to low intensity recreation, and open space/conservation are the most acceptable land uses in the 100-year floodplain to lessen the potential for loss of life, injury, property damage, and economic and social dislocations to the maximum extent feasible.

S-2.3 All new development, including filling, grading, and construction, within designated 100-year floodplain areas shall conform to the guidelines of FEMA and the National Flood Insurance Program and ordinances established by the County Board of Supervisors. With the exception of the construction of structures, Routine and Ongoing Agricultural Activities shall be exempt from this policy.

S-2.4 Monterey County shall strive to improve its National Flood Insurance Program Community Rating System classification.

S-2.5 In Community Areas, the suitability of new development in the FEMA-defined 100-year floodplain shall be addressed through the Community Plan process in consultation with the Monterey County Water Resources Agency. The County shall prioritize, support, encourage, and participate to the greatest extent feasible in collaborative efforts to address flooding in or around Community Areas in order to facilitate development identified in the Community planning process.

S-2.6 Drainage and flood control improvements needed to mitigate flood hazard impacts associated with potential development in the 100-year floodplain shall be determined prior to approval of new development and shall be constructed concurrently with the development.

S-2.7 Outside Community Areas, subdivisions that create lots where the only developable sites for new structures are within the 100-year floodplain shall be discouraged.

S-2.8 Alternative project designs and densities to minimize development in the floodplain shall be considered and evaluated.

S-2.9 New insurable buildings on existing lots of record shall be located outside the flood plain where possible.

S-2.10 New insurable buildings to be located in the floodplain shall require mitigation measures, including but not limited to raising lowest floor elevations to one-foot above the 100-year flood level, to reduce flood impacts on the development to a less-than-significant level, subject to the approval of the Monterey County Water Resources Agency.

S-2.11 All insurable buildings rebuilt or remodeled within a FEMA designated 100-year floodplain shall be elevated consistent with the guidelines of the National Flood Insurance Program if the cumulative work over a 10-year period exceeds 50-percent (50%) of the appraised value of the structure. Relocation to locations outside of the 100-year floodplain shall be encouraged.

S-2.12 Discretionary permits for development in or partially in the 100-year floodplain shall be conditioned to require recordation of a notice stating that the property is located within or partially within the 100-year floodplain and may be subject to building and/or land use restrictions.

DRAINAGE

GOAL S-3

ENSURE EFFECTIVE STORM DRAINAGE AND FLOOD CONTROL TO PROTECT LIFE, PROPERTY, AND THE ENVIRONMENT.

Policies

S-3.1 Post-development, off-site peak flow drainage from the area being developed shall not be greater than pre-development peak flow drainage. On-site improvements or other methods for storm water detention shall be required to maintain post-development, off-site, peak flows at no greater than pre-development levels, where appropriate, as determined by the Monterey County Water Resources Agency.

S-3.2 Best Management Practices to protect groundwater and surface water quality shall be incorporated into all development.

S-3.3 Drainage facilities to mitigate the post-development peak flow impact of new development shall be installed concurrent with new development.

S-3.4 A County Flood Management Program that helps reduce flood risks shall be established consistent with FEMA requirements at a minimum. The program shall consider both structural and non-structural solutions to address flooding.

S-3.5 Runoff Performance Standards that result in an array of site planning and design techniques to reduce storm flows plus capture and recharge runoff shall be developed and implemented, where appropriate, as determined by the Monterey County Water Resources Agency.

S-3.6 An inventory of areas where there is a high probability of accelerated erosion, sedimentation, and/or chemical pollution shall be maintained as part of the County's GIS mapping database.

S-3.7 The Monterey County Water Resources Agency shall prepare a Flood Criteria or Drainage Design Manual that establishes floodplain management policies, drainage standards and criteria, stormwater detention, and erosion control and stormwater quality protection measures in order to prevent significant impacts from flooding and ensure that development does not increase flooding risk over present conditions. The manual shall include, as appropriate, hydrologic and hydraulic analysis procedures, procedures to assess stream geomorphology and stability, potential development impacts on streams, and design guidelines for channel design, including biotechnical bank stabilization. Until the Drainage Design Manual is prepared, the County shall continue to apply existing policies and ordinances to manage floodplains and minimize flood risk, erosion control, and water quality impacts.

S-3.8 To assist planners in determining potential inundation hazards for existing and future development, the County shall coordinate the periodic review, completion, and filing (with appropriate State and County Offices of Emergency Services) of inundation maps for all dams and levees whose failure could cause loss of life or

personal injury within Monterey County. Where inundation maps indicate dam or levee failure could cause loss of life or property or personal injury, the corresponding responsible party shall investigate levee or dam stability and management, identifying emergency alert, evacuation, rehabilitation, and maintenance needs, as appropriate.

S-3.9 In order to minimize urban runoff affecting water quality, the County shall require all future development within urban and suburban areas to implement Best Management Practices (BMPs) as approved in the Monterey Regional Storm Water Management Program which are designed to incorporate Low Impact Development techniques. BMPs may include, but are not limited to, grassy swales, rain gardens, bioretention cells, and tree box filters. BMPs should preserve as much native vegetation as feasible possible on the project site.

FIRE HAZARDS

GOAL S-4

MINIMIZE THE RISKS FROM FIRE.

Policies

S-4.1 Risks and losses from fire hazards shall be reduced by encouraging public education programs on fire hazards and citizen awareness and responsibility in preventing fires.

S-4.2 The County shall encourage and support fire protection agencies to provide communities they serve with educational materials on local fire hazards and how each community can be protected. This information should be continually available at the local fire station, local library, other convenient locations, and through the media.

S-4.3 The County shall encourage and support educational programs, including but not limited to bilingual programs on fire safety by school districts, in cooperation with fire protection agencies, including Monterey County Office of Education (MCOE) and a nationally recognized fire safety education program county-wide.

S-4.4 Detailed scientific analysis of fire hazards in the County shall be provided periodically.

S-4.5 The wildland fire hazard severity map should be updated periodically as more precise information becomes available.

S-4.6 Structural and other non-wildland fire risks within wildland urban interface areas should be identified and maintained as a layer in the County's GIS in cooperation with fire officials and updated periodically.

S-4.7 The County and authorities having jurisdiction shall develop and maintain a procedure to inform potential developers of the requirements for development in high and very high fire hazard areas. This information shall be made available through the Planning Department.

S-4.8 Fire hazards shall be reduced to an acceptable level of risk by prescribing the use, location, type, and design of roadways.

S-4.9 Roadways shall be constructed and maintained in accordance with Monterey County Code Chapter 18.56 or the California Fire Code, as they may be updated from time to time, as determined by the fire authority having jurisdiction.

S-4.10 The County shall require the creation of road maintenance agreements for all new private subdivision roads.

S-4.11 The County shall require all new development to be provided with automatic fire protection systems (such as fire breaks, fire-retardant building materials, automatic fire sprinkler systems, and/or water storage tanks) approved by the fire jurisdiction.

S-4.12 The County shall require all modifications, additions, and remodeling of existing development exceeding thresholds adopted by the fire jurisdictions to be provided with automatic fire protection systems (such as fire breaks, fire-retardant building materials, automatic fire sprinkler systems, fire detection and alarm systems), water storage tanks and/or a Fuel Modification Zone plan as required by the fire jurisdiction.

S-4.13 The County shall require all new development to have adequate water available for fire suppression. The water system shall comply with Monterey County Code Chapter 18.56, NFPA Standard 1142, or other nationally recognized standard. The fire authority having jurisdiction, the County Departments of Planning and Building Services, and all other regulatory agencies shall determine the adequacy and location of water supply and/or storage to be provided.

S-4.14 Water systems constructed, extended, or modified to serve a new land use or a change in land use or an intensification of land use, shall be designed to meet peak daily demand and recommended fire flow.

S-4.15 All new development shall be required to annex into the appropriate fire district. Where no fire district exists, project applicants shall provide verification from the most appropriate local fire authority of the fire protection services that exist.

Project approvals shall require a condition for a deed restriction notifying the property owner of the level of service available and acceptance of associated risks to life and property. Where annexations are mandated, the County shall negotiate a tax share agreement with the affected fire protection district.

S-4.16 New and reconstructed bridges shall be constructed in accordance with Monterey County Code Chapter 18.56 and the California Fire Code as amended.

S-4.17 Drainage details for the road or driveway shall conform to current engineering practices, including erosion control Best Management Practices.

S-4.18 All access roads and driveways shall be maintained by the responsible parties to ensure the fire department safe and expedient passage at all times.

S-4.19 Gates on emergency access roadways shall be constructed in accordance with Monterey County Code Chapter 18.56 and the California Fire Code as amended.

S-4.20 Reduce fire hazard risks to an acceptable level by regulating the type, density, location, and/or design and construction of development.

S-4.21 All permits for residential, commercial, and industrial structural development (not including accessory uses) shall incorporate requirements of the fire authority having jurisdiction.

S-4.22 Every building, structure, and/or development shall be constructed to meet the minimum requirements specified in the current adopted state building code, state fire code, Monterey County Code Chapter 18.56, and other nationally recognized standards.

S-4.23 The County shall adopt the Fire Code document adopted by the State of California and appropriate amendments.

S-4.24 Property addresses shall be required to be posted in accordance with Monterey County Code Chapter 18.56.

S-4.25 Address issuance and street naming shall be coordinated between the incorporated cities and the County in accordance with Monterey County Codes to avoid duplication or confusion to public safety agencies.

S-4.26 When public facilities and above-ground utilities are located in high or very high fire hazard areas, special precautions shall be taken to mitigate the risks from wildfire and to ensure uninterrupted operation.

S-4.27 The County shall continue to review the procedure for proposed development, including minor and standard subdivisions, and provide for an optional pre-

submittal meeting between the project applicant, planning staff, and fire officials.

S-4.28 The County shall provide a list of acceptable fire-resistant plants suited to each of the County's various micro-climates, in accordance with *Policy OS-5.14* to avoid invasive species. This list should be developed with the cooperation of the County and fire authorities having jurisdiction, and made available at the Monterey County Planning Department.

S-4.29 The County shall assure that successive uses of individual buildings that require new permits for a new use comply with appropriate building standards.

S-4.30 New swimming pools may be required to be plumbed to allow connection to fire fighting equipment, if requested by the local fire jurisdiction.

S-4.31 A zone that can inhibit the spread of wildland fire shall be required of new development in fire hazard areas. Such zones shall consider irrigated greenbelts, streets, and/or Fuel Modification Zones in addition to other suitable methods that may be used to protect development. The County shall not preclude or discourage a landowner from modifying fuel within the Fuel Modification Zone, or accept any open space easement or other easement over land within a Fuel Modification Zone that would have that effect.

S-4.32 Property owners in high, very high, and extreme fire hazard areas shall prepare an overall Fuel Modification Zone plan in conjunction with permits for new structures, subject to approval and to be performed in conjunction with the CDFFP and/or other fire protection agencies in compliance with State Law.

S-4.33 Where new developments are required to provide for fuel modification zones, the cost of such construction shall be borne by the developer. Future maintenance of such fuel modification zones shall be in accordance with the fire defense standards adopted by the State of California. Homeowners shall be responsible for said maintenance.

EMERGENCY PREPAREDNESS

GOAL S-5

ASSURE THE COUNTY IS PREPARED TO ANTICIPATE, RESPOND AND RECOVER FROM EMERGENCIES.

Policies

S-5.1 The County shall participate in developing emergency plans that provide preparation for, as well as a coordinated and effective response to, emergency and disaster events. Plans include, but are not limited to, a multi-jurisdictional Local

Hazard Mitigation Plan (LHMP) and Community Wildfire Protection Plans (CWPPs).

S-5.2 The Monterey County Operational Area Emergency Operations Plan shall include general procedures to implement the nationwide National Incident Management System (NIMS) and statewide Standardized Emergency Management System (SEMS), activate and operate the Operational Area Emergency Operations Center (EOC), coordinate responders, and implement other tactical response measures.

S-5.3 The Coordinated Emergency Response Plans (CERP) for specific threat areas that include specific response and tactical procedures shall be maintained and updated as needed.

S-5.4 Training programs shall incorporate interagency coordination and joint response simulation exercises to include all elements and disciplines of the Monterey County Operational Area Authority.

S-5.5 Emergency preparation shall be enhanced by:

a. Continuing to improve preparedness programs and utilizing the best practices to increase public awareness, educate and organize the public to respond appropriately to disasters, in addition to public safety and emergency service providers.

b. Providing emergency and disaster related information to the public as events occur and coordinating with utility providers during disaster events.

c. Maintaining an ongoing program to train building and safety personnel in risk assessment and ensuring that County building codes keep current with state requirements.

S-5.6 Inter-jurisdictional coordination shall be enhanced by maintaining agreements with local, state, and federal agencies to provide coordinated emergency response. The Monterey County Operational Area Emergency Plan shall be maintained and enhanced in consultation with all applicable agencies.

S-5.7 The County shall maintain current mapping and Geographic Information System (GIS) databases on the location of hazards within Monterey County, shall develop programs for sharing of information with other jurisdictions, and provide appropriate access to databases for emergency public service providers to improve delivery of public safety services.

S-5.8 Emergency services in all areas of the County shall continue to be improved. Priority for those improvements shall be given to the areas of greatest need.

S-5.9 Emergency roadway connections may be developed where distance to through streets is excessive, or where a second means of emergency ingress or egress is critical. New residential development of three units or more shall provide more than one access route for emergency response and evacuation unless exempted by

the Fire jurisdiction. Such protection requirements shall be consistent with adopted fire safety standards.

S-5.10 Critical facilities under County jurisdiction shall be located, designed, and operated in a manner that maximizes their ability to remain functional in a disaster event.

S-5.11 A Development Impact Ordinance to obtain and maintain an acceptable level of emergency services shall be enacted so that new development, to the extent permitted under State law, shall provide its fair share of funding for public facilities and equipment concurrent with the development.

The funds collected under this ordinance shall be designated for the establishment of the public safety facilities serving the new development, either by a newly established public safety jurisdiction or by the existing public safety jurisdiction into which the development exists or is annexed.

S-5.12 New roads, bridges, and utility lines shall be designed and constructed in accordance with applicable seismic safety standards.

S-5.13 Utilities serving new development shall be sited and constructed to minimize the risks from hazards to the greatest extent feasible.

S-5.14 All public thoroughfares, private roads, and deeded emergency accesses shall be considered potential evacuation routes. The Monterey County Coordinated Emergency Response Plans shall provide basic information on the evacuation routes for specific areas. The routes listed in *Table S-1* (*next page*), as well as any other route deemed appropriate to the situation, shall be considered "Pre-designated Emergency Evacuation Routes" and may be employed during tactical situations at the discretion of the Monterey County Sheriff and/or the Incident Commander.

Table S-1 – Evacuation Routes

U.S. Highways:	• U.S. Highway 101	
State Highways:	• Highway 1 • Highway 25 • Highway 68 • Highway 129 • Highway 146	• Highway 156 • Highway 183 • Highway 198 • Highway 218
Numbered County Roads:	• Arroyo Seco Road (G17) • Bitterwater Road (G13) • Carmel Valley Road (G16) • Fort Romie Road (G17) • Hall Road (G12) • Interlake Road (G14) • Jolon Road (G14) • Jolon Road (G18)	• Nacimiento Lake Drive (G19) • Laureles Grade (G20) • Metz Road (G15) • Reservation Road (G17) • River Road (G17) • San Juan Road (G11) • San Miguel Canyon Road (G12)
Other County	• Alisal Road	• Johnson Canyon Road

Table S-1 – Evacuation Routes

Roads:	• Aromas Road • Blackie Road • Blanco Road • Bradley Road • Bryson-Hesperia Road • Cachagua Road • Calera Canyon Road • Camphora Gloria Road • Carpenteria Road • Castroville Boulevard • Cattlemen Road • Cholame Road • Chualar Canyon Road • Cooper Road • Corral de Tierra Road • Crazy Horse Canyon Road • Davis Road • Dolan Road • Echo Valley Road • Elkhorn Road • Elm Avenue • Espinosa Road (Salinas) • Gloria Road • Gonzales River Road • Harkins Road • Indian Canyon Road • Indians Road	• Lockwood-San Lucas Road • Lone Oak Road • Milpitas Road • Mission Road • Molera Road • Nacimiento-Fergusson Road • Nashua Road • Oasis Road • Old Stage Road • Palo Colorado Canyon Road • Paris Valley Road • Parkfield-Coalinga Road • Peach Tree Road • Pesante Road • Pine Canyon Road • Priest Valley Road • Reliz Canyon Road • Robinson Canyon Road • Salinas Road • San Benancio Road • San Juan Grade Road • San Lucas Road • 17 Mile Drive • Spreckels Road • Strawberry Road • Tassajara Road • Vineyard Canyon Road

S-5.15 Tsunami Evacuation Routes are any routes in an incorporated or unincorporated area leading inland away from the coastline to elevations twenty feet or higher.

S-5.16 Inventories of at-risk structures and buildings, including unreinforced masonry buildings, shall be developed by the County to the extent feasible. Measures to abate potentially dangerous buildings through retrofitting or demolition shall be identified and encouraged.

S-5.17 Emergency Response Routes and Street Connectivity Plans shall be required for Community Areas and Rural Centers, and for any development producing traffic at an equivalent or greater level to five or more lots/units. Said Plan shall include:

a. Roadway connectivity that provides multiple routes for emergency response vehicles.

b. Primary and secondary response routes in Community Areas and Rural Centers.

c. Secondary response routes, which may include existing roads or new roads required as part of development proposals.

The County shall review said plans in coordination with the appropriate Fire District.

EMERGENCY SERVICES

GOAL S-6

ENSURE THAT AMBULANCE, SHERIFF, AND FIRE SERVICES ARE AVAILABLE FOR THE PROTECTION OF LIFE AND PROPERTY.

Policies

S-6.1 The availability of sheriff, ambulance, and fire services, resources personnel and equipment shall be considered prior to approving the creation of new lots or the intensification of use on an existing lot, pursuant to *Table PS-1* (*Public Services Element*).

S-6.2 The provision of services shall be prioritized to give the highest priority to areas where the highest concentrations of people reside.

S-6.3 A Development Impact Ordinance shall be established to provide adequate protection coverage and emergency services (sheriff, fire, etc) facilities consistent with State law and the standards in *Table PS-1* (*Public Services Element*).

S-6.4 Establishement of new or expansion of existing Community Areas shall not be allowed in areas where emergency response times would exceed the standards in *Table PS-1* (*Public Services Element*).

S-6.5 Service level goals for fire and ambulance/emergency service are:

a. 8 minutes or less, 90% of the time in urban areas and Community Areas;
b. 12 minutes or less, 90% of the time in suburban areas and Rural Centers;
c. 45 minutes or less, 90% of the time in rural areas (areas not included in a or b above).. (See *Policy S-5.11*)

S-6.6 Informational brochures regarding the levels of fire and ambulance/emergency service available throughout the County may be developed.

S-6.7 Public safety measures, including sequential house numbering, non-repetitive street naming, standardized lettering of house numbers in subdivision design, lighting, and park designs, that allow for adequate view from streets shall be included in the design and construction of new development.

S-6.8 Efforts to reduce crimes and fires through greater application of neighborhood, rural, and industrial crime prevention techniques, and fire prevention education programs, shall be encouraged.

NOISE HAZARDS

GOAL S-7

MAINTAIN A HEALTHY AND QUIET ENVIRONMENT FREE FROM ANNOYING AND HARMFUL SOUNDS.

Policies

S-7.1 New noise-sensitive land uses may only be allowed in areas where existing (*Figures 9 A-H*) and projected (*Figures 10 A-E*) noise levels are "acceptable" according to "Land Use Compatibility for Community Noise Table" (*Table S-2, next page*). A Community Noise Ordinance shall be established consistent with said Table that addresses, but is not limited to the following (*Noise level maps are located at the end of this Element)*:

a. Capacity-related roadway improvement projects.
b. Construction-related noise impacts on adjacent land uses.
c. New residential land uses exposed to aircraft operations at any airport or air base.
d. Site planning and project design techniques to achieve acceptable noise levels such as: building orientation, setbacks, earthen berms, and building construction practices. The use of masonry sound walls for noise control in rural areas shall be discouraged.
e. Design elements necessary to mitigate significant adverse noise impacts on surrounding land uses.
f. Impulse noise.
g. Existing railroad locations & noise levels.

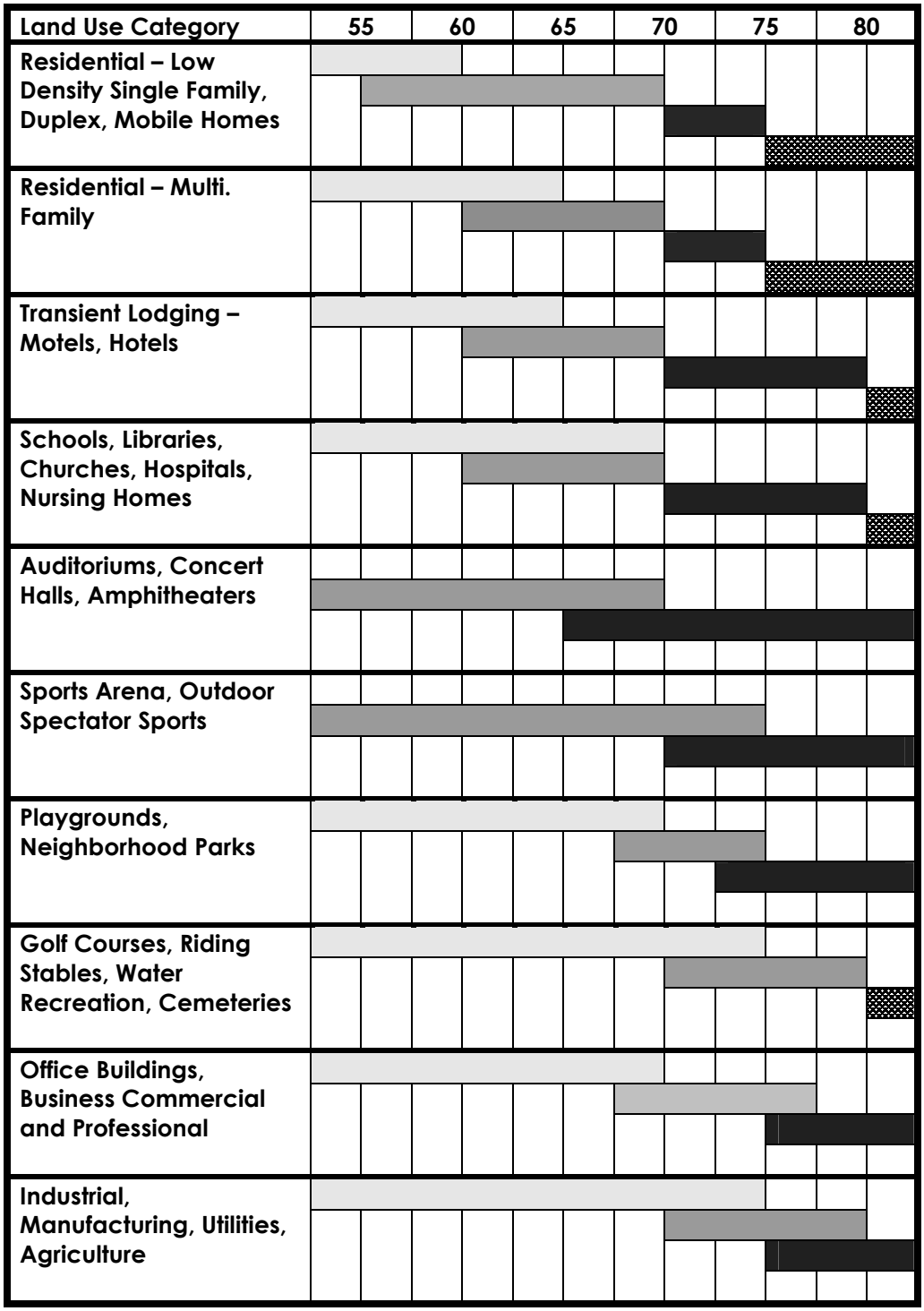
S-7.2 Proposed development shall incorporate design elements necessary to minimize noise impacts on surrounding land uses and to reduce noise in indoor spaces to an acceptable level.

S-7.3 Development may occur in areas identified as "normally unacceptable" provided effective measures to reduce both the indoor and outdoor noise levels to acceptable levels are taken.

S-7.4 New noise generators may be allowed in areas where projected noise levels (*Figure 10*) are "conditionally acceptable" only after a detailed analysis of the noise reduction requirements is made and needed noise mitigation features are included in project design.

S-7.5 New noise generators shall be discouraged in areas identified as "normally unacceptable." Where such new noise generators are permitted, mitigation to reduce both the indoor and outdoor noise levels will be required.

TABLE S-2
Community Noise Exposure
Ldn or CNEL, dB



INTERPRETATION:

Normally Acceptable
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply or air conditioning will

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable
New construction or development should generally not be undertaken.

Source: OPR General Plan Guidelines

S-7.6 Acoustical analysis shall be part of the environmental review process for projects when:

a. Noise sensitive receptors are proposed in areas exposed to existing or projected noise levels (*Figures 9 and 10*) that are "normally unacceptable" or higher according to *Table S-2* ("Land Use Compatibility for Community Noise").

b. Proposed noise generators are likely to produce noise levels exceeding the levels shown in the adopted Community Noise Ordinance when received at existing or planned noise-sensitive receptors.

S-7.7 All proposed discretionary residential projects that are within roadway or railroad noise contours of 60 CNEL or greater shall include a finding of consistency with the provisions of the Noise Hazards section of the Safety Element. If found that roadway noise exceeds the 60 CNEL within the project site, a project-specific noise impact analysis shall be required. If impacts are identified, the applicant shall conduct mitigation analysis using published Caltrans/Federal Highway Administration guidelines and implement mitigation measures as required. Mitigation measures may include, but are not limited to sound walls, adjacent roadway design, dual pane glass, building location or design, etc. Any proposed mitigation measures shall be concurrently implemented with the implementation of the project.

S-7.8 All discretionary projects that propose to use heavy construction equipment that has the potential to create vibrations that could cause structural damage to adjacent structures within 100 feet shall be required to submit a pre-construction vibration study prior to the approval of a building permit. Projects shall be required to incorporate specified measures and monitoring identified to reduce impacts. Pile driving or blasting are illustrative of the type of equipment that could be subject to this policy.

S-7.9 No construction activities pursuant to a County permit that exceed "acceptable" levels listed in *Policy S-7.1* shall be allowed within 500 feet of a noise sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays, prior to completion of a noise mitigation study. Noise protection measures, in the event of any identified impact, may include but not be limited to:

- Constructing temporary barriers, or
- Using quieter equipment than normal.

S-7.10 Construction projects shall include the following standard noise protection measures:

- Construction shall occur only during times allowed by ordinance/code unless such limits are waived for public convenience;

- All equipment shall have properly operating mufflers; and
- Lay-down yards and semi-stationary equipment such as pumps or generators shall be located as far from noise-sensitive land uses as practical.

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Figure 8A -Regional Faults to be inserted
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Figure 8B – FEMA Flood Insurance Rate Map to be inserted
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Figure 8C – Awareness Floodplain Maps to be inserted
(8.5” x 11”)

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Figure 8D – Dam Inundation Map to be inserted
(8.5” x 11”)

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Figures 9 A-H-Existing Noise Contours to be inserted
(8.5” x 11”)

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Figures 10 A-E -Projected Noise Contours to be inserted
(8.5” x 11”)