Multi-Hazard Mitigation Plan 4.3 Capability Assessment

Thus far, the planning process has identified the natural hazards posing a threat to Placer County and described and quantified the vulnerability of the County and communities to these risks. The next step, prior to forming Goals and Objectives for improving each jurisdiction's ability to reduce the impacts of these risks, is to assess what loss prevention mechanisms are already in place. Doing so provides the County's "net vulnerability" to natural disasters and more accurately focuses the goals, objectives and proposed actions of this plan. This part of the planning process is referred to as the "Capability Assessment."

The HMPC took two approaches in conducting this assessment. First, an inventory of existing policies, regulations and plans was made. These policy and planning documents were collected and reviewed to determine if they contributed to reducing hazard related losses, or if they inadvertently contributed to increasing such losses. Second, an inventory of other mitigation activities was made through the use of a matrix. The purpose for this effort was to identify activities and actions beyond policies, regulations and plans that were either in place, needed improvement, or could be undertaken, if deemed appropriate.

Below is a summary of how each of these documents contributes to an overall Hazard Mitigation framework. Each point identifies where and how mitigation concepts, principles and measures are integrated into the normal day-to-day activities of the local governments.

PLACER COUNTY

General Plan, Last Updated August 16, 1994

- The General Plan is considered a comprehensive and long-term document that serves as the communities "constitution" for land use and development. The General Plan is divided into two documents: the General Plan Background Report which inventories and analyzes existing conditions in the County and the General Plan Policy Document, which includes goals, policies, standards, and implementation programs. A Draft Update is currently under consideration and has already been recommended for approval by the Planning Commission. It will be considered by the Board of Supervisors in 2005.
- The Land Use Element provides a broad outline of future land use patterns in the unincorporated county and provides policies for existing and future residential, commercial, industrial, recreation, agricultural, open space, visual and scenic, land uses of the county. In terms of general land use, the Land Use Element states that the County shall permit only low-intensity forms of development in areas where natural or human-caused hazards are likely to pose a significant threat to health, safety, or property. The Land Use Element also has a policy to encourage the preservation of historic and attractive buildings in downtown areas. Another policy requires that development on hillsides employ design, construction, and maintenance techniques that ensure development do not cause or worsen natural hazards such as erosion, sedimentation, fire or water quality; and minimize risk to life and property from slope failure, landslides and flooding.
- The Housing Element was mostly recently updated in April 2003. Placer County has adopted the Uniform Building Code (UBC), the Uniform Housing Code, and the Uniform Code for the Abatement of Dangerous Buildings. According to the Housing Element, slight modifications, such as special roof design requirements to accommodate snow loads and avalanche protection standards have been made to the UBC for construction above a 5,000-foot elevation. Environmental constraints for building homes, which are in-place to preserve water quality, air quality, wildlife habitat, and other environmental resources, are recognized as an obstacle to creating affordable housing in the Tahoe region because meeting those environmental standards creates additional costs.
- The Public Utilities and Services Element contains policies for stormwater drainage, which include improving urban and suburban runoff through mitigation measures such as artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks and other best management practices (BMPs). More specifically, a stormwater policy requires that developers encase, or protect domestic water supply canals where they pass through developments with lot sizes of 2.3 acres or less and where subdivision roads are constructed 100 feet upslope from canals. Also within the Public Facilities and Services Element is a section dedicated to flood protection. The goal of this section is to protect the lives and property of the citizens of Placer County from hazards associated with

development in floodplains and to manage floodplains for their natural resource values. Some policies in this section are:

- 4.F.1. The County shall require that arterial roadways and expressways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.
- o 4.F.5. The County shall attempt to maintain natural conditions within the 100-year floodplain of all rivers and streams except under the following circumstances:
 - Where work is required to manage and maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, California Department of Fish and game regulations, and Clean Water Act provisions administered by the U.S. Army Corps of Engineers; or
 - When facilities for the treatment of urban runoff can be located in the floodplain, provided that there is no destruction of riparian vegetation.
- o 4.F.9 The County shall continue to implement floodplain zoning and undertake other actions required to comply with state floodplain requirements, and to maintain the County's eligibility under the Federal Flood Insurance Program.
- 4.F.11. To the extent that funding is available, the County shall work to solve flood control problems in areas where existing development has encroached into a floodplain.
- The Public Utilities and Services Element also contains a Fire Protection Services section with a main goal of protecting residents of and visitors to Placer County from injury and loss of life and to protect property and watershed resources from fires. One fire protection policy requires new development to fund fire protection facilities and operations, which maintains service standards.
- The Recreational and Cultural Resources Element establishes a goal of maintaining park and recreational facilities throughout the County to serve the needs of present and future community members. One associated policy is to strive to achieve and maintain a standard of 5 acres of improved parkland and 5 acres of passive recreation area or open space (floodways included) per population of 1,000. This Element also maintains a goal to identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.
- The Natural Resources Element focuses on policies structured around the protection of the County's streams, creeks, and groundwater, and the fish and wildlife habitat they provide. For example, the County requires sensitive habitat buffers, which include 100 feet from the centerline of perennial streams to development and 50 feet from centerline of intermittent streams. Another policy states that all development in the 100-year

floodplain must comply with the *Placer County Flood Damage Prevention Ordinance*. Policies also encourage the prevention of runoff into wetland areas. Implementation programs call for a maintaining a countywide inventory of ecologically significant resource areas, as well as current maps of critical habitat areas, and an updated list of state and federal rare, threatened and endangered species within the County

- The Health and Safety Element focuses on policies related to seismic events, flood hazards, fire hazards, airport hazards, emergency management, hazardous materials, and avalanche hazards:
- With regard to seismic safety, the County requires preparation of soils and geologicseismic analysis reports prior to permitting new development in areas prone to geological or seismic hazards. Further, habitable structures or sewage disposal systems on or in critically expansive soils are prohibited unless adequate mitigation is incorporated. Policies are also in-place to prevent development that would be prone to landslides. Another policy requires that facilities proposed for development in areas subject to earthquake activity and/or liquefaction must incorporate design measures to minimize damage.
- With regard to flood hazards, policies are in place to: maintain natural conditions within the 100-year floodplain; require areas subject to flooding to "flood-proof"; mitigate impacts of development in Placer County that could increase runoff in adjacent jurisdictions; prohibit the construction of emergency facilities within the 100-year floodplain; and avoid alteration of waterways whenever possible.
- Fire hazard policies in place to ensure development in high-fire-hazard areas is designed
 to minimize risk from fire hazards. Further, the County requires that discretionary
 permits for new development in fire hazard areas be conditioned to include requirements
 for fire-resistant vegetation, cleared firebreaks, or a fuel management program.
 However, there is some concern to whether this wording is too broad to be effectively
 enforced.
- The emergency management section of the Health and Safety Element states that the County shall ensure critical emergency response facilities such as hospitals, fire stations, dispatch centers, and emergency operations centers, have minimal exposure to flooding, seismic and geological effects, fire, avalanche, and explosions. The County's Emergency Operations Plan is referenced here as well. One of the implementation programs within this element requires that the County conduct an evaluation of County-owned emergency management facilities and public utility systems for susceptibility to flood and seismic hazards.
- Per avalanche hazard policies, the County is required to maintain maps of Potential Avalanche Hazard Areas (PAHAs) and require new development in such areas to be sited, designed, and constructed to minimize avalanche hazards. The Planning Department maintains hard copies of these maps.

• Finally, the Public Health and Safety Element has a policy that calls for an assessment district to provide mosquito abatement activities to prevent the spread of disease in Western Placer County.

County Code, March 2004

- Chapter 15, Building and Development, Article 15.52, Flood Damage Prevention Regulations. This article is also considered Placer County's Flood Damage Prevention Ordinance. Standards of construction require that all new construction and substantial improvements shall be anchored to prevent flotation. New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated at a minimum of one foot above the base flood elevation, which shall be certified by a California registered civil engineer or licensed land surveyor. Standards for developing lots located in both Zones A and C require that if a portion of a lot is within a flood hazard and another portion of the lot is outside of the flood hazard, construction shall be located outside of the hazard. Standards for utilities require new replacement of water supply and sanitary sewage systems to be designed to minimize infiltration of floodwaters. On-site waste disposal systems shall be located to avoid impairment during floods. Standards for subdivisions require all preliminary subdivision proposals identify flood hazards and base elevations. The final elevation must be certified by a California registered civil engineer or licensed land surveyor prior to construction. With regard to floodways, no encroachments of development, including fill are allowed in these areas unless certified by a civil engineer, showing that encroachments won't increase flood levels.
- Chapter 15, Building and Development, Article 15.48, Grading, Erosion, and Sediment Control Regulations. This article requires a permit for most grading conducted within the unincorporated areas of Placer County. A primary objective is to is to control all grading activities to ensure that grading does not obstruct, impede, or interfere with the natural flow of stormwaters, in such a manner as to cause flooding where it would not otherwise occur, aggravate any existing flooding conditions, or cause accelerated erosion.
- Chapter 15, Building and Development, Article 15.36.010, Development Fees. This article requires the payment of fees to be paid to the fire protection agency for the benefit of the owners or residents of the development where a local fire protection agency has adopted a capital improvement plan and identified a development fee to satisfy the plan.
- Chapter 15, Building and Development, Article 15.40, Factory-Built Housing. This article requires all factory-built housing to be placed on an adequate foundation and be provided with all normal utilities required for any standard housing.

Chapter 17, Zoning. This section of the County Code is the tool to achieve the objectives of the General Plan and characterizes land use standards for all parcels in unincorporated Placer County. It addresses setbacks, buffers, natural resources protection and drainage. For example,

the flood hazard combining district identifies areas subject to the 100-year floodplain and requires that new development in this combining zone abide by standards within the Placer County Flood Damage Prevention Ordinance (Article 15.52). Likewise, the geological hazard combining district was established to identify areas where geological and soil conditions may present hazards to life or property. All land use permit applications for projects located within this district require a report describing all geological and avalanche hazards in the region proposed for development.

• **Title 14, California Code of Regulations (CCR).** County adopted most of the California Code of Regulations (CCR), Title 14, Natural Resources, Division 1.5 Department of Forestry and Fire Protection, Chapter 7. Fire Protection, Subchapter 2. SRA Fire Safe Regulations.

Stormwater Management Plan, 2003-2008 (Revised March 1, 2004)

This comprehensive plan is designed to ultimately reduce pollution in stormwater runoff in compliance with the County's National Pollutant Discharge Elimination System (NPDES) stormwater permit within portions of western Placer County (excludes Foresthill and Colfax). The plan includes processes for accomplishing the goals of minimizing construction site runoff as well as post-construction stormwater management in newly developed and redeveloped areas.

Placer County Flood Control and Water Conservation District's Stormwater Management Manual, 1990.

The primary purpose of the District is to protect lives and property from the effects of flooding by comprehensive, coordinated flood prevention planning, using consistent standards to evaluate flood risk, and by implementing flood control measures such as requiring new development to construct detention basins and operation and management of a flood warning system. This manual presents policy, guidelines, and specific criteria for the development and management of natural resources, facilities and infrastructure for stormwater management. Flooding is recognized as the primary proble, associated with development occurring adjacent to streams and a consequent increase in stormwater runoff. The plan refers to the Basic Drainage Law Requirements which include four general principles that apply to development projects in general. The principles dictate what upstream and downstream property owners must do to minimize alteration to existing, functional drainage patterns in the region of their property.

Auburn/Bowman Community Plan, Hydrology Study, JMM 1992

This study covers the Auburn/Bowman area and includes flood mitigation recommendations.

Dry Creek Watershed Flood Control Plan, JMM 1992

This plan covers the Dry Creek Watershed area and includes flood mitigation recommendations.

Local Emergency Operations Plan (February 2004)

The Emergency Operations Plan, including the Placer Operational Area, includes information on hazards facing the county and associated response and recovery information.

Community Plans

Placer County has developed 25 community plans. The following are available online:

- Auburn/Bowman Community Plan
- Carnelian Bay Community Plan
- Draft Foresthill Divide Community Plan
- Granite Bay Community Plan
- Horseshoe Bar/Penryn Community Plan
- Kings Beach Community Plan
- Meadow Vista Community Plan

Other Services/Groups

American River Watershed Group

This organization focuses on natural resource management issues in the North and Middle Forks of the American River, including issues associated with safety of life and property, water quality, wildland fire management, and education.

Lake Tahoe Regional Fire Chiefs Association

Similar to the Western Placer County Fire Chief's Association, this association is comprised of fire chiefs primarily located in the Lake Tahoe area.

Mosquito Abatement

The Placer Mosquito Abatement District covers the western part of the County, which extends from Newcastle to the county lines of Sacramento, Sutter, and Yuba. In spring of 2000, Measure M was passed within western Placer County to fund the Placer Mosquito Abatement District, which was originally formed on June 18, 1996. In 2004, voters approved extending the Placer County Mosquito Abatement District to cover the entire county. The District provides information on facts about West Nile Virus and measures that can be taken to minimize contact with mosquitoes. Additionally, Placer County formed a WNV Task Force. Over the last year, the Task Force has planned for surveillance and abatement activities throughout the County; has mapped many of the standing water sources throughout the County; has conducted surveillance and abatement services; and has provided public information and conducted public education in the County.

North Fork American River Watershed Coordination Group

The California Department of Conservation has granted funds to the Placer County Resource Conservation District to be used for Watershed Coordination for 3 years (2003 to 2007). The North Fork American River Watershed actually includes both the North and Middle Forks of the American River. The objectives of the group is to coordinate collaboration between all stakeholders; implement education and outreach with landowners, businesses, and agencies; facilitate implementation of water quality improvements and ecosystem restoration; and inform and educate stakeholders on water quality issues and implement a water quality data collection program.

Office of Emergency Services

The Placer Operational Area Office of Emergency Services (OES) is the emergency management agency for Placer County. Placer County OES is headquartered in Auburn, the County seat. The office provides service countywide, in cooperation with local cities and special districts, such as fire and law agencies.

OES' Responsibilities include:

- Directs the County's overall response to natural and human-caused disasters.
- Assigns emergency responsibilities to the various departments of the County.
- Coordinates the response and recovery efforts of governmental and non-governmental agencies during disasters.
- In the case of a possible terrorist attack, works with the Placer County Health Officer and the Placer County Sheriff's Office to respond and protect public health and safety.
- Manages the County's Emergency Operations Centers.
- Conducts emergency drills and simulations.

OES also provides updated emergency-related information to the public on the County's website. This site provides weather and flooding information, which includes guidance on protecting your home from winter storms, where to get sandbags, preparation for what to do before, during and after floods, etc. Also provided are links to national, state, and local information on fires, earthquakes, highway and road information, and general federal and state emergency information.

Placer County Fire Safe Alliance

The Placer County Fire Safe Alliance began 12 years ago and includes members from federal, state, and local fire and non-fire agencies, the several fire safe councils in the County, and the Resource Conservation District. In 2001, the Alliance became a county-wide organization and switched from an information-sharing group to an action-oriented organization with regard to wildfire safety. Various programs and valuable information are offered to the public to help residents learn how to protect their property from fires. The Alliance and its partners have implemented many fire safe projects in the County, including the Placer County Chipper Program, defensible space inspections, and vegetation reduction projects.

Placer County Law Enforcement Association

This group is an association of law enforcement agencies from Placer County.

Placer County Flood Control and Water Conservation District

Flood control services in Placer County are provided by the Placer County Flood Control and Water Conservation District, which was established in 1984 as a special district to address regional flood control issues arising with growth. The District has developed a county flood warning system, a Flood Response Handbook (updated annually) and also sets standards for development and assists the County's OES during flood events. The District pursues planning and implementation of regional detention and retention flood control facilities in partnership with local member agencies. The District also administers an annual storm channel maintenance program in unincorporated portions of the County.

Placer County Resource Conservation District (RCD)

The Placer County Resource Conservation District (RCD) was founded in 1947. It is dedicated to:

- Identifying natural resource management and conservation issues;
- Providing education and technical assistance or direction to private landowners and local agencies/organizations; and
- Inspiring and mobilizing public conservation awareness and involvement for implementing programs and plans (including wildfire risk reduction) to conserve and enhance the natural resources within the County.

The RCD works with farmers and ranchers on agricultural issues. In addition, CDF partners with the RCD for definition of agency Vegetation Management Plans.

Tahoe Regional Planning Agency

The Tahoe Regional Planning Agency (TRPA) has developed a Best Management Practices (BMP) program, which are defined in the Lake Tahoe Basin as "structural and nonstructural practices proven effective in soil erosion control and management of surface runoff in the Lake Tahoe Region." An example of a BMP required for all property owners in the Lake Tahoe Basin (per subsection 25.5.A of the TRPA Code of Ordinances) is an infiltration facility designed to accommodate the volume of runoff from a six-hour storm with a two-year recurrence probability.

Western Placer County Fire Chief's Association

The Western Placer County Fire Chief's Association is comprised of fire chiefs primarily located in the Western portion of the County. A primary purpose of the group is to develop the

administrative abilities of Fire Chief's of Placer County, and to act as an Advisory Association to all governmental agencies as it pertains to fire protection and emergency services in Placer County. As part of their efforts, they provide aid in the training, preparation, and coordination of Placer County's Emergency Response Departments prior to, during and after a catastrophic emergency.

County Projects

The County also has many planned and ongoing projects focused on minimizing future losses associated with identified hazards. Many of these projects are sponsored and implemented by one or more County departments and/or other state and local agencies and organizations. Examples of projects include the following:

Flood Control Projects

Placer County and the Placer County Flood Control and Water Conservation District have identified the following projects that have either been completed, are ongoing, or in the planning stage.

Implementation Projects

- Local detention/retention structures to mitigate runoff impacts, associated with new development
- Miners Ravine Off-Channel Detention Basin Project a multi-objective flood control, creek restoration and public recreation project
- Secret Ravine Multi-objective Floodplain Restoration Sites 1 and 3 (also known as Alternative 4) from the August 2003 feasibility study. (Note that property acquisition would be part of grant request (6.5 million))
- Flood Warning System Upgrades Purchase and installation of additional precipitation and stream level gages; addition of gage adjusted radar capabilities; design, installation and calibration of flood forecasting software.
- Squaw Creek Embankment Reinforcement Project completed after the 1997 flood to protect future stream erosion and critical sewer infrastructure

Planning Projects

 Detailed re-study, Cross Canal Watershed Flood Control Plan (Update hydrology models, identify regional retention needs, identify critical bridge and culvert replacements, identify potential structure elevation needs, identify potential multi-objective flood control projects)

• Detailed re-study, Cross Canal Watershed Flood Control Plan (Update hydrology models, identify regional retention needs, identify critical bridge and culvert replacements, identify potential structure elevation needs, identify potential multi-objective flood control projects)

Placer County Chipper Program

The Placer County Chipper Program is free to all residents of the County, except for Truckee, which is served by the Nevada County Fire Safe Council Chipper Program (also free) since it straddles the County line. The program provides a very cost-effective way for residents to convert large piles of flammable material into small piles of useable biodegradable material. Initially started with funds from a PG&E Settlement after a major wildfire caused by PG&E power lines, subsequent funding was provided as part of a Proposition 204 Grant from the State of California. Funding for the past several years, and for the next few, is coming from a WUI Grant. As with most fire safe projects in the County, the Chipper Program is accomplished through an inter-agency partnership. Funding is administered by the RCD, project management and equipment maintenance are provided by CDF, and the Placer County Sheriff's Office provides jail inmates for the crews. Over the past seven years, since the program began in 1998, an estimated total of 17,486 tons have been chipped.

Fire Mitigation Projects

The following list identifies completed and in-process projects led by the Placer County Fire Safe Alliance Partners. This list does not include other agency led projects conducted under separate budgets.

- Auburn Shaded Fuel Break Private Lands
- Auburn Shaded Fuel Break Public Lands
- Community education and outreach, including Coffee Klatches
- Community Fire Safe Plan Greater Auburn Area Fire Safe Council (FSC)
- Community Fire Safe Plans Foothills FSCs
- Coordinator for the Placer County Fire Safe Alliance
- Cost-share fuel reduction
- Defensible Space & Healthy Forest Handbook
- Defensible Space Inspections 2001-2004
- Demonstration Shaded Fuel Breaks
- Finning Mill Road Shaded Fuel Break
- Fire & Water publication in 1998 and 2003
- Fire Wise Construction Workshop
- Foresthill Evacuation Plan
- Foresthill/Iowa Hill Evacuation Routes Map

- GIS Database
- Healthy Fire-Safe Forest Self Guided Tour brochure
- Iowa Hill Chipper
- Iowa Hill Fuel Breaks
- Kings Hill Road (Iowa Hill Shaded Fuel Break)
- Legislator Tour
- Meadow Vista Program Timber Environmental Impact Report (PTEIR)
- Placer County Chipper Program 1998-present
- Propose goals and policies for Strategic Fire Protection and Vegetation Management in the Weimar-Applegate-Colfax Area Municipal Advisory Council (WAC MAC) Community Plan Update
- You and Your Forest: A "How-to" Workbook

An example of the success of these projects is exemplified in the PRC 4291 Defensible Space Inspection Project. This project took place in 2003-2004 and was funded by a National Fire Plan grant. A total of 7,718 property inspections took place, which covered 8,850 structures (these include outbuildings as well as homes). Only 462 violations were noted, which required second and possibly third inspections. The communities covered by the inspections were Foresthill, Meadow Vista, Weimar, Applegate, Clipper Gap, Cape Horn, and the unincorporated County surrounding the City of Colfax.

Although not directly related to Placer County, the value of defensible space and vegetative management is illustrated through the photos below taken of the 2002 Cone Fire occurring in both the Blacks Mountain Experimental Forest, where various fuel reduction treatments had been conducted and in the Lassen National Forest, where no fuel treatments had been done.

CONE FIRE IN TREATED AREA







Other fire mitigation projects include those implemented by a variety of agencies such as BLM, USFS, CDF, and others and include the following projects:

- Fuels Treatment and Reduction (prescribed burns, mechanical thinning/removal, fuelbreaks)
- Vegetation Management
- Defensible Space
- Healthy Forest Restoration
- Response and Evacuation Planning
- FireWise Construction
- Firesafe landscapes
- Fire Education/Community Outreach
- Fire Safe Freeway
- Water Supply

Community Wildfire Protection Plans

National, state, and local policies have focused efforts on reducing the threat of wildfire, particularly in the wildland urban interface. Community wildfire protection plans assist communities in defining priorities for the protection of assets in the wildland urban interface areas. Currently there are several ongoing efforts to develop these plans within the County. One such plan currently in Draft form is the Community Wildfire Protection Plans for the California Portion of the Lake Tahoe Basin. This plan is being prepared on behalf of the following groups: Tahoe Basin Fire Safe Council: Fallen Leaf Fire Department, Lake Valley Fire Protection District, Meeks Bay Fire Protection District, and North Tahoe Fire Protection District.

Other

- The County, including its various jurisdictions and special districts conduct a variety of
 hazard preparedness and response training and drill sessions. The training and drill
 sessions are focused on familiarizing the trainees with established department procedures
 and equipment to improve overall hazard preparedness and response throughout the
 County. Also included is evacuation planning for the County.
- 1997 Coordination Agreement with Flood Control District. The County, Cities (Auburn, Colfax, Lincoln, Loomis, Rocklin, and Roseville) and the Flood Control District have entered into an Agreement in order to jointly coordinate in the development, support, and operation of the Placer County Flood Control and Water Conservation District. The District has been created to provide countywide water conservation; development of water resources; and control and management of drainage, storm, flood, and other waters; and exercise other powers as provided by law. The District was formed as the flood-related problems cannot be economically or efficiently solved through individual actions of existing public entities within Placer County.
- The various fire districts throughout the County maintain mitigation plans such as: Fuels Management Plans and Community Wildfire Protection Plans.

CITY OF AUBURN

General Plan, 1993

The Safety Element of the City's General Plan identifies areas with flood hazards as the natural drainage channels of the Auburn Ravine, Dutch Ravine and Rock Creek, and the tunnel section of the Auburn Ravine under Old Town. This element also recognizes the City of Auburn to be located in a seismically active region.

Building Codes

- Adopted Uniform Building Code 1997/2001, includes roofing ordinance for Class A roofing materials for all residential building within the City limits.
- Adopted Uniform Fire Code UFC 2000/CFC 2001, includes ordinance designating Very High Fire Severity Hazard Zones and Wildland Urban Interface areas within the City; ordinance of Fire Safe Building Standards for new development in VHFSHZ & WUI; and GIS and hard copy maps of Fire Hazard Zones, Fire Evacuation Zones, Fire Response Areas, and Fire Hydrants.

Other

- The City of Auburn has instituted new fire safe measures for the City. As part of the
 City's fire prevention efforts, the city provides a fire prevention checklist for
 homeowners on the City's website.
- Fuel Modification Program, "Shaded Fuel Break' for approximately 120 private parcels in the City bordering the American River Canyon.
- Annual home inspections for defensible space and vegetation management; one residential subdivision is completed each year.
- Public awareness programs and information through media and community events, averaging four to five times each year.
- Other available maps include GIS and hard copies of sewer, water, stormwater, and floodplains.
- Development and implementation of a stormwater treatment plan.

CITY OF COLFAX

General Plan, 1998

The Safety Element recognizes that Colfax and the surrounding area are designated as a "very high hazard area" with regard to wildland and urban-wildland fires. Flooding is not recognized as a hazard to the City as no portions are located within the 100-year floodplain. The Safety Element notes that the State's listing of active faults does not include any showing surface rupture in the City of Colfax, but relatively little fault mapping has been completed in the region.

Other

- The City upgraded its building code to the 1997 Universal Building Code in 2003.
- In 2004, the City updated its Hillside Development Guidelines to address wildfire issues, particularly vegetation management and restrictions when building on slopes.
- The City has increased enforcement of its weed abatement ordinance in 2002.
- The Colfax Lions Club is ensuring that all homes within the city have adequate address signs.
- The Wastewater Treatment Plant is being upgraded, which will lessen the potential of a contamination event; this work is due to be complete in 2006.

CITY OF LINCOLN

General Plan, Updated September, 2003

- The Public Facilities and Services Element was updated with a policy implemented to encourage project designs that minimize drainage concentrations and impervious coverage, avoid floodplain areas, and be designed to provide a natural water course appearance. Another policy requires new development in the City to provide stormwater detention sufficient to limit outflow to 90% of pre-project conditions for the 100-year flood event. Further, new development is required to provide stormwater-retention sufficient for the incremental runoff from an eight-day 100-year storm. Most significantly, per this element, the City shall prohibit development or major fill or structural improvements (except for flood control purposes) within the 100-year floodplain.
- The Open Space and Conservation Element states that all lands located within 100-year floodplains and within a minimum of 50 feet from the center channel of perennial and intermittent streams and creeks are designated open space, thereby protecting these areas from development. Another policy calls for the City to prepare a historical resources inventory.
- The Health and Safety Element includes policies created to minimize the impacts of natural hazards. For example, new structures intended for human occupancy must be designed to minimize risk due to groundshaking. Policies are also in-place to hillside development and to discourage development in areas prone to seismic hazards. The flood section of this element includes a policy to require master drainage plans as a condition of approval for large projects. Another policy is that the City will work with the Placer County Flood Control District to develop flood control facilities to help provide regional flood protection. Further, any new residential construction is required to have its lowest habitable floor elevated above the base flood level elevation. Finally, this element has a urban and wildland fire section which includes policies to expand existing fire protection and emergency services, enforce building codes, educate residents of fire hazards, and to develop wildland fire management plans for projects near open space areas.

Municipal Code, 10/90

Chapter 15.32, Flood Damage Prevention. This ordinance includes provisions to ensure notification to potential buyers of flood hazards putting properties at risk and methods for reducing flood losses. Specific provisions include language for requiring new construction and substantial improvements to be at or above the base flood elevation; a prohibition against new development increasing the base flood elevation by more than one foot, as well as other flood prevention language.

Department of Public Works Design Criteria & Procedures Manual, June 2004

The manual includes references to Section 10, Drainage, of the Municipal Code. These design standards for establishing elevations based on FEMA floodplain maps are more stringent than those found in Chapter 15.32 of the municipal code.

TOWN OF LOOMIS

General Plan, 2001

The Safety Element notes that flooding has been a minor hazard in the Town of Loomis because of it's relatively elevated location; however, portions of the town are within the 100-year and 500-year floodplain. Local drainage problems are attributed to inadequately sized culverts and bridges, which include culverts under Interstate 80 (I-80); the Horseshoe Bar Road crossing over Secret Ravine; the railroad and Taylor Road crossings of Sucker Ravine and Antelope Creek.

Municipal Code, June, 2004

- Chapter 11.04, Construction Codes. The City of Loomis has adopted both the Uniform Building Code and Uniform Fire Code, among several other construction codes.
- Chapter 11.08, Flood Damage Prevention. This ordinance establishes standard regulations for development within flood hazards, similar to all other areas of Placer County (e.g., all new construction must be anchored to prevent flotation). New construction is required to be elevated at least one foot above the base flood elevation within the Town of Loomis. Encroachment into the floodway is prohibited unless new development is certified by a registered professional engineer or architect, who demonstrates that no increase in the base flood elevation would occur upon project implementation.

CITY OF ROCKLIN

General Plan, 1991, (2004 Draft Updated General Plan)

- The City's General Plan is currently being updated. As part of the update, a "Constraints, Opportunities and Options Report" has been drafted to discuss environmental constraints to growth and opportunities for growth and suggest where General Plan policies can be improved. This report also looks extensively at past and future growth rates within Rocklin and Placer County. According to growth projections produced by Sacramento Area Council of Governments (SACOG), Rocklin's average annual growth rate is expected to remain between 2.6 and 4.3 percent over the next 10 years. The report also states that Placer County was the fastest growing county in California in 2002. With regard to current safety policies, the City currently requires owners of large areas of grassland that are annexed to the City to pay for the costs for the City to contract with the California Department of Forestry (CDF) to provide aerial fire suppression. The Constraints, Opportunities and Options Report suggests updated policies within the General Plan that includes require these additional costs to be borne by the development creating the additional impact.
- The Safety Element of the General Plan has policies in-place to support the goal of minimizing the danger of natural and man-made hazards and to protect people from earthquakes, fires, floods, and other disasters. For example, master drainage plans must accompany proposed large development projects. The City participates in the NFIP and also requires new residential construction to have its lowest habitable floor **elevated at least two feet above the base flood level elevation.** This element recognizes the threat of flooding from several creeks that flow through the City of Rocklin (e.g., Antelope, Aguilar, Secret Ravine, Clover Valley, Pleasant Grove, and Sucker). The City is also required to maintain an emergency plan. Another policy encourages residential development to be located within two road miles from a fire station and that high-density commercial development is located one and one-half road miles from a fire station. With regard to seismic hazards, the General Plan does not consider Rocklin to be in danger due to a combination of significant distances to major faults and general stability of underlying geology within the City.

City of Rocklin Municipal Code

- Chapter 15.04, Uniform Construction Codes. The City has adopted the Uniform Construction Codes including Building and Fire Codes as part of its building regulations. These regulations govern such issues as seismic and fire safety requirements in building and construction.
- Chapter 15.16, Flood Hazard Areas (Flood Hazard Ordinance). Sets standards for development within flood hazard areas, including the requirement that all new construction and substantial improvement of any structure shall have the lowest floor,

including basement, elevated two feet above the base flood elevation, and shall be certified by a registered engineer or surveyor.

- Chapter 2.32, Emergency Organization (Emergency Operations Plan). This ordinance defines the structure for the roles of all emergency affiliated staff within the City, including powers and duties of each person.
- Chapter 17 & 17, Subdivisions and Zoning. The use of subdivision and zoning ordinances creates procedures for regulating subdivisions and establishing zoning requirements to protect the health, safety, and welfare of the people.

City of Rocklin Administrative Guidelines

The Rocklin Fire Department established administrative guidelines for fire prevention measures such as for maintenance of vacant parcels, fire breaks, weed abatement, burn control, and the arson task force.

City of Rocklin Floodplain Management Program

A community effort combining zoning, building requirements, and floodplain ordinances to reduce risk of flood damage. The city of Rocklin participates in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. Examples include requirements for stormwater control, such as drainage and grading requirements.

Dry Creek Watershed Flood Control Plan, 1992

This plan is pertinent to the southeast one-half of the City of Rocklin. The plan anticipated that future land use changes would increase impervious surface area in the watershed by 50 percent, resulting in increased flood flows. The plan recommends strategies to prevent flooding such as detention structures, flood maintenance activities, and erosion control during the rainy season.

Feasibility Study of 3 Floodplain Restoration Sites, 2003

This study, along Secret Ravine within the City of Rocklin, will help meet regional detention goals within the watershed.

Other

• The City of Rocklin participates in a Juvenile Firesetter Program, which is a regional program to educate, assist, and council children who "exhibit firesetting behavior". Approximately 15 different agencies within the Sacramento and Placer County regions are involved in the program due to a statistically high number of fires being started by juveniles in the area.

- **Fire Department Training Division.** The City of Rocklin conducts ongoing training and drill sessions relating to the prevention, response, and mitigation of natural hazards.
- The City of Rocklin has been very proactive to control, if not eliminate exposure to wildfire. Some examples of mitigation efforts are:
 - 1. Non-combustible (metal) fencing at the rear of structures near the exposure to fuels and open space.
 - 2. Fire Access Points between housing for suppression crew access.
 - 3. Fire Vehicle Access Points into large undeveloped areas of dry fuels.
 - 4. An aggressive Vegetation Abatement program with financial penalties.
 - 5. The purchase of off-road type apparatus and wildland firefighting equipment and training.
 - 6. Contracts with the California Department of Forestry and Fire Protection to utilize aircraft in high-risk areas.
 - 7. Non-combustible roof building codes and ordinances.
 - 8. Automatic and Mutual Aid Agreements with regional firefighting resources.
 - 9. Training and certification in National Incident Management Systems (NIMS).
 - 10. Maintain a very high standard of hydrant density and water supply in Rocklin.
 - 11. Sub-division fuel modification zones and regulations

Collectively, these activities earned Rocklin a Class 3 Insurance Services Organization (ISO) Fire Rating.

LOCAL GOVERNMENT CAPABILITY MATRIX

In addition to the assessment of community policies, regulations and plans, the Planning Team also created a matrix as a way of taking inventory of additional mitigation capabilities in each community. The intent of this effort was to see if there were any similarities or gaps in community programs and tools that might indicate where some improvements could be made. The matrix and the key to the matrix labels are located on the following pages.

	PLACER COUNTY	AUBURN	COLFAX	LINCOLN	LOOMIS	Rocklin
Comp Plan/General Plan	Yes	Yes			Yes, 7/01	Yes
Land Use Plan	Yes	Yes			Yes, 7/01	Yes
Subdivision Ord	Yes	Yes			Yes	Yes
Zoning Ordinance	Yes	Yes			Yes, 2/03	Yes
NFIP/FPM Ordinance	Yes	Yes			1996	
- Map Date	1998/2001				1998	
- Substantial Damage language?	Yes	Yes			Yes	
- Certified Floodplain Manager?	Yes	Yes			Yes	
- # of Floodprone Buildings?	95	Yes (map)			19	
- # of NFIP policies	518	14	0	42	62	122
- Maintain Elevation Certificates?	Yes				Yes	
- # of Repetitive Losses?	3				10	
CRS Rating, if applicable	6	TBD			N/A	
Stormwater Program?	Yes	Yes			Yes	
Building Code Version	Yes	Yes			1997	
Full-time Building Official		Yes			No	
- Conduct "as-built" Inspections?		Yes			No	
BCEGS Rating					Yes	
Local Emergency Operations Plan	Yes	Yes (in progress)			Yes	
Hazard Mitigation Plan	No	No				
Warning System in Place?	Yes	Yes			No	
- Storm Ready Certified?	No				No	
- Weather Radio reception?	Yes	Yes			No	
- Outdoor Warning Sirens?	No	No			Yes	
- Emergency Notification (R-911)?	Yes	Yes			No	
- Other? (e.g., cable over-ride)	ALERT Gage System	Yes			County	
GIS System?	Yes	Yes			No	
- Hazard Data?		Yes			N/A	
- Building footprints?		No			N/A	
- Tied to Assessor data?	Yes	Yes			N/A	
- Land-Use designations?	Yes	Yes			Yes, 7/01	
Structural Protection Projects					No	
,	Yes (raised homes	Infrastructure				
Property Owner Protection Projects	post '97 floods)	maintenance			No	
Critical Facilities Protected?					Yes	
Natural Resources Inventory?	Yes	Yes (GP)			No	
Cultural Resources Inventory?	Yes	Yes (GP)			No	
Erosion Control procedures?	Yes	Yes			Yes	
Sediment Control procedures?	Yes	Yes			Yes	
Public Information Program/Outlet	Yes	Yes (CM/PD)			Yes	
Environmental Education Program?	Yes (limited)	<u> </u>			Yes	

EXPLANATION OF CAPABILITY ASSESSMENT MATRIX

Comp Plan: Comprehensive Long-Term Community Growth Plan

<u>Land Use Plan:</u> Designates type of Land Use desired/required – Comprised of Zoning

Subdivision Ordinance: Dictates lot sizes, density, setbacks, and construction type.

Zoning Ordinance: Dictates type of Use and Occupancy, Implements Land Use Plan

NFIP/FPM Ord: Floodplain Management Ordinance: Directs development in identified Flood Hazard Areas. Required for Participation in NFIP and Availability of Flood Insurance

<u>Sub. Damage:</u> Does your FPM Ordinance contain language on Substantial Damage/Improvements? (50% rule)

<u>Administrator:</u> Do you have a Floodplain Management Administrator (someone with the responsibility of enforcing the ordinance and providing ancillary services (map reading, public education on floods, etc.)

of FP Bldgs: How many buildings are in the Floodplain?

of policies?: How many buildings are insured against flood through the NFIP?

of RL's: # of Repetitive Losses: Paid more than \$1,000, twice in the past 10 years

CRS Rating: Are you in the Community Rating System of the NFIP, and if so, what's your rating?

BCEGS: Building Code Effectiveness Grading System Rating

LEOP: Do you have a Local Emergency Operations Plan – a Disaster RESPONSE Plan?

HM Plan: Do you have a Hazard Mitigation Plan?

<u>Warning:</u> Do you have any type of system, such as "Storm Ready" Certification from the National Weather Service, NOAA Weather Radio reception, Sirens, Cable (TV) Override, "Reverse 911"?

GIS: Geographic Information System

Structural Protection Projects: Levees, drainage facilities, detention/retention basins

Property Protection Projects: Buy-outs, elevation of structures, floodproofing, small "residential" levees or berms/floodwalls

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<u>Critical Facility Protection:</u> For example, protection of power substations, sewage lift stations, water-supply sources, the EOC, police/fire stations, medical facilities that are at risk, e.g., in the floodplain.

<u>Natural And Cultural Inventory:</u> Do you have an inventory of resources, maps, or special regulations within the community? (wetlands and historic structures/districts, etc.)

Erosion Or Sediment Control: Do you have any projects or regulations in place?

<u>Public Information And/Or Environmental Education Program</u>: Do you have an ongoing program even if its primary focus is not hazards? Examples would be "regular" flyers included in city utility billings, a website, or an environmental education program for kids in conjunction with Parks & Recreation?

FEDERAL AND STATE CONSIDERATIONS

There are some regional capabilities that should also be considered, and an additional layer of regulations at the state and federal level enhance these local capabilities. The Planning Team also reviewed the following:

Forests with a Future Campaign

The USDA Forest Service is initiating the Forests with a Future campaign in California and parts of Nevada to protect Sierra Nevada old-growth forests, wildlife and communities against catastrophic wildfires. This campaign is a new proactive approach aimed at restoring natural conditions to our forests and building public understanding of the need for action while encouraging people to help.

The Healthy Forest Restoration Act (HFRA) of 2003

This act created national legislation to focus efforts on reducing wildfire threats to communities, watersheds and wildlife habitat, as well as promoting healthy forest conditions and old-growth-large tree retention. Under this legislation, communities are responsible for developing a Community Fire Plan in order to be eligible for certain funding.

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