***STRIKEOUTS***

## SECTION I – GOALS AND POLICIES

### 1. WILDLAND FIRE HAZARD

**Goal S-1 MINIMIZE THE POSSIBILITY OF LOSS OF LIFE, INJURY, OR DAMAGE TO PROPERTY AS A RESULT OF WILDLAND FIRE HAZARD**

**Policy S-1.1 Fire Severity Zones.** The County shall ~~prohibit~~ ~~**EVALUATE**~~ inform permit applicants of the fire severity zone for the project area and that there exists the Trinity County Fire Safe Ordinance, which is **CURRENTLY** enforced by CalFire. ~~new developments in 'High' and 'Very High' Fire Severity Zones as designated by CalFire and other fire-prone areas and require mitigation to minimize hazards to acceptable levels.~~

**Policy S-1.2 Fire Resistant Building Materials.** The exterior of residential units should be composed of fire resistant materials and designed to reduce fire vulnerability within high and very high fire hazard areas.

~~**Policy S-1.2 Encourage Cluster Development.** In areas designated as high or very high fire hazard, the County should encourage cluster developments to provide for more localized and effective fire protection measures such as consolidations of fuel build-up abatement, firebreak maintenance, firefighting equipment access, and water service provision.~~

**Policy S-1.3 Fuel Modification Programs.** The County shall actively support fuel modification, reduction, and maintenance programs on **ALL** public and **ALL** private land~~s~~ throughout the County. ~~**FUEL BREAKS AND**~~ fire buffers should be created along heavily traveled roads within high and extreme hazard areas by thinning and discing ~~**WHEN AND WHERE FEASIBLE**~~. Parks, golf courses, utility corridors, roads, ~~**OPEN SPACE**~~ and greenbelts should be located so they may serve a double function as fuel breaks, ~~**WHERE FEASIBLE.**~~

~~**Policy S-1.4 Wildland Fire Management Plans.** The County shall require the development of wildland fire management plans for projects adjourning significant areas of open space that may have high fuel loads.~~

~~**Policy S-1.5 Fuel Breaks.** Additional fuel breaks or fuel modifications up to 100 feet around structures should be required when fire officials find that extra hazardous conditions exist. Secondary fuel breaks up to 200 feet in width should be required when the fire authority finds that additional precautions are necessary. Fire buffers should be created along heavily traveled roads within high and extreme hazard areas by thinning, discing, or controlled burning. Parks, golf courses, utility corridors, roads, and greenbelts should be located so they may serve a double function as fuel breaks.~~

~~**Policy S-1.6 Development Guidelines.** The County should consider fire hazards in evaluating development proposals. Within designated areas where population or residential building densities may be inappropriate to the~~

~~hazards present, measures should be developed and adopted to mitigate risk to life and property loss.~~

**POLICY S-1.8 COUNTY ORDINANCES, RESOLUTIONS, POLICIES.** DEVELOPMENT IN AREAS SUBJECT TO WILDLAND FIRE HAZARD MUST CONFORM TO ALL **RELATED** COUNTY ORDINANCES, ~~RESOLUTIONS, AND POLICIES~~, INCLUDING BUT NOT LIMITED TO, THE TRINITY COUNTY FIRE SAFE ORDINANCE, VEGETATION MANAGEMENT ORDINANCE, **AND SUBDIVISION ORDINANCE,** AND **SHALL BE ENCOURAGED TO COMPLY WITH ALL RESOLUTIONS AND POLICIES THE COUNTY HAS APPROVED.** ~~**OR IS A PARTY TO SUCH AS** RESOLUTION NO. 2008-006 DECLARING A STATE OF EMERGENCY RELATED TO THE EXTREME WILDFIRE RISK IN TRINITY COUNTY, **TRINITY COUNTY FIRE SAFE COUNCIL MEMORANDUM OF UNDERSTANDING, AND THE TRINITY COUNTY COMMUNITY WILDFIRE PROTECTION PLAN CERTIFICATION AND AGREEMENT.**~~

## 2. FIRE PROTECTION

### Goal S-2 INCREASE AND MAINTAIN FIRE PROTECTION CAPACITY

**Policy S-2.1 Fire District/Department Strategic Plans.** The County shall encourage the development of strategic plans by fire districts/departments. ~~and shall consult existing strategic plans when reviewing development proposals.~~

~~**Policy S-2.2 Fire Protection Services.**~~ The County shall **EXPLORE METHODS OF SUSTAINABLE FIRE PROTECTION FOR FIRE DEPARTMENTS, FIRE COMPANIES, AND FIRE DISTRICTS TO ENSURE THAT SUFFICIENT LEVELS OF SERVICE FOR FIRE PROTECTION ARE MAINTAINED.** ~~by require development projects to provide and/or fund fire protection facilities, personnel, operations, and maintenance, or provide alternative methods that sustain adequate levels of service.~~

**Policy S-2.3 Fire District Consolidations.** The County shall **ENCOURAGE THE TRINITY COUNTY LOCAL AGENCY FORMATION COMMISSION TO EVALUATE** ~~encourage~~ consolidation of fire and~~/with~~ other special districts to provide for cost and other service provision efficiencies.

**Policy S-2.4 Governmental Coordination of Fire Protection Services.** The County shall continue to support and cooperate with Calfire, BLM and USFS in providing fire protection services and fire prevention programs. ~~for the service areas.~~

**Policy S-2.5 Mutual Aid Agreements.** The County shall encourage fire districts/departments to establish and adopt written mutual aid agreements between fire districts and fire departments to provide **A MORE** uniform level of fire protection throughout the County.

~~**Policy S-2.6 Emergency Access.** The County shall require roads to be of adequate structural quality, sufficient width, and kept maintained to ensure access of emergency and service equipment. Construction of roads shall protect water quality, slope stability and threat to natural and cultural resources.~~

~~**Policy S-2.7 Signage.** The County shall encourage owners of existing private roads and require owners of new private roads to provide identification signage for emergency access purposes. Subdivisions creating new development shall place signage as set forth in the Trinity County Subdivision Ordinance, Fire Safe Ordinance and additional local ordinances.~~

~~**Policy S-2.8 Water Supply.** Adequate water supply, including fire hydrants, for fire suppression must be provided for all developments, as determined by the County, local fire district, CalFire, Trinity County Subdivision Ordinance, and the Trinity County Fire Safe Ordinance. Development of property not served by a community water system shall maintain sufficient water supplies on site to be used for the sole purpose of fire protection. Water supplies may be stored in the form of ponds, storage tank not less than 2500 gallon, or other means acceptable to the affected agency responsible for fire protection.~~

## 3. SECURITY

**Goal MAINTAIN EFFECTIVE AND COMMUNITY ORIENTED LAW ENFORCEMENT**.

~~**Policy S-3.1 Staffing Levels.** The County shall~~ **ENCOURAGE A MINIMUM** ~~annually monitor and review the level of officer staffing~~ **LEVEL OF SERVICE** ~~provided in the County to ensure that sufficient staffing and resources are available to serve local needs. A minimum level of service for the provision of law enforcement services should be established~~.

**Policy S-3.2 Law Enforcement Strategic Plan.** The County shall encourage the development of a strategic plan for law enforcement operations, services, and facilities **WITH THE GOAL OF EVALUATING METHODS OF SUSTAINABLE LAW ENFORCEMENT SERVICES.**

~~**Policy S-3.3 Law Enforcement Services – New Development.** The County shall ensure that sufficient levels of service for law enforcement are maintained by requiring development projects to provide and/or fund law enforcement facilities, personnel, operations, and maintenance, or provide alternative methods that sustain adequate levels of service.~~

**Policy S-3.4 Land Use Planning.** Actively involve law enforcement personnel in land use planning decisions. ~~by requiring new development to be designed so that criminal activity is discouraged.~~

**Policy S-3.5 Community Partnerships.** The County shall **ENCOURAGE** ~~develop and support~~ law enforcement programs through community partnerships to help reduce and prevent crime.

**Policy S-3.6 Facilities.** The County shall plan ~~and develop~~ law enforcement facilities according to overall need and the distribution of growth within the County.

**Policy S-3.7 Community Education.** The County shall use education and crime prevention as integral parts of the practice of law enforcement.

## 4. EMERGENCY RESPONSE

### Goal MAINTAIN EMERGENCY RESPONSE SYSTEM TO EFFECTIVELY PREPARE AND RESPOND TO NATURAL OR HUMAN –MADE DISASTERS

**Policy S-4.1 Emergency Operations Plan.** The Trinity County Operational Area Emergency Operations Plan shall include general procedures to implement the nationwide National Incident Management System (NIMS), statewide Standardized Emergency Management System (SEMS), activate the Operational Area Emergency Operations Center (EOC), coordinate responders, and implement other tactical response measures.

**Policy S-4.2 Emergency Evacuation Plans.** The County shall review, revise, create, coordinate, maintain, **PUBLISH, AND CIRCULATE** County and community emergency evacuation plans to respond to natural or human-made disasters, such as wildfires, flooding, or dam failure.

~~**Policy S-4.3 Coordination.** The County should coordinate with all other local, state, and federal governmental agencies charged with disaster and emergency preparedness responsibilities.~~

**Policy S-4.4 Exercises.** The County should conduct periodic emergency response exercises to ensure that all County departments respond efficiently and that emergency communications and other systems are properly maintained.

**Policy S-4.5 Telecommunications Providers.** Enable telecommunications providers to furnish safe, comprehensive and efficient ~~wireless~~ communication services throughout the County. ~~while minimizing any adverse impacts their facilities may have on neighboring properties and the natural environment.~~

~~**Policy S-4.6 Dam Inundation.** The County should continue to maintain emergency evacuation plans for identified potential flooding areas downstream of dams.~~

~~**Policy S-4.7 Critical Facilities.** The County shall identify and map the location of all critical facilities. Contingency plans for disaster response and recovery should incorporate these facilities.~~

**Policy S-4.8 PREFIRE MANAGEMENT PLANS. THE COUNTY SHALL ENCOURAGE FIRE DISTRICTS, DEPARTMENTS, AND COMPANIES TO DEVELOP AND MAINTAIN PREFIRE MANAGEMENT PLANS AND MAPS TO ASSESS ~~ALTERNATIVES~~ AND ENHANCE THE RESPONSE TO PROTECT PUBLIC AND PRIVATE ASSETS FROM UNACCEPTABLE RISK OF WILDLAND FIRE DAMAGE.**

**Policy S-4.9 EMERGENCY MEDICAL SERVICES. THE COUNTY SHALL STRIVE TO IMPROVE EMERGENCY MEDICAL SERVICES FOR ALL COUNTY RESIDENTS. ~~THROUGH COOPERATIVE PARTNERSHIPS WITH ALL SERVICE PROVIDERS.~~**

**5. FLOOD AND INUNDATION**

**Goal MINIMIZE THE POSSIBILITY OF LOSS OF LIFE, INJURY, OR DAMAGE TO PROPERTY AS A RESULT OF FLOOD AND INUNDATION**

**Policy S-5.1 Federal Flood Insurance Program.** The County shall continue to participate in the Federal Flood Insurance Program. ~~to regulate land uses in flood hazard areas in order to minimize loss of life and property, and in order to minimize public flood-related expense.~~

**Policy S-5.2 Low Intensity Land Use and Floodplain Areas.** ~~Designate~~ **PROMOTE** agriculture, passive parks, open space, and other low intensity uses within floodplain areas.

**Policy S-5.3 Development in Floodplain Zones.** ~~The 100-year floodplain zones~~ **SPECIAL FLOOD HAZARD AREAS** (as designated on maps prepared by the Federal Emergency Management Administration) should be protected and maintained through ~~strict limitation on~~ **REVIEW OF** land use. ~~To carry out this policy, the following guidelines on development should be observed:~~

- ~~Critical facilities (those facilities which should be open and accessible during emergencies) should not be permitted.~~
- ~~New development and divisions of land should be developed to minimize flood risk to structures, risk to infrastructure, and ensure safe access during flood conditions.~~

**Policy S-5.4 Impacts to Downstream Properties.** ~~Prior to the approval of development project sites and projects within floodplain areas, the~~ **A** project applicant shall demonstrate that such development **WITHIN FLOODPLAIN AREAS** will not adversely impact downstream properties or contribute to flood hazards.

**Policy S-5.5 Dam Failure Inundation Maps.** Dam failure inundation maps shall be maintained by the County to aid in the project review process.

~~**Policy S-5.6 High Density Development in Dam Inundation Areas.** Discourage high-density development in areas that lay within the area of inundation for any of the five dams: Lewiston, Buckhorn, Trinity, Matthews, and Ewing.~~

~~**Policy S-5.7 Development In Areas Adjacent or Downstream From Dams.** When development is proposed in areas adjacent to or downstream from an existing dam, the area affected by dam failure inundation should be identified as part of any planning application.~~

**Policy S-5.8 Coordination of Emergency Services For Dam Failure.** The Trinity County Office of Emergency Services shall maintain coordination with dam managers to assure quick and efficient coordination in the event of dam failure.

## 6. AIR QUALITY

**Goal MAINTAIN A HIGH STANDARD OF AIR QUALITY**

**Policy S-6.1 Burning.** The burning of any material shall be in compliance with burning permit conditions and/or standards established by the North Coast Air Quality Management District **AND CALFIRE.**

**Policy S-6.2 Point Source Monitoring.** ~~New and existing~~ Point sources of air pollution ~~should be monitored for compliance~~ **SHALL COMPLY** with County, State and Federal air quality regulations and standards.

~~**Policy S-6.3 Transportation and Air Quality. THE COUNTY SHALL ENCOURAGE THE USE OF PUBLIC TRANSIT AND ALTERNATIVE FUEL VEHICLES** to reduce the number of vehicle trips and miles traveled. residential development should be located in close proximity to places of shopping, play, and employment.~~

~~**Policy S-6.4 Roadway Treatments.** As unpaved roads are a source of the County's particulate emissions, the County shall require that all new roads be paved or treated to reduce dust generation where feasible.~~

~~**Policy S-6.5 Local and Regional Agency Review.** The County shall consult and cooperate with other agencies in developing an effective approach to regional air quality planning management.~~

~~**Policy S-6.6 Air Quality Analysis.** The County may require an analysis of potential air quality impacts associated with significant new developments through the environmental review process, and identification of appropriate mitigation measures prior to approval of the project development.~~

**Policy S-6.7 Dust Suppression.** The County shall require dust suppression measures for grading, **CONSTRUCTION, AND BUILDING ACTIVITIES AS APPROPRIATE.**

**Policy S-6.8 Asbestos Hazards.** ~~The County shall require that~~ All projects requiring earth-disturbing activities, or a building permit that would result in earth disturbance, in areas likely to contain naturally occurring asbestos ~~to have a California-registered geologist knowledgeable about asbestos-containing formations inspect the project for asbestos hazards.~~ **MUST COMPLY WITH NORTH COAST AIR QUALITY MANAGEMENT DISTRICT REGULATIONS.**

**Policy S-6.9 Particulate Matter Attainment Plans. THE COUNTY SHALL ACTIVELY PARTICIPATE IN REVIEWS, UPDATES, OR THE PREPARATION OF NEW PARTICULATE MATTER ATTAINMENT PLANS BY THE NORTH COAST AIR QUALITY MANAGEMENT DISTRICT AS THEY AFFECT TRINITY COUNTY.**

**Policy S-6.10 Smoke. THE COUNTY SHALL PROVIDE PUBLIC EDUCATION REGARDING THE HEALTH EFFECTS OF SMOKE AND SHALL MAKE AVAILABLE FACILITIES FOR PUBLIC USE DURING WILDFIRE INCIDENTS AND UNHEALTHY AIR QUALITY DAYS AS DETERMINED LOCALLY.**

**7. GEOLOGIC AND SEISMIC HAZARDS**

**Goal MINIMIZE THE THREAT TO LIFE AND PROPERTY FROM SEISMIC AND GEOLOGIC HAZARDS**

**Policy S-7.1 ~~Slope Stability~~ Geologic Hazards – Subdivisions.** Geotechnical reports and/or related studies shall be required for all subdivision proposals in areas of known landslides or other geologic instability.

**Policy S-7.2 ~~Slope Stability~~ Geologic Hazards - Existing Parcels.** Geotechnical reports and/or related studies shall be required prior to issuance of a building permit in all identified landslide areas **OR OTHER GEOLOGIC INSTABILITY AREAS.**

~~**Policy S-7.3 Hillside Development.** Areas in excess of 30 percent slope may require submittal of engineered plans for all construction and grading, at the discretion of the County Planning Department. These plans shall address roads, utility corridors, and similar off-site improvements, as well as erosion control.~~

~~**Policy S-7.4 Landside Areas.** The County shall not allow inform developers **OF IDENTIFIED** existing unconsolidated landside debris.~~

~~**Policy S-7.5 Construction and Grading.** The County shall confirm that all construction and grading activities done will not adversely affect the stability of any slope.~~

**Policy S-7.6 Building Design and Construction.** Building design and construction shall consider soil conditions prior to development.

## 8. AIRPORT SAFETY

*SEE TRINITY COUNTY AIRPORT LAND USE COMPATIBILITY PLAN*

~~**Goal MINIMIZE THE POSSIBILITY OF THE LOSS OF LIFE, INJURY, OR DAMAGE TO PROPERTY AS A RESULT OF AIRPORT HAZARDS**~~

~~**Policy S-8.1 Land Use Compatibility.** Airport Land Use Compatibility Plans shall be developed for each county airport and all development around airports must be consistent with the guidelines contained within the Plans.~~

~~**Policy S-8.2 Airport Design.** Ensure that all airports are designed in compliance with adopted federal and state safety standards.~~

~~**Policy S-8.3 Airport Safety.** Daily operational activities in and around airports shall promote safety.~~

~~**Policy S-8.4 Protect People and Property on the Ground.** Protect people and property on the ground from the potential consequences of near-airport aircraft accidents through effective land use planning.~~

~~**Policy S-8.5 Minimize injury to aircraft operations.** Maintain useful open land in the vicinity of airports to minimize the severity of injury to aircraft occupants in the event of an off-airport emergency landing.~~

~~**Policy S-8.6 Prevent creation of hazards to flight.** Reduce obstructions to airspace required for flight to, from, and around airports, consider wildlife hazards and other forms of interference with safe flight, navigation, or communication.~~

~~**Policy S-8.7 Airport Regulations.** Airport Land Use Compatibility Plans and County Airport Regulations shall be updated as necessary, maintained and enforced.~~

## 9. HAZARDOUS MATERIALS

**Goal MINIMIZE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, AND ENVIRONMENTAL DEGRADATION RESULTING FROM THE USE, TRANSPORT, STORAGE, DISPOSAL, AND RELEASE OR DISCHARGE OF HAZARDOUS MATERIALS**

~~**Policy S-9.1 Hazardous Materials.** Provide means for the identification, safe use, storage, transport, and disposal of hazardous materials.~~

~~**Policy S-9.2 Siting.** In siting on- and off-site hazardous waste management facilities, the County shall follow the criteria and mitigation measures set forth in the Trinity County Hazardous Waste Management Plan (HWMP)in order to minimize safety hazards associated with hazardous material and hazardous waste incidents.~~

**Policy S-9.3 Coordination.** The County shall continue to coordinate efforts to identify locations of hazardous materials. ~~and prepare and implement plans for management of spilled hazardous materials as required.~~

~~**Policy S-9.4 Development Review.** Any proposal for development of a disposal site for hazardous materials generated in the County shall be reviewed closely to ensure that no significant environmental impacts will result from the project.~~

**Policy S-9.5 Non-County Originated Hazardous Waste.** The County will discourage the development of hazardous waste disposal facilities for hazardous waste originating outside of Trinity County.

**Policy S-9.6 County Collection.** The County will continue to pursue methods of collecting, on a regular basis, household hazardous materials.

## 10. LANDFILL AND TRANSFER FACILITIES

**Goal MAINTAIN AND MONITOR LANDFILL AND TRANSFER FACILITIES FOR HEALTH AND SAFETY PROTECTION**

**Policy S-10.1 Adequate Solid Waste Disposal.** Provide for an adequate solid waste program which maintains public health, environmental, and land use quality.

**Policy S-10.2 Solid Waste Recycling and Energy Recovery.** Support the development and utilization of solid waste recycling and energy recovery systems. ~~if cost effective.~~

## 11. WATER QUALITY

**Goal MAINTAIN AND ENHANCE THE HIGH QUALITY OF SURFACE WATER AND GROUNDWATER IN ORDER TO PROTECT PUBLIC HEALTH AND SAFETY**

**Policy S-11.1 Surface Water Quality.** Maintain ~~and improve~~ surface water quality through implementation of Best Management Practices for public and private construction activities. ~~in order to prevent all forms of water pollution which may adversely affect public health, such as chemicals, nutrients, pathogens, metals, blue-green algae, acid mine drainage and any other harmful pollutant which adversely affects public health.~~

~~**Policy S-11.2 Groundwater Quality.** Maintain and improve groundwater quality through implementation of Best Management Practices for public and private construction activities. in order to prevent all forms of water pollution which may adversely affect public health, such as chemicals, nutrients, pathogens, metals, blue-green algae, acid mine drainage and any other harmful pollutant which adversely affects public health.~~

~~**Policy S-11.3 Water Pollution.** Prevent water pollution which cause waterborne illnesses and diseases through appropriate design and mitigation measures imposed as conditions of approval on use permits, parcel~~

~~maps, sewage disposal systems and other discretionary permits issued for development.~~

~~**Policy S-11.4 Early Notice.** Provide early notice to the public to warn the pubic when adverse water quality conditions are present which may affect public health and safety.~~

**Policy S-11.5 Cleanup.** Support and encourage cleanup efforts where surface or groundwater has been adversely affected by pollution and poses a risk to the public.

**Policy S-11.6 Herbicides.** Continue to support Trinity County's herbicide policy **STATEMENT** in order to prevent contamination of surface or groundwater with herbicides.

**12. CLIMATE CHANGE**

**Goal ~~COMPLY WITH GOVERNORS DIRECTIVE ON GLOBAL WARMING AND CLIMATE CHANGE~~ REDUCE GREENHOUSE GAS EMISSIONS TO SUSTAIN CLEAN AIR AND WATER AND A HEALTHY AND SAFE ENVIRONMENT**

**Policy S-12.1 Jobs/Housing Proximity and Transit-Oriented Development.** The County shall encourage ~~compact~~, mixed-use projects designed to maximize ~~affordable~~ housing and walking, bicycling and the use of public transit systems **AND THE USE OF ALTERNATIVE ENERGY VEHICLES.**

**Policy S-12.2 ~~Onsite Trees.~~** ~~The County shall recommend preservation or replacement of onsite trees that would otherwise be removed due to development, as a means of providing carbon storage.~~ **ENCOURAGE ACTIVE MANAGEMENT OF FORESTS TO ABSORB GREENHOUSE GAS.**

**Policy S-12.3 ~~Government~~ Passenger vehicles and public transit.** The County shall consider the purchase of passenger vehicles and public transit buses that use alternative fuels or technology. ~~such as electric hybrids, biodiesel, and ethanol.~~ Where feasible, the County shall require fleet vehicles to be low emission vehicles. **CARPOOLING SHALL BE ENCOURAGED WHEN FEASIBLE.**

**Policy S-11.4 Forest Biomass.** The County shall encourage the use of forest biomass for sustainable energy generation **AND/OR ANY OTHER PRODUCTIVE USE.**

**SECTION II – IMPLEMENTATION MEASURES**

**1. WILDLAND FIRE HAZARD**

**Implementation Measure S-1.1** The County shall maintain a current copy of a fire hazard severity map based on input from CalFire and local fire districts/departments within the County.

***Responsible Agency.*** CalFire, Planning Division, Building Division

***Timeframe.*** Ongoing

**Implementation Measure S-1.2** The County shall require that all new developments that are located in the State Responsibility Area (SRA) or Local Responsibility Area (LRA) Very High Severity Zone conform to the California Building Code's "Material and Construction Methods for Exterior Wildfire Exposure" (Chapter 7A).

***Responsible Agency.*** CalFire, Planning Division, Building Division

***Timeframe.*** Ongoing

**Implementation Measure S-1.3** During review of development proposals, the County shall require appropriate building setbacks and fuel modification requirements within fire hazard zones, as appropriate to the specific hazard zones.

***Responsible Agency*.** CalFire, Planning Division, Building Division

***Timeframe.*** Ongoing

**Implementation Measure S-1.4** The County shall review all development plans and subdivision maps to provide recommendations for fire prevention and protection, including but not limited to safe circulation, ingress and egress, sprinkler requirements, storage and flows, and water pressure requirements.

***Responsible Agency.*** CalFire, Planning Division, Building Division

***Timeframe.*** Ongoing

**2. FIRE PROTECTION**

**Implementation Measure S-2.1** The County ~~shall~~ **IS ENCOURAGED TO** work with local Fire Districts/Departments to develop 5 Year Strategic Plans in conjunction with the preparation of Municipal Service Reviews and Sphere of Influence Updates by Trinity County LAFCO. The County shall also secure copies of completed Strategic Plans for utilization in review of development proposals.

***Responsible Agency.*** Department of Natural Resources and Long Range Planning, Trinity County LAFCO, Planning Division

***Timeframe.*** 2008-2012

**Implementation Measure S-2.2** Where determined to be necessary, the County will require as condition of approval the dedication of land and/or establishment of an appropriate funding mechanism~~, including fire impact fees~~, to help offset costs for fire protection facilities and services.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

~~**Implementation Measure S-2.3** Require that public structures that do not meet adopted uniform code requirements for fire safety be upgraded, abated, or downgraded in use. Priorities for the rehabilitation or phasing out of existing unsafe structures will be based on hazards to life and occupancy classification.~~

~~***Responsible Agency.*** Building Division, General Services Division~~

~~***Timeframe.*** Ongoing~~

**Implementation Measure S-2.3** Collaborate with Fire Districts/Departments to review and analyze the potential for fire district and/with other special districts consolidations so as to achieve cost and service efficiencies.

***Responsible Agency.*** Trinity County LAFCO

***Timeframe.*** 2008-2012

**Implementation Measure S-2.4** Develop a Fire Hazard Zoning Code as defined in the Fire Hazard Zoning Field Guide published by the California Department of Forestry.

***Responsible Agency.*** Planning Division, Department of Natural Resources and Long Range Planning

***Timeframe.*** 2008-2012

~~**Implementation Measure S-2.7** Require all new developments to design public facility improvements to ensure that water volume and hydrant spacing are adequate to support efficient and effective fire suppression without disruption to community water supplies.~~

~~***Responsible Agency.*** Planning Division~~

~~***Timeframe.*** Ongoing~~

**IMPLEMENTATION MEASURE S.2.8 COUNTY STAFF SHALL MEET PERIODICALLY WITH REPRESENTATIVES FROM CALFIRE, BLM, AND USFS TO DISCUSS COORDINATION OF FIRE PROTECTION SERVICES AND FIRE PREVENTION PROGRAMS.**

***RESPONSIBLE AGENCY.*** Planning Division, Department of Natural Resources and Long Range Planning, Trinity County LAFCO

***TIMEFRAME.*** Ongoing

**IMPLEMENTATION MEASURE S-2.9 THE COUNTY IS ENCOURAGED TO WORK WITH LOCAL FIRE DISTRICTS/DEPARTMENTS AND OTHER AGENCIES TO ESTABLISH AND ADOPT WRITTEN MUTUAL AID AGREEMENTS BETWEEN FIRE DISTRICTS AND FIRE DEPARTMENTS.**

***RESPONSIBLE AGENCY.*** Planning Division, Department of Natural Resources and Long Range Planning, Trinity County LAFCO

**3. SECURITY**

**Implementation Measure S-3.1** **DEVELOP A 5 YEAR STRATEGIC PLAN FOR LAW ENFORCEMENT SERVICES IN THE COUNTY, INCLUDING BUT NOT LIMITED TO, A MINIMUM OFFICER STANDARD BASED ON POPULATION OR OTHER LAND AREA BASED FORMULA.** ~~Complete a review of law enforcement services in the County on an annual basis and seek funding for additional services as needed.~~

***Responsible Agency.*** Sheriff's Department

***Timeframe.*** Annually

~~**Implementation Measure S-3.2** Attempt to establish a minimum officer to population ration of 2 officers to 1,000 population or other land area based formula.~~

~~***Responsible Agency.*** Sheriff's Department~~

~~***Timeframe.*** 2008-2012~~

~~**Implementation Measure S-3.3** Establish funding mechanisms to pay for both capital and operation costs of police services to serve new development.~~

~~***Responsible Agency.*** Sheriff's Department, Auditors Office~~

~~***Timeframe.*** 2008-2012~~

~~**Implementation Measure S-3.4** Require new development to pay their fair share for necessary law enforcement services through the implementation of Development Impact Fees, Mello-Roos Community Facilities Districts, or other available funding mechanisms.~~

~~***Responsible Agency.*** Sheriff's Department, Planning Division, Auditors Office~~

~~***Timeframe.*** 2008-2012~~

**IMPLEMENTATION MEASURE S-3.4** **COUNTY SHALL CIRCULATE ALL DEVELOPMENT PLANS, INCLUDING MINOR AND MAJOR SUBDIVISIONS, TO THE SHERIFF'S DEPARTMENT FOR REVIEW AND COMMENT.**

***Responsible Agency.*** **PLANNING DIVISION, SHERIFF'S DEPARTMENT**

***Timeframe. ONGOING***

**Implementation Measure S-3.5** Continue to develop programs utilizing citizen volunteers to assist in County law enforcement activities to reduce and prevent crime.

***Responsible Agency.*** Sheriff's Department

***Timeframe.*** Ongoing

**IMPLEMENTATION MEASURE S-3.6 COUNTY SHALL COORDINATE WITH THE SHERIFF'S DEPARTMENT REGARDING PLANNING FOR FUTURE LAW ENFORCEMENT FACILITIES.**

***Responsible Agency.*** Planning Division, Building Division, General Services Division

***Timeframe.*** Ongoing

**IMPLEMENTATION MEASURE S-3.7 COUNTY SHALL UTILIZE NEWSPAPER, AND OTHER ELECTRONIC AND PAPER MEDIA, TO DISSEMINATE INFORMATION AND EDUCATE THE PUBLIC REGARDING CRIME PREVENTION.**

***Responsible Agency.*** Sheriff's Department

***Timeframe.*** Ongoing

**4. EMERGENCY RESPONSE**

~~**Implementation Measure S-4.1** The County shall develop and implement a program for training staff in disaster preparedness and response.~~

~~***Responsible Agency.*** Sheriff's Department~~

~~***Timeframe.*** 2008-2012~~

**Implementation Measure S-4.2** The County shall conduct training programs for staff and the public in disaster preparations and response. At a minimum these programs should include:

- Existence and locations of areas susceptible to geologic and flood hazards
- Evacuation plans, routes, procedures
- Self-sufficiency procedures (i.e. supplies, etc)
- Shelter locations

***Responsible Agency.*** Sheriff's Department, Health and Human Services Department, Behavioral Health Department, Department of Transportation

***Timeframe.*** 2008-2012

**Implementation Measure S-2.6** Continue updating of County addressing system to assist in emergency conditions and where rescue, evacuation, and/or notification of residents is required.

***Responsible Agency.*** County Department of Transportation

***Timeframe.*** 2008-2012

**Implementation Measure S-4.3** The County shall review and update the Emergency Operations Plan a minimum of every 5 years. The Plan shall identify

leadership, representatives, coordination, and action for responding to emergencies in a timely and efficient manner.

***Responsible Agency.*** Sheriff's Department

***Timeframe.*** Every 5 years

**Implementation Measure S-4.4** The County shall consider adopting a pre-disaster ordinance for post-disaster recovery and reconstruction that includes provisions for debris clearance, damage assessment, demolitions, re-occupancy, and building ~~moratorium~~ criteria, fee waivers and deferrals, and expedited permitting procedures for repair and reconstruction.

***Responsible Agency.*** Department of Transportation, Planning Division, Building Division, Environmental Health Division, Solid Waste Department, Auditor's Office

***Timeframe.*** 2008-2012

**Implementation Measure S-4.5** The County shall establish site management for all of its critical communication facilities, including cell towers, antennas, radio and repeater facilities, FCC licensing and determine a funding source for oversight and maintenance of these systems.

***Responsible Agency.*** Sheriff's Department, General Services Division

***Timeframe.*** 2008-2012

**IMPLEMENTATION MEASURE S.4.9 COUNTY STAFF SHALL MEET PERIODICALLY WITH REPRESENTATIVES FROM EMERGENCY MEDICAL SERVICES PROVIDERS TO DISCUSS COORDINATION OF EMERGENCY MEDICAL SERVICES THROUGHOUT THE COUNTY.**

***Responsible Agency.*** **ADMINISTRATION, TRINITY COUNTY LAFCO**

***Timeframe.*** **ONGOING**

**5. FLOOD AND INUNDATION**

**IMPLEMENTATION MEASURE S-5.1** The County shall ensure that all requirements continue to be met to participate in the National Flood Insurance Program.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing.

**Implementation Measure S-5.2** **DEVELOPMENT IN** riparian areas and drainages and areas defined as 100-year floodplains **WILL BE REVIEWED TO DETERMINE THE POTENTIAL FOR** ~~are to be kept free from development that would adversely~~ impacts to floodway capacity or characteristics, natural/riparian areas, or natural groundwater recharge areas.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

**Implementation Measure S-5.3** New development proposals shall be reviewed to determine if they are within a ~~FEMA mapped floodplain~~ **SPECIAL FLOOD HAZARD AREA.** New development and divisions of land, especially residential subdivisions, within ~~FEMA mapped floodplains~~ **SPECIAL FLOOD HAZARD AREAS** should be developed to minimize flood risk to structures, risk to infrastructure, and ensure safe access during flood conditions.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

~~**Implementation Measure S-5.3** Deny any project that would result in new or increased flooding impacts on adjoining parcels or upstream and downstream areas not designed and intended to accommodate the increase in flood waters.~~

~~***Responsible Agency.*** Planning Division~~

~~***Timeframe.*** Ongoing~~

**Implementation Measure S-5.4** On flood prone parcels, the County shall locate development on portions of the site that are not subject to flooding, consistent with other policies of this General Plan **BUT ALLOW FOR OTHER ALTERNATIVES MEETING FEMA CRITERIA.**

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

**Implementation Measure S-5.5** The County shall inform developers if their project site falls within the dam failure inundation area as defined by dam inundation maps.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

**Implementation Measure S-5.**8 Agencies maintaining emergency action plans for dam failure should meet to review each dam's Emergency Action Plan on a ~~bi-annual~~ **BIENNIAL** basis. Included in the review should be a "table-top" exercise simulating dam failure to allow each agency to critique their departmental function within the planned response.

***Responsible Agency.*** Sheriff's Department and other regulatory agencies.

***Timeframe.*** Ongoing

## 6. AIR QUALITY

**IMPLEMENTATION MEASURE S-6.1 and 6.2** County shall notify the North Coast Air Quality Management District regarding complaints regarding burning and/or other types of air pollution, point source air pollution.

***Responsible Agency.*** Planning Division, Building Division, Environmental Health Division

***Timeframe.*** Ongoing

**Implementation Measure S-6.1** In order to reduce ~~the~~ dust impacts, **ANY NEW MAJOR DEVELOPMENT SHALL PAVE OR TREAT ROAD SURFACES.** ~~of new development on adjoining residences, paving or treatment of roads should be required in the development, subdivision, use permit, grading or air quality permit process. Existing roads may be resurfaced through special assessment districts, County Service Area Zones of Benefit, or as part of existing County road maintenance activities or districts.~~

***Responsible Agency.*** Department of Transportation, Planning Division

***Timeframe.*** Ongoing

**Implementation Measure S-6.3** The County shall require contractors to implement dust suppression measures during excavation, grading, and site preparation activities. Techniques may include, but are not limited to, the following:

- Site watering or application of dust suppressants
- Phasing or extension of grading operations
- Covering of stockpiles
- Suspension of grading activities during high wind periods
- Revegetation of graded site

***Responsible Agency.*** Department of Transportation, Planning Division

***Timeframe.*** Ongoing

**IMPLEMENTATION MEASURE S-6.4** County shall review development plans to determine whether any potential exists for disturbance of areas of naturally occurring asbestos and if so determined ensure all requirements of the North Coast Air Quality Management District are met by the development.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

**IMPLEMENTATION MEASURE S-6.5** County shall contact the North Coast Air Quality Management District periodically to review changes in District regulations and to provide input regarding those changes as appropriate to Trinity County.

***Responsible Agency.*** Planning Division, Department of Natural Resources and Long Range Planning

***Timeframe.*** Ongoing

## 7. GEOLOGIC AND SEISMIC HAZARDS

**IMPLEMENTATION MEASURE S-7.1 and 7.2** The County shall require a copy of any geotechnical reports and/or other studies regarding any development plan in areas of known landslides or other geologic instability.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

**Implementation Measure S-7.3** The County shall not allow the siting of critical facilities in mapped Naturally Occurring Asbestos Areas, in areas subject to seiches, liquefaction, in areas with a high landslide risk, or on seismically unstable soils, unless a geologic/seismic hazards geotechnical engineering study shall be performed to identify potential impacts and engineering recommendations prior to siting or site acquisition.

***Responsible Agency.*** Planning Division, Building Division

***Timeframe.*** Ongoing

~~**Implementation Measure S-7.4** The County shall conduct a structural review of all County critical facilities and include a detailed geologic/seismic site investigation and, if necessary, a review of access roads and utilities serving the sites. Require upgrading as determined by the reviews.~~

~~***Responsible Agency.*** General Services Division, Building Division~~

~~***Timeframe.*** Ongoing~~

## 8. AIRPORT SAFETY

*SEE TRINITY COUNTY AIRPORT LAND USE COMPATIBILITY PLAN*

~~**Implementation Measure S-8.1** The County shall comply with all goals, policies, implementation measures and other guidelines contained in the Airport Land Use Compatibility Plans.~~

~~***Responsible Agency.*** Airports Division, Building Division, Planning Division, Department of Transportation~~

~~***Timeframe.*** Ongoing~~

## 9. HAZARDOUS MATERIALS

~~**Implementation Measure S-9.1** The County shall review all proposed development proposals that manufacture, use, transport, or dispose of hazardous materials to ensure compliance with federal, state, and local regulations and requirements.~~

~~***Responsible Agency.*** Planning Division, Environmental Health Division, Solid Waste Department~~

~~***Timeframe.*** Ongoing~~

~~**Implementation Measure S-9.2** The County shall comply with all State laws regarding the use of toxic chemicals in parks, grounds and public buildings and ensure that County staff is properly trained in the use, storage, and disposal of toxic chemicals.~~

~~***Responsible Agency.*** General Services, Risk Management~~

~~***Timeframe.*** Ongoing~~

**Implementation Measure S-9.3** The County shall coordinate with the State Office of Emergency Services, the State Department of Toxic Substances Control, the State Highway Patrol, Fire Districts/Departments, Cal Fire, the Sheriff's Department and other appropriate agencies in hazardous materials planning and incident response.

***Responsible Agency.*** Sheriff's Department, Department of Transportation

***Timeframe.*** Ongoing

**IMPLEMENTATION MEASURE S-9.4** The County will establish policy to ensure that any new hazardous waste disposal facilities approved for development do not collect hazardous materials originating outside of the County.

***Responsible Agency.*** Planning Division, Solid Waste Department

***Timeframe.*** Ongoing

## 10. LANDFILL AND TRANSFER FACILITIES

**Implementation Measure S-10.1** Maintain current information and status on legislation, policy, and regulations regarding solid waste disposal to ensure County is in compliance with federal, state, and local solid waste disposal requirements.

***Responsible Agency.*** Solid Waste Department

***Timeframe.*** Ongoing

**Implementation Measure S-10.2** County will continue to seek funding for and develop methods to expand recycling and energy recovery systems in conjunction with solid waste disposal.

***Responsible Agency.*** Solid Waste Department

***Timeframe.*** Ongoing

## 11. WATER QUALITY

**Implementation Measure S-11.1** **THE COUNTY WILL ENCOURAGE** ~~County will continue to seek funding for projects and programs to protect surface water quality and to ensure c~~onstruction activities **THAT DO NOT** ~~to not contribute to the~~ degrade ~~of~~ surface water quality.

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

~~**Implementation Measure S-11.2** Develop groundwater management ordinance to ensure protection of groundwater sources.~~

~~***Responsible Agency.*** Board of Supervisors, Department of Natural Resources and Long Range Planning~~

~~***Timeframe.*** Ongoing~~

~~**Implementation Measure S-11.3** County will post, publish, and disseminate information regarding water quality conditions that affect the public and will work with water providers, including private water companies and special districts, to ensure the public is aware of any water quality conditions directly affecting water use and consumption.~~

~~***Responsible Agency.*** Environmental Health Division, Department of Natural Resources and Long Range Planning~~

~~***Timeframe.*** Ongoing~~

**Implementation Measure S-11.4** County will seek funding and coordinate with other agencies to implement cleanup measures in cases where surface or groundwater is adversely affected by pollution.

***Responsible Agency.*** Environmental Health Division, Department of Natural Resources and Long Range Planning

***Timeframe.*** Ongoing

**Implementation Measure S-11.5** County will continue to follow recommendations contained in the County's herbicide policy statement.

***Responsible Agency.*** Planning Division, General Services Division, Department of Natural Resources and Long Range Planning

***Timeframe.*** Ongoing

## 12. CLIMATE CHANGE

**Implementation Measure S-12.1** The County shall encourage development projects to mitigate climate change impacts from increased traffic. Mitigations may include, but are not limited to, the following:

- Providing bicycle access and parking facilities
- Provide preferential parking for car pools
- Establishing telecommuting programs or satellite work centers

***Responsible Agency.*** Planning Division

***Timeframe.*** Ongoing

**Implementation Measure S-12.2** The County shall **WORK WITH FEDERAL AND STATE AGENCIES RESPONSIBLE FOR FOREST MANAGEMENT AND COMMUNITY FOREST REPRESENTATIVES AND ADVOCATES REGARDING EFFORTS TO** ~~review development proposals to ensure that preservation or replacement of onsite trees are included in development proposals in order to~~ mitigate climate change impacts.

***Responsible Agency.*** Planning Division, Department of Natural Resources and Long Range Planning, Board of Supervisors

***Timeframe.*** Ongoing

**Implementation Measure S-12.3** The County shall **CONSIDER** purchase **OF** alternative fuels/energy vehicles when purchasing or replacing County fleet.

***Responsible Agency.*** Administration and all County departments

***Timeframe.*** Ongoing

**Implementation Measure S-12.4** The County shall coordinate with other agencies, funding programs, businesses, and individuals to explore and encourage the development of forest biomass for sustainable energy generation **AND/OR FOR OTHER PRODUCTIVE USE.**

***Responsible Agency.*** Board of Supervisors, Administration, Department of Natural Resources and Long Range Planning

***Timeframe.*** Ongoing

## SECTION III – ~~EXISTING CONDITIONS~~ BACKGROUND INFORMATION

### 1. WILDLAND FIRE HAZARD

Trinity County is at very high risk to experience frequent catastrophic wildfires. Due to the extensive distribution and quantities of wildland vegetation and developed properties, most of the County is considered to be in a wildland urban interface zone. Wildfires that occur in the wildland urban interface area pose severe risks to life, property, and infrastructure and are one of the most dangerous and complicated fire situations that firefighters encounter. The majority of State Responsibility Areas for lands in Trinity County where the State of California has financial responsibility for wildland fire protection are mapped as Very High Fire Hazard Severity Zones. **THESE MAPS WERE ADOPTED BY CAL FIRE ON NOVEMBER 7, 2007. DRAFT FIRE HAZARD SEVERITY ZONES IN LOCAL RESPONSIBILITY AREAS WERE PREPARED IN SEPTEMBER 2007 BUT HAVE NOT YET BEEN ADOPTED BY CAL FIRE. (http://frap.cdf.ca.gov)**

**FORESTS IN TRINITY COUNTY, AND THE ENTIRE WESTERN UNITED STATES, CONTINUE TO BURN WITH EXTREME SEVERITY AND SCALE. A SIGNIFICANT COMPONENT OF THIS INCREASE IN FIRE ACTIVITY HAS, IRONICALLY, BEEN THE SUCCESS OF FIRE EXCLUSION. AS THE ABILITY TO SUPPRESS WILDFIRES COINTINUES, THE WILDFIRE PROBLEM WORSENS.**

Fuel loading problems have substantially increased due to **BUREAU OF LAND MANAGEMENT AND U.S. FOREST SERVICE LAND MANAGEMENT PRACTICES** in wildland and urban interface areas. High levels of fuel loading combined with natural weather conditions such as drought, high temperatures, low relative humidity and high winds create prime conditions for frequent and catastrophic fires.

**FIRE, USUALLY STARTED BY LIGHTENING, IS A NATURAL PHENOMENON OF ECOLOGICAL RENEWAL IN THESE LANDSCAPES. HOWEVER, WHERE FIRES ENCOUNTER UNNATURALLY HIGH FUELS IN LANDSCAPES ~~THAT HAVE ALREADY LOST A LARGE PROPOTION OF THEIR MORE FIRE RESISTANT OLD GROWTH FOREST~~, THE IMPACTS ON FORESTS AND WATERSHEDS FALL BEYOND THE NATURAL RANGE OF HISTORIC VARIABILITY AND BEGIN TO THREATEN ECOSYSTEM FUNCTIONS. THE REGIONAL AND LANDSCAPE SCALE IMPACTS OF THESE FIRES INCLUDE CHANGES IN VEGETATION PATTERNS, LOSS OF REMAINING OLD GROWTH FOREST IN RESERVES, GROWING CONCERNS ABOUT AIR QUALITY, CLIMATE CHANGE, ECONOMIC LOSSES AND DANGER TO HUMAN LIFE.**

**IN ADDITION TO THE SOCIAL AND HEALTH RAMIFICATIONS OF FIRES BURNING WITH EXTREME SEVERITY AND SCALE, ARE THE ECOLOGICAL RIPPLE EFFECTS. FUELS BUILD UP AFTER A FIRE PARTIALLY BURNS TREES WHICH FALL TO BECOME FUEL FOR THE NEXT FIRE EVENT. SOILS DENUDED OF PROTECTIVE VEGETATION COVER ERODE INTO FISH BEARING STREAMS AND FURTHER THREATEN ALREADY ENDANGERED SALMON AND STEELHEAD TROUT RUNS.**

~~Development located among trees and other combustible vegetation has always been a concern in Trinity County and continues as development increasingly spreads to more remote locations. At the wildland urban interface, structures and vegetation are normally in close proximity. Wildland fire holds potential to spread to structures, while a structure~~

fire can ignite vegetation. Development coupled with timberlands, summer drought climate **WEATHER CONDITIONS** limited road access, and steep topography has significantly increased the complexity of the fire protection challenges in the wildland urban interface.

The Trinity County Fire Safe Council, through a countywide effort, has identified the values at risk for each community, developed recommendations for their protection, and prioritized recommended projects in each area. These and other documents regarding forest health and fire management, including the Trinity County Community Wildfire Protection Plan and Fuels Reduction Plans and Projects for communities in Trinity County, can be found at www.tcrcd.net under Projects and Outreach and Publications, Complete Online Library (Downloadable Documents). **AS A RESULT OF THE TRINITY COUNTY WILDFIRE PROTECTION PLAN, THREE PREFERRED TREATMENTS WERE EXPRESSED BY CITIZENS FOR DEALING WITH WILDFIRE IN TRINITY COUNTY – 1) FUELS REDUCTION, 2) SHADED FUEL BREAK MAINTENANCE OR CONSTRUCTION, 3) STAND/PLANTATION THINNING.** In summary, general fuels reduction efforts, followed by shaded fuel break construction and maintenance, and stand and plantation thinning on forests, can greatly reduce a community's risk to wildfire. In particular, a strong partnership between federal and private landowners to manage and reduce wildfire risk across the landscape is necessary to address this issue. Fuel management zones and fire breaks around communities at risk have been identified **(www.tcrdc.net)** and work has begun to implement these strategies. A concerted outreach effort has been made by local and regional groups to educate landowners in regard to defensible space, fuels reduction strategies and onsite improvements to aid in fighting fires.

**THERE ARE FOUR MAIN PRINCIPLES OF FIRE RESISTANCE FOR DRY FOREST SUCH AS THOSE IN THE WILDLAND URBAN INTERFACE OF TRINITY COUNTY. THESE PRINCIPLES APPLIED ON A WATERSHED BASIS WILL HELP TO REDUCE THE EFFECTS OF CATASTROPHIC WILDFIRE ON NATURAL RESOURCES AS WELL AS REDUCE THE EFFECTS TO HOMES IN TRINITY COUNTY.**

| Principle | Effect | Advantage | Concerns |
|---|---|---|---|
| Reduce surface fuels | Reduces potential flame length | Control easier; less change of crown fire | Surface disturbance less with fire than other techniques |
| Increase height to live crown | Requires longer flame length to begin torching | Less torching | Opens understory; may allow surface winds to increase |
| Decrease crown density | Makes tree-to-tree crown fire less probable | Reduces crown fire potential | Surface wind may increase and surface fuels may be drier |
| Keep big trees of resistant species | Less mortality for same fire intensity | Generally restores historic structure | Less economical; may keep trees at risk of insect attack |

**RESOURCES FOR PRE-FIRE TREATMENTS ARE SCARCE AND IT IS IMPORTANT TO USE THEM AS EFFECTIVELY AS POSSIBLE AND TO FOCUS EFFORTS ON**

**PROTECTING THOSE VALUES OF GREATEST INTEREST TO THE COMMUNITY. AS FIRES DO NOT STOP AT PROPERTY BOUNDARIES, THIS MEANS THAT SUCH A COORDINATED EFFORT SHOULD INVOLVE ALL WHO HAVE AN INTEREST IN LOCAL LAND MANAGEMENT INCLUDING FEDERAL, STATE AND LOCAL GOVERNMENT AGENCIES, PRIVATE LAND OWNERS AND THE GENERAL PUBLIC. WHILE INDUSTRIAL FOREST LANDOWNERS AND GOVERNMENT AGENCIES HAVE WORKED ON FIRE MANAGEMENT PLANNING TO VARYING DEGREES WITHIN THEIR OWN JURISDICTIONS, THERE HAS NOT YET BEEN A COMPREHENSIVE COORDINATION EFFORT ACROSS BOUNDARIES IN TRINITY COUNTY.**

The County has adopted a Fire Safe Ordinance which governs land development outside of established fire districts (Weaverville and Hayfork). The ordinance requires minimum road widths, turnaround locations, property line setbacks, water resources and fuels reduction activities for private land development.

The County has identified goals, policies, and implementation measures intended to improve fire prevention and fire defense capabilities. Issues addressed include water supplies, structures built in fire-defensible spaces (building setback areas which are kept clear of brush and fuel), and building code provisions to protect new and renovated structures from fire danger. Goals, policies, and implementation measures guide development toward areas with better fire suppression infrastructure and/or lower fire risk.

## 2. FIRE PROTECTION

Trinity County fire protection is provided by fourteen (14) Volunteer Fire Departments, located throughout the County, CAL FIRE, and the U.S. Forest Service. By law, CAL FIRE is responsible for wildland fire protection on all state land within Trinity County and the U.S. Forest Service is responsible for wildland fire protection on all federal national forest lands. **HOWEVER, ANNUALLY CAL FIRE, THE BUREAU OF LAND MANAGEMENT, AND U.S. FOREST SERVICE ENTER INTO AN AGREEMENT TO DISTRIBUTE PROTECTION RESPONSIBILITIES BETWEEN STATE AND FEDERAL RESPONSIBILITY AREAS.** Due to budgetary restraints at the federal and state and county levels, the staff at federal and state stations can vary drastically with CAL FIRE and U.S. Forest Service stations being staffed only during the summer fire season, which is normally from May to November.

The volunteer fire departments are responsible for structural fire protection and rescue services at all time of the year with 24/7 operations. Of all the volunteer departments, only Hayfork, Lewiston, Post Mountain, Trinity Center and Weaverville receive any limited tax revenues. The departments are funded by local area fundraising and grants. In addition, the County provides approximately $45,000 a year for help in paying workers compensation costs for the departments, and providing Title III grant funding, however these sources of funding are year to year and may not be available due to increasing budget concerns.

The fourteen (14) volunteer fire departments are: Coffee Creek, Douglas City, Down River, Hawkins Bar, Hayfork, Hyampom, Junction City, Kettenpom-Zenia, Lewiston, Post Mountain, Salyer, Southern Trinity, Trinity Center, and Weaverville. Membership in

these departments tends to fluctuate and consists to a large degree of senior citizens. **IN SOME AREAS OF THE COUNTY,** a large portion of the equipment utilized by the departments in protecting all of the citizens of in the County is growing older and becoming less functional.

The Volunteer Fire Departments are governed by various entities such as **COMMUNITY SERVICE DISTRICTS, FIRE DISTRICTS,** unincorporated volunteer fire companies, **AND/OR NONPROFIT GROUPS**. The volunteer fire departments all have legal district boundaries, however, if the various departments only responded in their own boundaries a large part of the County would be unprotected for fire protection and rescue services. The departments all routinely respond outside of their own legal boundaries to any emergency dispatched by the 9-1-1 dispatcher in the Trinity County Sheriff's Department. During the fire season, **MANY** of the departments respond to any reported fire dispatched to regardless of location, **HOWEVER THE DEPARTMENTS DO NOT ABANDON THEIR SERVICE AREAS ENTIRELY. VOLUNTEERS ARE ON AUTOMATIC AID FOR WILDLAND FIRES WITHIN THEIR DISTRICTS DURING THE FIRE SEASON. THE VOLUNTEERS ARE ON MUTUAL AID FOR FIRES THAT ARE IN RESPONSE AREAS WITH NO STRUCTURES.** CAL FIRE and the U.S. Forest Service are legally responsible for fire protection within their jurisdiction, however most of the time, because of their geographic locations, the volunteer departments are the first on scene and provide the initial attack until replacements arrive and take over. CAL FIRE and the U.S. Forest Service have mutual aid agreements with all of the departments to reimburse them for their assistance on the fires. after the first twenty-four hours. The first twenty-four hours are the responsibility of the individual departments.

**TRINITY COUNTY ISO RATINGS**

**INSURANCE SERVICES OFFICE (**ISO) is an independent organization that serves insurance companies, fire departments, insurance regulators, and others by providing information about risk. In each community ISO analyzes the relevant data and assigns a **Public Protection Classification (PPC) – a number from 1 to 10.** Class 1 represents exemplary fire protection, and Class 10 indicates that the area's fire-suppression program does not meet ISO's minimum criteria.

A Community's PPC depends on the following:

1. Fire Alarm and Communications Systems, including telephone systems, telephone lines, staffing, and dispatching systems.
2. The Fire Department, including equipment, staffing, training, and geographic distribution of fire companies.
3. The Water Supply System, including condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

At the time of the preparation of this document, the ISO ratings for most of the communities in Trinity County range from 4 (Weaverville and Hayfork) or 5 (Trinity Center) to mostly 9 (remaining communities in Trinity County) for both Personal and Commercial Class ratings.

| 2007 ISO Ratings FIRE PROTECTION AREA | PERSONAL CLASS | COMMERCIAL CLASS |
|---|---|---|
| COFFEE CREEK | 7 | 7/9 |
| DOUGLAS CITY | 9 | 9/9 |
| HAWKINS BAR | 6 | 6/9 |
| HAYFORK | 4 | 4/9 |
| HYAMPOM | 9 | 9 |
| JUNCTION CITY | 9 | 9/9 |
| LEWISTON | 9 | 9/9 |
| SALYER | 9 | 9/10 |
| SOUTHERN TRINITY | 8 | 9/10 |
| TRINITY CENTER | 5 | 5/9 |
| WEAVERVILLE | 4 | 4/9 |

With respect to many of the volunteer fire departments, new active members are difficult to recruit and many of the existing members are senior citizen volunteers having been with their departments for many years. Furthermore, existing equipment at many departments is aging and the departments have few funds to replace the equipment. More detailed information is available from each volunteer department.

**On November 8, 2007, an email was sent to each volunteer fire department asking the following questions:** The number of current active members, ages of each, certification levels, number of vehicles and types, and any other pertinent information. The information to date that has been provided is listed in the next section below.

**TRINITY CENTER VOLUNTEER FIRE DEPARTMENT**
P.O. Box 191 TC 96091 Non-Emergency Number 266-3333

| AGE | CERTIFICATION | APPARATUS |
|---|---|---|
| 53 | FF-2, FIRST RESPONDER | 1-TYPE I PUMPER 1,000 GAL |
| 54 | FF-2, FIRST RESPONDER | 1-TYPE II PUMPER 500 GAL |
| 56 | FF-2, EMT-1 | 1-TYPE III PUMPER 500 GAL |
| 56 | FF-2, EMT-1 | 1-TYPE V RESCUE/EMS UNIT 300 |
| 61 | T-22 | 1- AMBULANCE |
| 62 | FF-2, EMT-1 | |
| 62 | FF-2, EMT-1 | |
| 63 | FF-2, EMT-1 | |
| 65 | MD | |
| 66 | FF-2, EMT-1 | |
| 68 | FF-2, EMT-1 | |

**COFFEE CREEK VOLUNTEER FIRE DEPARTMENT**
HC2, BOX 3951, Trinity Center, 96041 Non-Emergency Number 266-3955

| AGE | CERTIFICATION | APPARATUS |
|---|---|---|
| 38 | NEW-NO QUALIFICATIONS | 1-TYPE I PUMPER 500 GAL |
| 44 | FF-2, FIRST RESPONDER | 1-TYPE III PUMPER 300 GAL |

| | | |
|---|---|---|
| 50 | FF-2, FIRST RESPONDER | 1-WATERTENDER 3,000 GAL |
| 60 | EMT-1 | 1-AMBULANCE |
| 65 | EMT-1 | |
| 65 | EMT-1 | |
| 65 | MD | |
| 66 | FF-2, EMT-1 | |
| 67 | FF-2, EMT-1 | |
| 67 | FF-2, FIRST RESPONDER | |
| 71 | FF-2, T-22 FIRST AID | |
| 76 | FF-2, T-22 FIRST AID | |

**SALYER VOLUNTEER FIRE DEPARTMENT**
P.O. BOX 235,Salyer,95563 Non-Emergency Number 629-2073, Emergency 623-2212

16 ACTIVE MEMBERS, AGES 19 TO 67, 5 EMT'S, 4 FIRST RESPONDERS, 7 FIRST-AID. 2- TYPE II ENGINERS, 1- 3,000 GAL. WATER TENDER

**HAYFORK VOLUNTEER FIRE DEPARTMENT**
P.O. BOX 613, Hayfork, 96041 Non-Emergency Number 628-

22 MEMBERS AGES 19-67, 5 FIRST-AID, 4 FIRST RESPONDERS, 11 EMT 1'S, 2 RECRUITS NO TRAINING. 1 TYPE I ENGINE, 2 TYPE II ENGINES, 1 RESCUE VEHICLE, 1 UTILITY WITH BREATHING SUPPORT AND LIGHTS, 1-4,000 GAL WATER TENDER.

**DOUGLAS CITY VOLUNTEER FIRE DEPARTMENT**
P.O. BOX Douglas City, 96024 Non-Emergency Number 623-5110

| AGE | CERTIFICATION | APPARATUS |
|---|---|---|
| 21 | FF-2, FIRST AID | 1- TYPE I PUMPER, 500 GAL |
| 29 | FF-2, FIRST RESPONDER | 2- TYPE II PUMPERS 1,000 GAL |
| 33 | FF-2, FIRST- AID | 1- TYPE III PUMPER 300 GAL |
| 45 | FF-2, FIRST RESPONDER | 1-TYPE V RESCUE/EMS |
| 46 | FF-2, FIRST-AID | |
| 50 | FF-2, FIRST-AID | |
| 50 | FF-2, EMT-1 | |
| 52 | FF-2, FIRST RESPONDER | |
| 53 | FF-2, FIRST RESPONDER | |
| 55 | FF-2, FIRST RESPONDER | |
| 58 | FF-2, FIRST-AID | |
| 64 | EMT-1 | |
| 69 | FF-2, FIRST RESPONDER | |

**LEWISTON VOLUNTEER FIRE DEPARTMENT**
P.O. BOX Lewiston, 96052 Non-Emergency Number 778-3711

14 Members 5 over 50 (some over 60), 5 between 30 and 40, 4 between 20 and 30. 2-EMT 1's, 7 FIRST RESPONDERS, 2 FIRST-AID TITLE 22, 3 WHOM STARTED FIRST-AID TITLE 22 IN APRIL. 1- TYPE I PUMPER 1,250 GPM, 800 GAL TANK, 1 TYPE II PUMPER- 1,000 GPM, 800 GAL TANK, 2- TYPE III WILDLAND, 1-TYPE III

WILDLAND (BELONGS TO USA, ON LOAN), 1- TYPE 1 WATERTENDER, 1 RESCUE VEHICLE.

**WEAVERVILLE VOLUNTEER FIRE DEPARTMENT**
P.O. BOX Weaverville, 96093, Non-Emergency Number 623-6156
As of December 31, 2007 = 20 members, Average percent of participation = 11.86%, members participated above 40% = 3.

**CAL FIRE**

Trinity County is part of three CAL FIRE units: Shasta Trinity Unit (eastern Trinity County), Humboldt DelNorte Unit (Salyer area), and Mendocino Unit (southern Trinity County). (there is a Direct Protection Area (DPA) map available at http://frap.cdf.ca.gov) for these areas). The Shasta Trinity Unit has two Battalion Chiefs, four ICS Type Three engines, and three Stations (Fawn Lodge with two engines, Hayfork, and Weaverville). Stations start opening in mid-May with full staffing complete by the beginning of July and close in the fall. Engines automatically respond to all incidents with the volunteer departments within their initial response area.

All engines are 3-0 which means they must have a minimum of three personnel on the engine one of those being a Company Officer. Station 60 Weaverville One Captain and two firefighters. This station is first to open in Battalion and last to close. Opening occurs in the end of May and closes in October. Station 61 Fawnlodge opens in May or June and is fully staffed by the end of June. The station is two engine with one Captain, one Engineer and 4 Firefighters assigned between the two engines and usually closes in October. Station 62 Hayfork opens in May or June and is a one engine station, staffed by a Captain and 2 firefighters. Personnel assigned to engines have the following minimum training: Wildland fire, improvement fire (structure, vehicle etc…) medical first responder, Haz-mat first responder, and standard ICS courses.

**TRINITY RIVER MANAGEMENT UNIT (TRMU) USFS**
Portion of the Shasta-Trinity NF, which encompasses the Weaverville and Big Bar congressionally designated districts, has six engines. All six engines are classified under ICS typing as type III, 500 gallon units. Engines generally staffed with five personnel each day from somewhere around May 15th. to the middle of October. It is the intention to staff engines seven days, but due to vacancies or qualifications sometimes only able to staff 5 days a week. As of 6/13/2008 there is two engine seven day effective, two five day and two four day (ten hour days). In addition the Shasta-Trinity sponsors a type II helicopter module with normal staffing being close to ten per day, seven days a week. The TRMU also has two 1,500 gallon water tenders, one stationed on the Weaverville side and one on the Big Bar side. In addition they have two fire prevention units that carry 125 gallons, again one on the Big Bar side and one on the Weaverville side.

## 3. SECURITY

### Trinity County Sheriff's Department

The Trinity County Sheriff's Department is the primary investigative law enforcement agency for the County. Its jurisdiction encompasses the entire County, as there are no incorporated cities within its borders. Due to its geographic makeup and mostly

mountainous rural roadways, it can take several hours to get from one area of the County to another.

In years past, the Sheriff's Department had staffing levels sufficient to provide adequate 24 hour coverage in Weaverville and Hayfork, as well as 40 hour per week Resident Deputy coverage during the peak enforcement times in the more rural communities, including Southern Trinity, Down River, Trinity Center, and Lewiston. There are currently no Resident Deputy positions, no 24 hour coverage, and often only one or two deputies on duty at a time, responsible for covering the entire County. Current staffing levels consist of 10 Patrol Services, 5 Detectives/Narcotics, and 2 Administration positions.

The Sheriff and Undersheriff report that the existing staffing levels are inadequate to provide for the needs of the County and have stressed the importance of restoring 24 hour patrol coverage in Weaverville and Hayfork, as well as restoring at least one Resident Deputy position in each of the four above mentioned resident posts. To accomplish this, a minimum of thirty (30) sworn positions would be needed.

**Jail/Corrections**

The Sheriff and Undersheriff report that the existing jail facility is too small and in need of repair. The jail currently has 52 beds and was projected to need at least 75 beds by 2010. The Sheriff states that a 100 bed facility would be optimum as it would adequately provide for the future needs of the county, and also create the opportunity to generate additional revenue for the department by being able to sell bed space to other jurisdictions. AB 900 (jail construction funds) are being evaluated at this time. The Sheriff also reports that if increased staffing levels were to be restored, additional office space will be needed as well. The Sheriff further identified the need for a separate dispatch area away from its existing location within the jail facility. Additionally, the Sheriff reports a strong need for the implementation of a vehicle replacement program.

Additional funding sources for the Sheriff's Department are also needed. Recommendations include a greater fiscal emphasis in the county on public safety (allocation adjustments of existing county revenues), raising the transient occupancy tax, selling bed space in the jail to other jurisdictions, and the realization of increased asset seizure revenues with more officers on the job.

Current staffing consists of 11 Correctional Officers/Dispatch and 1 Correctional Sergeant. The Correctional Officer and Correctional Sergeant positions are "non-sworn" positions and cannot be utilized to perform patrol duties. The California Board of Corrections and California Correctional Standards Authority require that two Correctional Officers be on duty and present within the jail facility at all times. The department is currently allocated for 15 Correctional Officer positions, however 4 positions are currently vacant. The Sheriff reports that 20 Corrections/Dispatch personnel are what are really needed at this time. This would provide increased safety and supervision and would also restore the Transport Officer position, relieving the need to pull patrol deputies off the street to handle prisoner transports. The Sheriff and Undersheriff also report the need for one additional "non-sworn" position to handle the department's Sexual Offender Registration requirements, currently assigned to the department's Evidence/Property Room Officer.

**California Highway Patrol – Trinity River**

The **CALIFORNIA HIGHWAY PATROL HAS AN OFFICE IN** ~~Trinity River office in~~ Weaverville **AND ASSISTS LOCAL LAW ENFORCEMENT AS AUTHORIZED.** ~~is currently allocated for 12 Traffic Officers, 3 Sergeants, and 1 Commander (Lieutenant). Two of the Traffic Officer positions are currently vacant. The office currently has adequate staffing and the officers are available to provide backup to the Sheriff's Department when requested.~~

**California Department of Fish and Game**

~~There are 3 Wardens assigned in Trinity County although they handle assignments in some of the contiguous counties as well.~~ The Wardens are available to provide assistance to the Sheriff's Department in emergency situations when requested.

**U.S. Forest Service**

~~Based on available information, there are two law enforcement positions in the U.S. Forest Service in Trinity County. One position is in the Six Rivers National Forest and the other in the Shasta-Trinity National Forest.~~ Historically these officers have provided assistance to the Sheriff's Department when requested and available.

~~**Trinity County District Attorney's Office**~~

~~The District Attorney's Office is the chief law enforcement agency for all of Trinity County. Some of the responsibilities of the office include reviewing reports received from various law enforcement agencies, filing criminal complaints, prosecuting criminal cases in court, handling the county's Bad Check Restitution Program, conducting various additional investigations, and handling the duties of the Public Administrator. The current staffing level of the office consists of the District Attorney, three Deputy District Attorneys, one Investigator, one Administrative Services Officer, and two Legal Secretaries. The existing budget of the office is heavily reliant on various grant funding, in which specified levels of staffing and specific activities are required to remain eligible to continue receiving such funding. The District Attorney indicates that four Deputy District Attorneys, two Investigators, three Legal Secretaries, one Administrative Services Officer, and one Receptionist are needed to effectively serve the future needs of the county.~~

~~**Trinity County Marshal's Office**~~

~~The Trinity County Marshal's Office is one of only two remaining Marshal's offices in the state. The trend in most jurisdictions has been for the local Sheriff's Department to assume the duties of the Marshal's Office within their jurisdiction through consolidation.~~

~~The primary responsibility of the Marshal's Office is to provide for the security of the Trinity County Superior Court. Additional responsibilities include the following:~~

- ~~Service of subpoenas and other legal documents~~
- ~~Enforcement of evictions and till taps and direction to the public on these matters~~
- ~~Service of arrest warrants~~

- Provision of mental health transports
- Provision of security for the entire Courthouse
- Provision of back-up to other law enforcement agencies
- Other responsibilities as required

The Trinity County Marshal's Office consists of the Marshal, who is appointed by the Superior Court, and two Deputy Marshals. The Marshal and deputies are state employees compensated by California State Trial Court funding.

Based on a report by the Marshal, the staffing level of the office is inadequate to meet the needs and responsibilities of the department. Vacancies due to sick time, vacation time, and mandatory training periods go unfilled, and extra-help personnel (retired law enforcement officers and volunteer civilians) are frequently utilized to provide basic courthouse security on days in which high profile court cases are scheduled. The arrest warrant service program is not in operations due to insufficient Deputy Marshals to safely perform these duties. In order to adequately meet the current and future needs of the county providing for a safe and secure courthouse, a minimum of four (4) Deputy Marshals, as well as an Administrative Secretary, are needed.

**Trinity County Probation Department**

Responsibilities of the Trinity County Probation Department include, operation of the county's Juvenile Detention Facility, supervision and oversight of the Juvenile Court School, supervision of adult and juvenile probationers, and preparation of Pre-sentence Investigation Reports.

The department currently has nine Probation Officers (including the Chief and Assistant Chief), nine Juvenile Counselors (who operate the Juvenile Hall), two Support Staff, and several Extra-help positions in the Juvenile Hall. The Probation Chief reports that there are currently approximately 400 Adult Probationers that are being supervised by just two officers. The Chief indicated that an appropriate ratio would be 1-50 Adult Probationers per officer, and 1-20 Juvenile Probationers per officer. The Chief also expressed concern that the State may be planning to turn parole supervision duties over to the individual counties as well. The Chief further pointed out that his department is heavily reliant on grant funding, in which specified levels of staffing and specific activities are required to remain eligible to continue receiving such funding. The Chief indicated that a total of 14 Probation Officers, 14 Juvenile Counselors, and 4 Support Staff is what will be needed to effectively serve the future needs of the county.

## 4. EMERGENCY RESPONSE

### Office of Emergency Services

The Trinity County Office of Emergency Services (OES) provides emergency management for the County. Per the California Emergency Services Act the office coordinates emergency support of incidents by the county, special districts and state, federal, and non-profit agencies and organizations. The Trinity County Sheriff's Department is the emergency management agency for Trinity County. There is a Trinity County Emergency Operations Plan adopted in August 1996

~~The Trinity County Office of Emergency Services is responsible for the following activities:~~

- ~~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~~
- ~~County OES is the single point of contact during natural disasters, human-made incidents, or acts of terrorism with federal, state, special districts and other political entity emergency management organizations, such as the Federal Emergency Management Agency (FEMA) and the Governor's Office of Emergency Services. OES coordinates on-going preparedness and pre-disaster mitigation with these agencies and others.~~
- ~~Manages the County's Emergency Operations Center~~
- ~~Conducts emergency drills and simulations~~
- ~~Provides preparedness information to citizens and community groups~~
- ~~Provides information to the public during emergencies~~
- ~~Coordinates training of public information team personnel~~

**Emergency Medical Services**

Medical services in Trinity County are provided by a variety of organizations. ~~There are two health clinics run by Trinity County Public Health Department, located in Weaverville and Hayfork. Mountain Community Medical Services (formerly Trinity Hospital) in Weaverville provides 24 hour emergency services. Trinity Life Support Ambulance and Southern Trinity Area Rescue (STAR – a volunteer division of Southern Trinity Health Services) provide ambulance services, while the Trinity County Sheriff's Department maintains an active Search and Rescue Team. Both Trinity County Life Support and Southern Trinity Area Rescue have been highly dependent on annual County funding~~ **~~AT~~ VARIOUS LEVELS** ~~to assist with their operations and facilities.~~

**Evacuation Plans**

There are in existence locally utilized evacuation plans in some communities in the County. ~~Some of the evacuation routes are common community knowledge in conjunction with local fire departments and districts. In the event of a large disaster, the Trinity County OES also coordinates with state and federal agencies, such as CalFire and the U.S. Forest Service. Due to wildfires that impacted many communities in the County in the summer of 2008 and other prior disastrous fires, the Trinity County OES is currently in the process of updating both the Emergency Operations Plan and developing more formal protocols related to community evacuation plans. The Trinity County Resource Conservation District and Trinity County Fire Safe Council have prepared related documents including some community evacuation maps. (www.tcrcd.net)~~

**Communication Facilities**

The County is composed of small, isolated communities, it is important to have sufficient communications infrastructure to link populations so that at minimum, emergency communications can be instituted. ~~The County is currently being funded by the Public~~

~~Utilities Commission to construct cell towers so that communication facilities can be established.~~ The County is ~~also~~ participating in a collaborative effort with Humboldt County to establish broadband infrastructure capacity to Trinity County. Effective communication facilities in Trinity County will provide for a wide range of access to information networks and will increase the ability for economic development to occur in the County.

**~~Cell Towers~~**

~~In 2006 Trinity County received a $2.3 million grant to provide POTS (plain old telephone service) to underserved and low-income residents. The grant provides for up to ten sites; it will be county-owned and operated with 20-year leases for cellular service providers and it is hoped that other technologies will also co-locate.~~

~~While there is an abundance of fiber optic cable in place in Trinity County, local access is currently unavailable although county government is exploring connections through consortium memberships. Without the cell tower grant and the possibility of fiber connections, the fact will remain that only one-third of Trinity Pines has POTS, and less than 10 percent of south county has POTS. It is estimated that the northern part of Trinity County as well needs more telephone system availability. Competing and exclusive frequencies for repeaters and radio communications are also a local and a national problem, the solution of which must be considered as a goal for early implementation.~~

**~~Repeater Sites~~**

**~~Oregon Mountain~~**

~~Functions as the "hub." Covers Weaverville, Douglas City, Lewiston, some Trinity Lake, some Downriver. Powered by AC power with 2 days battery backup. Antennas mounted on wooden poles. Shared with Sheriff, Public Works (DOT), Fire, Command, PUD, Med 6. Site is connected to Sheriff's Dept. via "dry telephone lines."~~

**~~Hayfork Bally~~**

~~Located on USFS land. Equipment housed in old radar building. This site has the best coverage of all communications sites. Powered by propane thermogen only. Sheriff's Dept., Command, Public Works, Fire, Ham Radio, Verizon, Med 6, all use site. Antennas mounted on wooden poles, will soon be relocated onto steel tower. Site will be switched to solar power.~~

**~~Pickett Peak~~**

~~Located on USFS land. Covers Southern Trinity. Site is in need of major overhaul. Powered by solar and thermogens. Antennas mounted to wooden poles. Used by Sheriff, DOT, Fire, Command. Adding new Med 6 repeater. Building is divided in half with half used by Trinity County and half used by Ruth Lake CSD and a private party.~~

**Ironsides Mountain**

Located on USFS land. Mounted in a small metal box on a pole. Powered by solar only. Covers Burnt Ranch and Downriver area. Currently only houses Fire equipment. Sheriff repeater will be relocated here in during the Summer.

**Carville**

Located on SPI land. Covers Coffee Creek, Trinity Center, North Lake. 10x12 foot fiberglass vault. Solar power only. Antennas mounted to wooden poles. Used by Sheriff, Fire Net (community owned), Command Net (community owned).

**Hoadley "Saddle"**

Land leased from BLM, may move to Hoadley Peak. Solar power only. This site is not yet in use, but the same basic four entities expect to use the site (Sheriff, Fire, DOT, Command).

**Areas of Concern**

The Director of Emergency Services identified the following list of issues that need to be addressed with the system:

1. The county needs to establish some sort of site management. Currently, there is no agency in charge of maintaining these communications sites.

2. There is currently no money earmarked for maintenance of the system. Usually money is pulled from different agency budgets on an emergency basis to cover maintenance and repairs.

3. The coverage for Southern Trinity needs to be improved. One or more new repeater sites need to be installed.

4. The "dry pairs" the run from the Sheriff's Dept. to Oregon Mountain need to be replaced with a private microwave link.

5. The county needs to establish some sort of departmental oversight to deal with FCC licensing as well as frequency allocation between different agencies.

6. Winter access to communications sites via Snow Cat is a big concern that needs to be addressed immediately. Some of the sites are in various states of disrepair and can go down for an entire winter because they cannot be accessed.

7. Inter-agency cooperation needs to be addressed. Most repeater sites are located on USFS land, but this agency is not always willing to work with the County. USFS utilizes the County system during fires, but is not willing to share access to facilities on Hayfork Bally such as solar power and backup generator.

8. Probably the most important area that needs to be addressed is the fact that not all agencies pay for use of the system. Fire departments and the Sheriff's Dept. usually pay for most or all repairs. State funded agencies such as CPS, CHP, and Schools use

the system but in no way contribute to its maintenance or ongoing costs. Below is a list of agencies that utilize the system but do not pay for use:

**System Summary**

According to the County's Director of Emergency Services, the communication system provides good overall coverage of the County with the exception of Southern Trinity. With Pickett Peak as the only repeater site in Southern Trinity and with this site being so remote, maintenance is difficult and reliability is an issue.

Currently the County maintains several satellite phones for use in areas not currently covered by the system or for uses of a confidential nature (Public Health). The County has recently deactivated 10-12 GlobalStar phones due to poor service and has activated 2 new Iridium phones.

When the County's cell tower project is completed, communications capabilities will be augmented and allow coverage in additional areas as well as allow confidential communications. With cell coverage comes the capability for Data Terminals in law enforcement vehicles, but Trinity County is still 10-15 years away from implementing this technology.

The system used to be maintained through contracts with Valley Communications of Redding. Due to expense, these were terminated, however the Sheriff's Department continues to maintain it's contract.

An ad-hoc communications committee has been formed to discuss radio as it relates to EMS in the county.

## 5. FLOOD AND INUNDATION

Floods are the most frequent type of disaster. Reduction of flood losses must be based on the best possible understanding of how and where floods happen and how they cause damage. Flooding is defined as relatively high streamflow that overflows the natural or artificial banks of a stream or submerges land not normally below water level. (U.S. Geological Survey)

Trinity County was originally an emergency participant in the National Flood Insurance Program (NFIP), administered by the Federal Emergency Management Agency (FEMA). The NFIP allows homeowners to purchase flood insurance, and provides for emergency repairs to public facilities such as county roads after a declared emergency. Flood Insurance Rate Maps (FIRM's) were are available for some areas, but there were few, if any, requirements for Trinity County to enforce mandatory building restrictions in designated floodplains prior to 1988.

However, as a result of repetitive flood losses throughout the nation, It became a "voluntary" program in 1988. In order to be able to participate in the NFIP, local government agencies would have to adopt a Floodplain Management Ordinance that meets federal standards for floodproofing, elevation, anchoring, etc. If local agencies do not participate in the NFIP, then flood insurance cannot be purchased within that jurisdiction, nor will local agencies such as the Trinity County Transportation Department be able to obtain flood loss payments when flood damage occurs. The lack of ability to

purchase flood insurance has significant negative consequences for local real estate transactions.

Trinity County adopted a Floodplain Management Ordinance in 1988. ~~Subsequent amendments were made to the Ordinance because of new flood studies for Weaverville, Hayfork and Coffee Creek, which were coordinated by the Planning Department in cooperation with the Army Corps of Engineers, FEMA, the California Department of Water Resources (CDWR) and the California Conservation Corps. Each time a new flood study is incorporated into a FIRM, the Ordinance must be changed to reflect the new flood study, as well as any new or revised flood hazard zones that might be included in that new FIRM.~~

In general, the Floodplain Management Ordinance includes definitions, standards for development in floodplains and references to the various flood studies that have been completed in Trinity County. ~~A Planning Director issued use permit is required for projects within mapped flood hazard areas.~~ However, many areas of Trinity County have known, but unmapped floodplains ~~(Mad River, Van Duzen River, South Fork Trinity River),~~ thereby making the Ordinance inapplicable in those areas because of a lack of mapped flood hazard areas. ~~Interestingly enough, the North Fork of the Eel River and Kekawaka Creek have mapped Zone A's in the southwestern portion of Trinity County. However, most of Trinity County is unmapped.~~

The County Board of Supervisors can adopt additional flood studies as best available information for the purposes of issuing building permits. ~~without amendment of the FIRM's. However, that additional information can only result in more restrictive regulation, not less restrictive regulation.~~

~~The 2000 amendments to the Floodplain Management Ordinance were substantial, in that the~~ **THE FLOODPLAIN MANAGEMENT** Ordinance was incorporated into Section 29.4 of the Trinity County Zoning Ordinance (Ordinance No. 315), the Flood Hazard Zoning District. ~~Other substantial amendments include a countywide prohibition on building within designated floodplains, unless the parcel has no buildable area outside of a floodplain, then the parcel may be developed, subject to meeting standards (elevation, anchoring, etc.) for development within a floodplain.~~

There are generally two types of flood hazard zones within Trinity County- Zone A with no Base Flood Elevation (BFE) determined (100-year flood elevation), and Zone AE with the BFE determined by an engineered flood study. ~~If a landowner wants to build within a Zone A, a registered professional architect or engineer must perform a flood study to determine the BFE (at the landowner's cost). If a project is within a Zone AE, the landowner must contract with either a registered professional engineer or architect or a professional land surveyor to certify on an "Elevation Certificate" that the structure is elevated one foot above the base flood elevation. Many of the smaller creeks and streams (including the Trinity River downstream of Canyon Creek) are in Zone A. For Zone A floodplains, the BFEs have not been determined and are only approximate, thereby putting a lot of responsibility and cost on the landowner to provide the BFE and other pertinent information about velocities and depths that can only be provided by a registered professional architect or engineer. Completion of accurate flood studies greatly assists landowners and government agencies in developing and implementing projects to avoid flooding problems. For that reason, the Trinity County Planning~~

Department has encouraged and coordinated cooperative flood studies in Weaverville, Hayfork, Coffee Creek and along the Trinity River.

Two key compliance issues in the Floodplain Management Ordinance are structural elevation requirements, and certification that the project will not increase the BFE. The Ordinance requires that for the first floor must be elevated at least 12 inches above the BFE. A registered professional engineer or architect's certification that the project will not individually or cumulatively increase the BFE more than 12 inches is also required.

**Current Floodplain Issues**

Current Floodplain mapping issues include the following:

1) Completion of the Revised Hayfork Flood Study- There was a 16 foot vertical error in the profile for this flood study that was incorporated into the Hayfork FIRM in 1996. The field work has been completed by the California Department of Water Resources (CDWR) and submitted to Federal Emergency Management Agency (FEMA). FEMA has released a draft version of the proposed Firm Map for review and will be holding public hearings.

2) Revision of the Trinity River Floodplain from Lewiston Dam to the North Fork confluence at Helena- The Trinity River Restoration Program, through the U.S. Bureau of Reclamation, has provided the Trinity County Planning Department with a grant to perform a peer review of a new flood study of the Trinity River performed by CDWR and to send it to FEMA for incorporation into the related FIRM's, and also for the County Board of Supervisors to consider it as best available information for issuance of building permits.

3) Floodplain Awareness Mapping- CDWR has contracted with a private consultant to provide a briefer form of floodplain mapping in areas that may be subject to development. Planning staff has provided information to the consultant on appropriate areas to study.

**Trinity River Floodplain Management**

The best available information for floodplain management in Trinity County is along the Trinity River, largely due to the abundant funding and revenues associated with the Trinity River Division of the Central Valley Project and the Trinity River Restoration Program. However, the existing FIRM is based on a 1976 Army Corps of Engineers Flood Study that is now considered to be outdated due to inadequate hydrology (lack of information on tributary inflows) as well as significant sediment and vegetative encroachment onto the floodplain. There have been individual studies along the Trinity River corridor that are often in conflict with the 1976 study leading to inconsistent data sources.

**Dams and Dam Failure Inundation**

Located within Trinity County are five managed dams: Lewiston, Trinity, Buckhorn, Ewing, and Matthews Dam.

**Lewiston Dam**

The Bureau of Reclamation owns and operates Lewiston Dam located seven miles below Trinity Dam. The dam is part of the Central Valley Project. Lewiston Dam creates an after bay for Trinity Power Plan and diverts water by means of Clear Creek tunnel to Whiskeytown Lake. The water in turn is then released to the Sacramento River Basin Project. Lewiston Dam also provides correct tail-water elevations for Trinity Dam power plant.

~~While Bureau of Reclamation is responsible for timely and effective notification of emergency events, warning and evacuation planning and implementation are the responsibility of the city, county, state, or federal authorities having jurisdiction in areas that will be inundated by releases or impacted by other events related to Trinity or Lewiston Dams, or in other events that could present a hazard.~~

~~Control operators, who are stationed at the Powerplant, perform routine inspections at Lewiston dam, approximately three times per week, and a specific dam inspection is completed once a week. Communication capabilities include commercial telephones, two-way radios, cellular telephones, and pagers.~~

**Trinity Dam**

Trinity Dam is located nine miles from Lewiston. The Bureau of Reclamation manages and operates Trinity Dam. It was constructed between 1957 and 1962 as part of the Central Valley Project. ~~It is a zoned earth-fill structure, containing about 29,251,000 cubic yards of earth, sand, gravel, and rock. This dam was originally constructed primarily for regulation of flows and storage of water for irrigation~~. The lake also serves as a water source for hydroelectric energy generated at the Trinity Powerplant, which is located at the toe of Trinity Dam. The power that is generated is dedicated first to meeting the requirements of the project facilities, with the remaining energy marketed to various preference customers (Trinity County has first preference) in Northern California.

**Buckhorn Dam**

Buckhorn Dam is located on Grass Valley Creek, 20 miles West of Redding and is part of the Central Valley Project. It is managed and operated by the Bureau of Reclamation. ~~The primary responsibility for the operation, maintenance, and safety of Buckhorn Dam rests with the Area Manager, Northern California Area Office. Construction began in 1988 and was completed in 1991. The dam is part of the Trinity River Restoration Program, which was developed for restoration of the Trinity River to the quality prior to the construction of Trinity Dam. It is designed to trap decomposed granite from Buckhorn Mountain before it enters Grass Valley Creek, which eventually flows to the Trinity River.~~ If Buckhorn Dam were to fail or make unusually high discharges, human lives and/or property downstream would be endangered. In the event of Probable Maximum Flood failure and maximum possible releases, a copy of the Emergency Action Plan is located at the Office of Emergency Services (OES) in Weaverville. This documents all procedures that will help minimize damage resulting from dam failure and large water releases from Buckhorn dam.

**Matthews Dam**

Construction on Matthews Dam ended in 1962, providing a water supply for the Humboldt Bay and Eureka area. Humboldt Bay Municipal Water District (HBMWD) owns and operates Matthews Dam and the hydroelectric plant. The dam is located on the Mad River approximately 80 miles upstream from the mouth of the river **AT RUTH LAKE.** ~~(Sec. 19, T. 1 S., R. 7 E., H.B. & M.). R.W. Matthews Dam is a zoned, earthfill dam, with an ungated spillway, and maximum height above the streambed of approximately 150 feet. On the basis of the dam's height, reservoir capacity and downstream damage potential, the dam would be rated "large" in size and "high" in hazard potential, according to the "Recommended Guidelines for Safety Inspection of Dams" (HBMWD 1990:2-1).~~ The dam is rated high-hazard, not because it is at risk for failing, but because of the number of people that could be impacted downstream in the event of failure (HBMWD 1990:2-1). Emergency Action Plans (EAPs) for dam failure are maintained at the Office of Emergency Services, Trinity County Sheriff's Office, Southern Trinity Area Rescue, USFS Mad River Ranger District, Ruth Lake Community Services District, and the Humboldt Bay Municipal Water District.

**Ewing Reservoir**

Ewing Reservoir is located in Hayfork ~~(Sec. 1, T. 31 N., R. 11 W., M.D.B. & M.). Prior to the construction of the dam, an inundation study and map were prepared for Ewing Reservoir.~~

> ~~Even in the event of complete dam failure at Ewing Reservoir (i.e. a 45 degree breach of both sides of the dam) the volume and velocity of floodwaters will not pose a significant threat to people or property (Hayfork Community Plan 1996:7:12).~~

~~Griffith and Associates, Surveyors and Engineers, prepared the inundation study and map. The Map was reviewed and approved by the Office of Emergency Services in February 1976~~. Trinity County Waterworks District #1 has an evacuation plan on file. ~~that outlines: (1) responsibilities of various personnel in the event of dam failure; (2) the location of temporary gathering points for food and shelter; and (3) sources of emergency food, water and other assistance.~~ Their office is located on Reservoir Road in Hayfork. A copy is also located at the Office of Emergency Services in Weaverville.

**Safety of Dams Criteria – Trinity and Lewiston Dams**

An additional, long-term issue for Trinity River Floodplain management is **Safety of Dams** criteria for operation of Trinity and Lewiston Dams. Trinity Reservoir, when full, holds approximately 2.5 million acre-feet (AF) of water. ~~The dam structure itself is earth fill and over 500 feet high. Trinity Dam was the largest earth-fill dam in the world when it was completed in 1963. The maximum combined outlet capacity of Trinity Dam under "uncontrolled" spills through the glory hole spillway and all other outlets is approximately 36,000 cubic feet per second (cfs) (it has never been tested at full capacity). However, since the dams went in, there have been at least 4 occasions when inflows to the reservoir were 100,000 cfs. As a result, the U.S. Bureau of Reclamation keeps the reservoir storage down during the wet season in order to provide a safety buffer in the event of a large runoff event or a probable maximum flood.~~

The U.S. Bureau of Reclamation had determined prior to the Trinity Record of Decision that the chance of catastrophic dam failure is 1:50,000. but that if the dam were to overtop, it would take a wall of water 8 hours to reach the Pacific Ocean. The U.S. Bureau of Reclamation determined that most of the economic losses would be from lost water and power supplies to the Central Valley, not the lives and properties lost from the ensuing flood downstream of the dams.

Along with the five major dams, there are many small impoundments of water. Some small dams are regulated by the California Department of Water Resources Division of Dam Safety. However, many dams fall below the threshold height or storage capacity to fall within the jurisdiction of that agency and are not inspected for hazards.

Recent work to increase the capacity of the Trinity River to provide fishery flow releases up to 11,000 cfs has resulted in over a doubling (from 6,000 cfs to 13,750 cfs) of the controlled release capacity (releases through the dam, not the Glory Hole spillway) of Trinity Dam, and therefore, has increased dam safety. Work includes replacement of several bridges, removal of the "little yellow house" in Douglas City, as well as repair and replacement of several at-risk water and sewage disposal systems. While it will still take many months to remove water from the reservoir if it is in danger of failure, the increase in release capacity into the Trinity River helps provide reservoir managers with greater flexibility to make room for large runoff events, or deal with them when they occur without jeopardizing downstream facilities such as roads, bridges and homes.

Eventually, Trinity Reservoir will fill up with sediment. It may take hundreds of years, but the rate of fill is unknown because the Bureau of Reclamation eliminated the unit that determines reservoir sedimentation approximately 18 years ago. Whenever Trinity Reservoir fills with sediment and the Safety of Dams storage criteria can no longer be met, dam failure is inevitable unless a larger spillway is constructed, or the reservoir is dredged. This is an important consideration for future generations who may inhabit the areas downstream of Trinity and Lewiston Dams.

In general, emergency notification and evacuation plans are an important aspect of ensuring public safety below reservoirs, whether large or small. Educating the public on how to implement those plans is also important and probably largely absent in Trinity County. Proper construction of new dams should also be closely watched in order to not create additional hazards to the public. This was recently an issue for a poorly constructed reservoir in Hayfork that was at risk of failure and could have jeopardized portions of downtown Hayfork. There have been small dam failures in Trinity County from improperly constructed and unregulated dams.

## 6. AIR QUALITY

### Naturally Occurring Asbestos

Information on Naturally Occurring Asbestos (NOA) provided by the California Air Resources Board notes that asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California, including areas of Trinity County (Ca Dept of Conservation ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf). The most common type of asbestos is chrysotile, but other types are also found in California. Serpentine rock often contains chrysotile asbestos. Serpentine rock,

and its parent material, ultramafic rock, is abundant in the Sierra foothills, the Klamath Mountains, and Coast Ranges. Serpentine rock is typically grayish-green to bluish-black in color and may have a shiny appearance.

Asbestos is commonly found in ultramafic rock, including serpentine, and near fault zones. The amount of asbestos that is typically present in these rocks range from less than 1% up to about 25%, and sometimes more. Asbestos is released from ultramafic and serpentine rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways which are surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. It is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time.

All types of asbestos are hazardous and may cause lung disease and cancer. Health risks to people are dependent upon their exposure to asbestos. The longer a person is exposed to asbestos and the greater the intensity of the exposure, the greater the chances for a health problem. Asbestos-related disease, such as lung cancer, may not occur for decades after breathing asbestos fibers. Cigarette smoking increases the risk of lung cancer from asbestos exposure.

The California Air Resources Board adopted two statewide control measures which prohibits the use of serpentine or ultramafic rock for unpaved surfacing and controls dust emissions from construction, grading, and surface mining in areas with these rocks. The Asbestos Airborne Toxic Control Measure (Asbestos ATCM) is generally designed to regulate use of materials that contain or may contain NOA. Some activities are exempt under various conditions.

One section of the ATCM targets "restricted material" that "includes ultramafic rock and serpentine rock; any material extracted from a region defined on geologic maps as an ultramafic rock unit, and any material that has been tested and found to have an asbestos content of 0.25 percent or greater." This section of the rule applies to "any person who sells, supplies, offers for sale or supply, transports, or applies 'restricted material'."

Another section of The ACTM regulates the use of NOA material for "any construction, grading, quarrying, or surface mining operation on any property that meets any of the following criteria: (1) Any portion of the area to be disturbed is located in a geographic ultramafic rock unit; or (2) Any portion of the area to be disturbed has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the owner / operator, or the Air Pollution Control Officer (APCO); or (3) Naturally-occurring asbestos, serpentine, or ultramafic rock is discovered by the owner / operator, a registered geologist, or the APCO in the area to be disturbed after the start of any construction, grading, quarrying, or surface mining operation."

Disturbance, construction, and maintenance of roads, depending on the type of activity and location, are also regulated. For non-road construction and grading activities, generally those with a disturbance area of one acre or less may only occur if several mitigation measures are implemented and those activities with a disturbance area of more than one acre must have an approved dust mitigation plan.

**Particulate Matter**

There is a "Particulate Matter (PM10) Attainment Plan" for the North Coast Unified Air Quality Management District (www.ncuaqmd.org), of which Trinity County is a member. ~~that was adopted in 1995. The entire region is considered non-attainment, which means that either the daily PM10 limits or the annual average daily limits are exceeded or both.~~

~~Particulate matter pollution consists of very small liquid and solid particles floating in the air. PM10 is a major component of air pollution that threatens both health and the environment. Major sources of PM10 include motor vehicles, wood burning stoves and fireplaces, dust from construction, wildfires and brush/waste burning, and windblown dust from open lands.~~

- ~~Motor vehicles~~
- ~~Wood burning stoves and fireplaces~~
- ~~Dust from construction~~
- ~~Wildfires and brush/waste burning~~
- ~~Windblown dust from open lands~~

~~PM10 is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. It is among the most harmful of all air pollutants. When inhaled these particles evade the respiratory system's natural defense and lodge deep in the lungs. Health problems begin as the body reacts to these foreign particles. PM10 can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections.~~

~~The primary general source of PM10 estimated by the Air Resources Board in the 1995 Attainment Plan in Trinity County was unpaved road dust. Other PM10 sources in general are: woodstoves, open burning, unplanned fires, and unleaded vehicles. The source that was estimated in the 1995 Plan to be responsible for over 55% of PM10 during peak level periods was wood stove burning.~~

~~The 1995 Plan relied on both the estimates and sampling data to base recommendations, which mostly consist of suggestions for county regulations on some of these activities. The County's existing General Plan Safety Element (2002) states "the primary sources of pollutants contributing to the non-attainment designation for PM10 are wood stoves, wind-blown dust from dirt roads and agriculture, and open burning from backyard burns and prescribed burns." The Weaverville Community Plan (1990) directs planners to evaluate existing particulate sources, such as dirt roads or practices that will generate significant PM10 levels, to determine if they result in a significant environmental impact.~~

~~The North Coast Unified Air Quality Management District Particulate Matter Attainment Plan is currently under review and will be updated as necessary in 2008.~~ **~~IT IS IMPORTANT THAT THIS UPDATE TAKE INTO ACCOUNT THE INTENSITY AND FREQUENCY OF WILDFIRES IN THE COUNTY AND THE RESULTING NEGATIVE AIR QUALITY EFFECTS.~~**

**Wildfire Smoke**

Wildfire smoke can spread toxic pollutants and ash over communities for hundreds of miles. Trinity County is especially affected by the large amounts of wildfire smoke generated from frequent fires within the forests making up the majority of land use in the County.

~~Carbon monoxide is one of the main components of wildfire smoke and chemical reactions in wildfire smoke can trigger ozone production. Catastrophic wildfire smoke releases similar pollutants as automobile tailpipes into the air. Historically, the devastating fires that cause this kind of air quality degradation were rare. With overcrowded forests and an abundance of forest fuels these fires are much more common especially in Trinity County. Several recent fires have created exceedingly large quantities of smoke in Trinity County which have negatively affected the health of residents and visitors and the County's rural recreation economy.~~

## 7. GEOLOGY

Geology in Trinity County is important to take into account for land decisions relating to planning. Movements of the earth create mountain ranges, valleys, volcanoes, minerals, and earthquakes which have an effect upon the human environment. These effects can potentially be disastrous to not only the individual, but also communities, and create difficulties for emergency responders. ~~Therefore, it is crucial that there be a general knowledge of the subject by government and policies in place to avoid catastrophe.~~

According to the California Division of Mines and Geology (1965), Trinity County lies in portions of two geomorphic provinces, and these are in sharp contract with each other in topography, geology and mineral resources. The northeastern part, which ocvers hearly two-thirds of the county, is in the Klamath Mountains province where flat-topped ridges and glaciated peaks rise to elevations ranging from 6000 to above 9000 feel. The southwestern part of the county is in the Coast Ranges province, with a top elevation of about 6800 feet. The ridge of South Fork Mountain marks the division between the two provinces.

The two different provinces create two distinct drainage patterns, with the northeastern part draining generally westward, while the southwestern portion drains northwestern. Another distinguishing feature of the two provinces is the fact that the principal rock units of the Klamath Mountains are older than Cretaceous and are intruded by granite rocks. The rock of the Coast Ranges is mostly Late Jurassic and Cretaceous in age and is not intruded by granite. Many rock units of both provinces have been invaded by ultramafic intrusives and some of the latter have subsequently been altered to serpentine.

~~Trinity County, with an area of 3000 square miles, is bounded on the north by Siskiyou, on the east by Shasta and Tehama, on the south by Mendocino, and on the west by Humboldt County, and is drained by the Trinity, Mad, Eel, and Van Dusen rivers.~~

~~Trinity is a mountainous county, its eastern third area being covered by the Coast Range or Trinity Mountains, the summit of which divides it from Tehama and Shasta counties. The mountain ranges of Scott and Salmon on the north form the boundary between it and Siskiyou. Bully Choop, Baldy, and other peaks in the Trinity and Salmon Mountain ranges reach an altitude of over 6000 feet. The hydrography of Trinity County consists~~

of the Trinity River and its confluents draining all parts of it. The Trinity River, heading in the Scott Mountain division of the Coast Range, after flowing south for 60 miles, makes a detour to the northwest, which course it holds for another 60 miles, where it makes a detour t othe northwest, which course it holds for another 60 miles and units with the Klamath River in Humboldt County. From the section where Coffee Creek, one of the tributaries, flows into the Trinity River, banks of auriferous gravel commence, parallel with the river as far as Swift Creek. The river formerly flowed west of the town of Trinity Center, at an elevation of several hundred feet above its present channel, thence taking a southwesterly course through the Buckeye Range on to Weaver Basin.

Through this section, Trinity Center to Weaver Basin, there is evidence of ancient river channels with the ancient river emptying into a great lake at the present Weaver Basin. The material filling this channel is composed of volcanic breccia and rocks of all formations and ages – angular, irregular, rounded and intermingled with conglomerates, clay and sands.

The bed of Weaver Basin is cement, several hundred feet in thickness below the auriferous gravel, deposited from the ferruginous, siliceous and calcareous matter carried down by the waters, erosions of the various formations along the channel settling in the basin, and there cementing. There is an absence of coarse material which may indicate that this cementation took place prior to the filling of the cement channel with auriferous sands and gravel.

Granite in Trinity County is the same material and occurs in the same manner as in Shasta County. Limestone is found in many places in Trinity County as follows: 1) A belt of Devonian limestone running parallel with the South Fork of the Trinity River from its source to Hoopa Valley, for the most part associated with igneous rocks, 2) A parallel belt of Devonian limestone running to the northeast of the previous belt mentioned, and 3) A belt of Carboniferous limestone, entering Trinity County from the southeast running northwest and disappearing north of Hayfork. Northeast of these belts numerous limestone exposures are found. A large amount of metamorphism in Trinity County has altered much of the limestone into marble.

Scott Mountain, formed of igneous, volcanic rocks, with basalts, trachyte, and obsidian, overlaps the granite in the Salmon Range to the west, its gray peaks towering above the timberline. On the east is the Trinity Range of granite, syenites, diabase and prophyries. Father south on the range are metamorphic gneiss, hornblende and mica schists, then a slate belt, followed by a large belt of serpentine crossing.

**Seismic Hazards**

Earthquakes create various geological processes that can cause severe damage to structures and danger to people. The Alquist-Priolo Special Studies Zones Act signed into law in 1972 requires that the California Division of Mines and Geology prepare Special Study Zone maps which delineate all potentially and recently active faults which constitute potential hazards to structures. The purpose of the Act is to prohibit the location of most structures for human occupancy across the traces of active faults and to thereby mitigate the hazard of fault rupture.

As of 1997, 543 Official Maps of Earthquake Fault Zones were issued. The maps delineate regulatory zones for the faults in California. Thirty-six (36) counties and 97

cities are affected by the existing Earthquake Fault Zones, and of these 36 counties, Trinity County is not listed as being affected by potentially active faults, and therefore does not have a relatively high potential for ground rupture. However, while Trinity County is not potentially affected by active faults, there are many inactive faults that exist. Even with no active faults, the occasional earthquake can be felt within the County.

**Landslides**

Landslides create a threat that is multifaceted; they create a serious threat to highways and structures that support fisheries, tourism, timber harvesting, mining, and energy production as well as general transportation. Landslides are common in regions that are mountainous, such as Trinity County, with weathered shale and other clay-rich rocks, and particularly where there are steep slopes, periodic rains, and vegetation loss has occurred after wildfires or a result of clear-cut logging.

Landslide refers to the down slope movement of masses of rock and soil. Landslides are caused by one or a combination of the following factors: change in slope gradient, increasing the load the land must bear, shocks and vibrations, change in water content, groundwater movement, frost action, weathering of rocks, and removal or changing the type of vegetation covering slopes.

Landslide hazard areas occur where the land has certain characteristics, which contribute to the risk of the downhill movement of material. These characteristics include type and structure of earth materials, steepness of slope, water, vegetation, erosion, earthquake generated groundshaking, and the presence of impermeable soils, such as silt or clay, which are mixed with granular soils such as sand and gravel.

Commonly, downslope movement is only considered a hazard when it threatens people and property. Therefore, this discussion focuses on landslides that occur in areas affecting human life or property; rather than landslides that occur in wilderness areas.

Slope failures in the United States result in an average of 25 lives lost per year and an annual cost to society of about $1.5 billion. Damages to highways along cost $1 billon annually (USGS 1999).

Typical effects include damage or destruction of portions of roads and railroads, sewer and water lines, homes and public buildings. Even small-scale landslides are expensive due to clean up costs that may include debris clearance from streets, drains, streams and reservoirs; new or renewed support for road and rail embankments and slopes; minor vehicle and building damage; personally injury; livestock, timber, crop and fencing losses and damaged utility systems. Landslides are often a secondary hazard related to other natural disasters. Rainstorms triggering landslides may also produce damaging floods. Earthquakes often include landslides that can cause additional damage. The identification of areas susceptible to land sliding is necessary to support grading, building foundation design, housing density, and other land development regulations to reduce the risk of property damage and personal injury.

In the early 1980s, the Department of Water Resources conducted a study that mapped the geology, landslides, instability and erosion hazard areas for two watersheds in Trinity County; the South Fork of the Trinity River and the Main Stem of the Trinity River.

These maps are the best available landslide information for Trinity County. Larger, more detailed maps are located at the Trinity County Planning Division.

**Ultra-Mafic Rocks**

The northeastern portion of Trinity County has large areas of ultramafic rock areas. (Department of Conservation, Division of Mines and Geology) Areas of ultramafic rock areas are more likely to contain naturally occurring asbestos.

By the time ultramafic rocks are exposed at the surface by uplift and erosion, the rocks may be partially to completely altered to serpentinite, a type of metamorphic rock. Sometimes the metamorphic conditions are right for the formation of chrysotile asbestos or tremolite-actinolite asbestos in bodies of ultramafic rock or along their boundaries. T

The presence of ultramafic rocks impacts how construction, grading, road building and maintenance, quarrying, or surface mining is done in those areas. When asbestos containing rocks are crushed or broken through natural weathering processes or through activities associated with construction, asbestos-containing dust can be generated. The dust may pose serious health risks. (see section on Air Quality)

## 8. AIRPORT SAFETY

*SEE TRINITY COUNTY AIRPORT LAND USE COMPATIBILITY PLAN*

Aviation is a vital link in the transportation system. Aviation provides a gateway to the world and plays a key role in the economy as businesses use the speed and reliability of air service to achieve operating efficiency. Airports are critical for providing services, such as business travel, tourism, recreation, emergency response, fire suppression, and law enforcement. Airports and businesses that support airports provide direct and indirect jobs and income. Aviation provides tangible and intangible benefits, such as quality of life and enhanced mobility.
General aviation airports are any airports that do not have commercial passenger service.
Rural general aviation airports are important to community safety because they provide:

- a base for forest fire observations and suppression operations
- community access to air ambulance services
- disaster egress and ingress
- In mountainous terrain, airports serve as an emergency landing facility for aircraft encountering in-flight difficulties both during the day and night

One of the greatest concerns facing airports today is the continued pressure brought about by inappropriate land use that threatens and limits the operations of an airport. The importance and valuable contributions of airports requires that land use planners consider the effect that land use decisions will have on airport operations and public safety. Without proper land use planning, airport operations can become unsafe and land uses surrounding airports can become unsafe places for residents and workers.
Airports located in areas with dwellings in the approach or take-off pattern may cause safety problems for both the airplanes and occupants on the ground. Most of the public safety risk created by airports is borne by pilots and passengers. The primary hazard to

the general public is the possibility of being injured on the ground during an aircraft accident. To reduce this risk, the Federal Aviation Administration (FAA) requires runway protective zones and height limits on structures near airports.

This discussion of aviation hazards is limited. Hazards to aviation flight and people around an airport are fully identified and analyzed in the *Trinity County Airport Land Use Compatibility Plan* (TC ALUCP). The ALUCP sets out policies for land use within each airport's influence area.

This section provides a summary of the existing conditions that relate to safety at each Trinity County airports. **MORE DETAILED INFORMATION IS CONTAINED IN THE TC ALUCP.**

The Trinity County Airports Division manages five general aviation public use airports:

- Weaverville Airport
- Hayfork Airport
- Hyampom Airport
- Ruth Airport
- Trinity Center Airport

All Trinity County airports have these common features:

- No fuel service
- Not attended by oversight staff
- No fixed based operators (FBO)
- No weather reporting system
- No aircraft rescue or fire fighting services on airport

- In Class E airspace. Class E airspace is controlled airspace. Only aircraft conducting instrument flights are required to be in contact with air traffic control when operating in Class E airspace. Aircraft conducting visual flights in Class E airspace are not required to be in radio communications with air traffic control facilities. Visual flight can only be conducted if minimum visibility and cloud ceilings exist. to the north sometimes resulting in accidents.

**Weaverville Airport**

Weaverville Airport is located in the county seat of Weaverville (pop. 3,500), and is classified as a Community-Recreation Airport. It is situated at the northern edge of Weaverville. The Airport is bounded by Highway 3 to the east, the community of Weaverville to the south, the Weaverville landfill to the west, and a residential area to the north. The facility consists of a 50' X 3380' asphalt surfaced runway supplemented by runway lights, a P.A.P.I. (Precision Approach Path Indicator), and a wind indicator. Nighttime activity is restricted to pilots with prior permission. As a General Aviation (GA) facility, Weaverville Airport serves Aircraft Design Group 1, which is defined as airplanes having up to a 49-foot wing span (i.e., most single and some twin engine prop aircraft.). The runway is constrained by gradient and obstructions in the approach and

departure zones. Terrain to the north and east of the airport penetrates the horizontal and conical surfaces of the runway. The runway is single-directional. Planes must take off to the south and land from the south due to runway gradient and surrounding terrain, although, due to pilot error, flights have taken off to the north sometimes resulting in accidents. The facility has twenty-nine tie-downs and nine hangers. There are no fueling facilities on the site.

Given the mountainous terrain of the region, this location serves as an emergency landing facility for aircraft encountering in-flight difficulties, as a base for summertime forest fire observations and suppression operations, and previously as a community and area access for air ambulance services and patient transfers from Trinity Hospital in Weaverville. Improvements at the Weaverville Airport have been limited due to the severe constraints of the current airports. Routine maintenance and upkeep are performed but expansion activities at the airport are not expected.

**Hayfork Airport**

Hayfork Airport, located in central Hayfork (pop. approx. 2500), is classified as a Community airport and is visual flight rules (VFR) rated. It is unattended with no fixed-based operator. A single, two-way runway exists. consisting of a 4100' x 60' physical asphalt surface. The single two way runway and the taxiway are equipped with a pilot-keyed, medium intensity lighting system. Approximately 18 chained tie-downs are available for based and transient aircraft on the apron. Two hangars exist and are occupied by lease. There are currently no fueling facilities on the site. As a General Aviation (GA) facility, Hayfork Airport serves Aircraft Design Group 1, which is defined as airplanes having up to a 49-foot wing span (i.e., most single and some twin engine prop aircraft).

The airport is located along V-195 airways at a point 55 statute miles northwest of Red Bluff Airport. Given the mountainous terrain of the region, this location is valuable as an emergency landing facility for aircraft encountering in-flight difficulties, as a base for summertime forest fire observation and suppression operations, and as community access for air ambulance services.

**Hyampom Airport**

Hyampom Airport, located within the community of Hyampom (pop. approx 300) is classified as a Community airport. It is unattended with no fixed-based operator. A single, two-way runway exists, consisting of a 2980' x 60' physical asphalt surface. And approximately 12 tie-downs are available.

The airport is located along the northerly edge of V-195 airways at a point 55 statute miles northwest of Red Bluff Airport. Given the mountainous terrain of the region, this location is valuable as an emergency landing facility for aircraft encountering in-flight difficulties, as a base for summertime forest fire observation and suppression operations, and a community access for air ambulance services.

Hyampom Airport has provided impetus for development of a vineyard and winery economy in Hyampom Valley. As the wineries develop, it is envisioned that organized fly-ins and other recreation events will add to the community's economy.

**Ruth Airport**

Ruth Airport, located in the southern portion of the county near Ruth Lake (pop. approx 400) is unattended with no fixed-based operator. A single, two-way runway exists consisting of a 3500' x 50' physical asphalt surface. The single two-way runway is not lighted. Approximately 10 tie-down spaces are available for based and transient aircraft. The airport is located along V-195 airways at a point 55 statute miles northwest of Red Bluff Airport. Given the mountainous terrain of the region, this location is valuable as an emergency landing facility for aircraft encountering in-flight difficulties, as a base for summertime forest fire observations and suppression operations, and as community and area access for air ambulance services.

Due to its location near Ruth Lake, Ruth Airport provides valuable economic opportunities to the southern portion of Trinity County and serves as a valuable link between other recreation destinations in the north state region.

**Trinity Center Airport**

Trinity Center Airport, located in Trinity Center (pop. approx. 600), is classified as a Community-Recreation airport and is visual flight rules (VFR) rated. It is currently unattended with no fixed-based operator. A single, two-way, runway exists, consisting of a 3200-foot physical asphalt surface that includes relocated thresholds of 200 feet on each end (runway width varies between 50' and 60' feet). The runway presently is not lighted. Approximately 50 chained tie-downs are available for based and transient aircraft on the apron. Additional aircraft parking is available along the west side, north of the apron. Twenty-two owner-built hangars are occupied by lease. There currently are no fueling, service, or repair facilities on the site. The airport is located on V-23 airways at a point forty statute miles from Scott Valley Airport and thirty-two statute miles from Benton Airport in Redding. Given the mountainous terrain of the region, this location is valuable as an emergency landing facility for aircraft encountering in-flight difficulties, as a base for summertime forest fire observation and suppression operations, and as access for air ambulance service.

Due to its location at Trinity Lake, Trinity Center Airport provides valuable economic opportunities to the county and serves as a link between other recreation destinations in the north state region.

## 9. HAZARDOUS MATERIALS

Hazardous materials accidents, spills or contamination can occur anywhere meaning all areas of Trinity County are vulnerable.

Hazardous materials and wastes are regulated by federal, state and local agencies and are required to be recycled or disposed of properly. However, illegal storage, disposal and releases of hazardous materials or waste from leaks and accidents can still occur.

The California State Highway Patrol (CHP) regulates transport of hazardous materials. When such material/waste spill originates on a highway the CHP is responsible for direction of cleanup, enforcement and notification to the local Sheriff's Department/Office of Emergency Services (OES), Environmental Health and the State Department of Toxic Substances.

The Shasta Cascade Hazardous Material Response Team (SCHMERT) may be called in to respond to serious, significant material emergencies including threatening or on-going release of a toxic, corrosive, reactive, flammable or unknown material. The SCHMERT response time is a minimum of 30-60 minutes.

~~Initial response to a reported hazardous material incident will most likely be the closest volunteer fire department. The first department on scene assumes incident command until the lead agency arrives (CHP on highways, Sheriff's Department/OES or Environmental Health in other county areas) As stated, SCHMERT may eventually become the lead agency.~~

~~Infrequently, perhaps once a year, law enforcement informs Environmental Health of meth lab wastes. Environmental Health then requires the property owner to properly clean the site. Illegal dumping including meth lab related materials pose a public health threat but do not usually spread contamination beyond the immediate dump site. Water quality could be a concern.~~

~~In general, hazardous material sites are regulated by the State Department of Toxic Substances Control.~~

**~~Cortese List For Toxic Clean Up Sites and Brownfields~~**

~~Trinity County currently has no sites on the official Cortese List.~~

~~As of January 2008, there are six active cleanup and abatement orders and one active cease and desist order in Trinity County listed by the State Water Resources Control Board, as required by the Cortese Site policies. (www.calepa.ca.gov/SiteCleanup)~~

**~~Commercial/Industrial Hazardous Materials Storage & Underground Storage Tanks~~**

~~There are 28 leaking underground fuel tanks in Trinity County listed by the State Water Board through GeoTracker as having an 'Open' case status and 66 sites with a 'Closed' case status. There are also 26 'Open' and one 'Closed' Spill-Leaks-Investigations-Cleanups sites listed in Trinity County. (www.calepa.ca.gov)~~

## 10. LANDFILL AND TRANSFER FACILITIES

The Trinity County landfill and transfer site is located west of Weaverville Airport 1.5 miles north on highway 3 from its intersection with Highway 299 in Weaverville. There are nine transfer sites located throughout the County. ~~Legal location: SE quarter of Section 6, Township 33 N, Range 9W, Mt. Diablo Base Meridian. The landfill facility occupies 43.6 acres of a 73 acre parcel owned by Trinity County. The filled area occupies approximately 20 acres of which 16.55 acres is filled with municipal refuse and the remainder allocated for inert waste.~~

~~In 1999 10.14 acres were capped and closed with the remaining 6.5 acres scheduled to close in 2009. The proposed use for the landfill footprint is open space. For other uses, a specific plan describing such use and methods for protection of the landfill and public will be submitted to the RWQCB (Regional Water Quality Control Board), the CIWMB (California Integrated Waste Management Board) and LEA (Local Enforcement Agency).~~

There are currently no schools or hospitals within 1,000 feet of the property boundary. A juvenile detention facility is located approximately 400 feet north of the landfill.

Leachate is drained into four 2,500 gallon plastic tanks in a containment area on the west side of the landfill. A booster pump and sewer line provide disposal to the Weaverville Sanitary District sewer line. Leachate flow is measured monthly in the collection system. Sampling of leachate is performed concurrently with groundwater sampling. Sampling for disposal to the Weaverville Sanitary District is performed twice a year and is directed by the Weaverville Sanitary District. There are four storm water sampling points at the site and the landfill has a gas monitoring network of ten probes with the required minimum of 1,000 foot spacing around the landfill's perimeter.

Household Hazardous Wastes (HHWs) found during load checks are logged and stored in fire rated load check lockers on site. Employees are trained in recognition of these wastes and such 'orphan wastes' are removed from the site within 90 days by a licensed hazardous waste hauler under appropriate manifests. Annually, the Solid Waste Division along with their HHW Contractor hosts a Household Hazardous Waste Collection Day at three locations in the county.

Of the nine transfer sites in Trinity County, three (Hayfork, Junction City and Weaverville) maintain a 'bio hazard' bin accepting needles and sharps, all accept e-waste (electronics)and all except Van Duzen and Big Bar accept oil and filters. All outlying sites haul to the main transfer site in Weaverville for proper disposal.

## 11. WATER QUALITY

Most residents of Trinity County rely on surface water for domestic consumption. The two largest communities, Weaverville and Hayfork, rely upon the surface waters of Weaver Creek/Trinity River and Big Creek, respectively, for their water supply. Many Trinity County residents take water directly from streams, surface springs and rivers for domestic use, some with treatment, and others without treatment. The risk of waterborne diseases and illnesses is particularly high for surface water users who do not treat their water. However, many chemicals and heavy metals are not easily removed from drinking water, thus creating a risk for those who use treated surface water (usually chlorine and some filtration), and creating a need to maintain and improve the generally high quality of water in Trinity County.

Risks from waterborne illnesses can include **GIARDIA**, viruses, bacteria, liver-toxin producing blue-green algae, heavy metals and chemicals such as pesticides/herbicides. In some cases, nutrients such as fertilizers, failing sewage disposal systems or livestock may lead to other water quality problems such as blue-green algae (BGA) growth, which has not currently been detected in Trinity County, but has become prevalent in the adjacent counties in recent years. Extensive water withdrawals from a particular stream may also increase temperatures, increase the proliferation of water withdrawals from a particular stream may also increase temperatures, increase the proliferation of water-borne pathogens, decrease dilution of existing pollutants and generally decrease water quality.

For those who utilize groundwater for domestic purposes, water quality is still of concern because there are not well-established aquifers, and some sources of groundwater may

be connected to surface waters and thus potential pollution. Over pumping of groundwater may also result in the increase in the concentration of groundwater pollutants such as heavy metals, arsenic, sulfur, iron, bacteria or surface pathogens. Because aquifers are underground once they are polluted, it is prohibitively expensive and technically difficult to remediate the pollution.

## 12. CLIMATE CHANGE

Assembly Bill 32 (AB 32), the California Global Warning Solutions Act of 2006 (Nunez, 2006), recognizes the California is the source of substantial amounts of GHG emissions which influences climate change. (www.arb.ca.gov/cc).

Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and later the surface and features of the land. Significant changes in global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of greenhouse gas (GHG) emissions in the atmosphere. Greenhouse gases trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e. fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming.

State law defines GHG to include the following: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Health and Safety Code, Section 38505(g). The most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide.

AB 32 establishes a state goal of reducing GHG emissions to 1990 levels by the year 2020 (a reduction of approximately 25 percent from forecast emission levels) with further reductions to follow. The law requires the Air Resources Board to establish a program to track and report GHG emissions, approve a scoping plan for achieving the maximum technologically feasible and cost effective reductions from sources of GHG emissions, adopt early reduction measures to begin moving forward, and adopt, implement and enforce regulations – including market mechanisms such as "cap-and-trade" programs – to ensure the required reductions occur.

Each public agency that is a lead agency for complying with the California Environmental Quality Act (CEQA) needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. A consistent approach should be applied for the analysis of all such projects and the analysis must be based on best available information. For these projects, compliance with CEQA entails three steps: identify and quantify the GHG emissions, assess the significance of the impact on climate change, and if the impact is found to be significant, identify alternatives and/or mitigation measures that will reduce the impact below significance.

Some cities and counties have adopted general plans and policies that encourage the development of compact, mixed-use, transit-oriented developments which reduce

vehicle miles traveled, encourage alternative fuel vehicle use, conserve energy and water usage, and promot carbon sequestration. Adoption of general plan policies and certification of general plan environmental impact reports that analyze broad jurisdiction-wide impacts of GHG emissions is a strategy to address cumulative impacts and to streamline later project-specific CEQA reviews.

Because the majority of land in Trinity County is forestland, it is important to address keeping forestland healthy. Forests absorb GHG like carbon dioxide whereas catastrophically burning forests release tremendous amount of carbon and other pollutants in large outbursts. According to the U.S. Environmental Protection Agency, managed forests in the United States absorb about 17 percent of total annual U.S. greenhouse gas emissions – equivalent to removing the carbon dioxide emissions from 235 million automobiles annually. With careful management of forests, the threat of wildfire goes down and the carbon originally trapped in the forest by healthy growing trees stays in the wood. Replanting forestland, **PUBLIC AND PRIVATE,** continues the cycle of carbon storage. Thus Trinity County may play a ~~large~~ role in reducing global warming due to its largely forested land area **THROUGH A CARBON CREDIT PROGRAM OR OTHER METHOD OF ADDRESSING A REDUCTION IN GLOBAL WARMING.**

## SECTION IV - DEFINITIONS

**Alquist-Priolo Fault Zone.** The Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972, requires the State Geologist to identify zones of special study around active faults.

**Best Management Practices.** Performance standards used to measure success in controlling non-point source water pollution.

**Biomass.** Plant material, vegetation, or agricultural waste used as a fuel or energy source.

**Climate Change.** Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and later the surface and features of the land.

**Community Facilities District.** Under the Mello-Roos Community Facilities Act of 1982 (Government Code Section 53311, et seq.), a legislative body may create within its jurisdiction a special district that can issue tax-exempt bonds for the planning, design, acquisition, construction, and/or operation of public facilities, as well as provide public services to district residents. Special tax assessment levied by the district are used to repay the bonds.

**Community Wildfire Protection Plan (CWPP)** Plan for an at-risk community that is developed by the applicable local government, local fire department, State agency, interested parties, and Federal land management agencies. The Plan identifies and prioritizes areas for hazardous fuel reduction and recommends methods of treatment that will protect communities and infrastructure. It also recommends measures to reduce structural ignitability throughout the community.

**Critical Facilities and Infrastructure.** Facilities housing or serving many people, which are necessary in the event of an earthquake or flood, such as hospitals, fire, police, and emergency service facilities, utility lifeline facilities such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

**Developable Land.** Land that is suitable as a location for structures and that can be developed free of hazards to, without disruption of, or significant impact on natural resources.

**Development.** The physical extension and/or construction of land uses. Development activities include: subdivision of land, construction or alteration of structures, roads, utilities, and other facilities, installation of septic systems, grading, deposit of refuse, debris, or fill materials, and clearing of natural vegetative cover (with the exception of agricultural activities).

**Dust Suppression.** Methods used to control and prevent dust from becoming airborne in order to reduce risk to human health and the environment.

**Erosion.** The loosening and transportation of rock and soil debris by wind, rain, or running water.

**Fault.** A fault is a fracture in the earth's crust that is accompanied by displacement between the two sides of the fault.

**Federal Emergency Management Agency (FEMA).** FEMA is the federal agency designated to plan for and respond to emergencies, both natural and human made. A key role performed by the agency is the designation of floodplains and management of the federal flood insurance program.

**Federal Responsibility Area (FRA).** Land exclusive of cities and state lands in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the federal government.

**Fire Hazard Zone.** An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

**Flood Insurance Rate Map (FIRM).** For each community, the official map on which the Federal Insurance Administration has delineated areas of special flood hazard and the risk premium zones applicable to that community.

**Floodplain.** The area adjacent to a stream, slough, river, lake or other water course that is inundated during a 100-year storm event as mapped by the Federal Emergency Management Agency (FEMA).

**100-Year Flood.** A flood that has 1 percent likelihood of occurring in any given year. (i.e. Base Flood – recognized as a standard for acceptable risk).

**100-Year Floodplain.** The area covered in water during a 100-year flood.

**Floodway.** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "base flood" without cumulatively increasing the water surface elevation more than one foot.

**Geotechnical Engineering Study.** A geotechnical report is a report prepared by a certified engineering geologist or a civil engineer practicing within the area of his or her competence, which identifies geologic and seismic hazards and recommends mitigation measures to reduce the risk of these hazards to acceptable levels.

**Global Warming.** Global warming is an increase in the temperature of the atmosphere near the Earth's surface attributed to accumulation of greenhouse gas emissions in the atmosphere.

**Goal.** A goal is a general direction-setter. It is an ideal future end related to the public health, safety, or general welfare. It is a general expression of community values and therefore may be abstract in nature.

**Greenhouse Gas.** State law defines greenhouse gas to include the following: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

**Hazardous Materials.** A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of.

**Hazardous Wastes.** Hazardous wastes are defined as materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal and have the characteristics of a hazardous material. Hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive.

**Impact Fee.** A fee, also called a development fee, levied on the developer of a project by a city, county, or other public agency as compensation for otherwise unmitigated impacts the project will produce. California Government Code Section 66000 et seq. specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

**Implementation Measure.** An action, activity, or strategy carried out in response to adopted policy to achieve a specific goal. Policies and programs establish the "who", "how", and "when" for carrying out the "what" and "where" of goals.

**Inundation.** Covered by floodwaters.

**Local Responsibility Area (LRA).** Local responsibility areas include incorporated cities, cultivated agricultural lands, and portions of the desert. Local responsibility area

fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.

**National Ambient Air Quality Standards.** The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

**Naturally Occurring Asbestos (NOA).** Geologic deposits or naturally occurring earth materials including rock and soils with an asbestos concentration of 0.25% or greater as determined by Air Resources Board Test Methods or as shown on the Ultramafic and Serpentine Rock and Soils Map for Trinity County.

**Policy.** A specific statement of principle or of guiding actions that implies clear commitment but is not mandatory. A general direction that a governmental agency sets to follow in order to meet its goals before undertaking an action program.

**Seismic.** Caused by or subject to earthquakes or earth vibrations.

**Shall.** That which is obligatory; an unequivocal direction.

**Should.** Signifies a directive to be honored if at all possible; a less rigid directive than "shall," to be honored in the absence of compelling considerations.

**Slope.** Land gradient described as the vertical rise divided by the horizontal run,a dn expressed in percent.

**Soil.** The unconsolidated material on the immediate surface of the earth created by natural forces that serves as natural medium for growing land plants.

**Solid Waste.** Any unwanted or discareded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials.

**State Responsibility Area (SRA).** Land exclusive of cities and federal lands regardless of ownership, classified by the State Board of Forestry as areas in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the state. These are lands covered wholly or in part by timber, brush, undergrowth or grass, whether of commercial value or not, which protect the soil from erosion, retard runoff of water or accelerated percolation, and lands used principally for range or forage purposes.

**Subdivision.** Division of unimproved or improved land for the purpose of sale, lease or financing. A **major subdivision** is a division of property into five or more lots and a **minor subdivision** consists of four or fewer lots.

**Wildland–Urban Interface (WUI)**. Area where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels.

*Resource Conservation District is creating updated GIS maps for Blueprint Planning Grant Project – staff will obtain most recent maps to include in final Safety Element*

**SECTION V – MAPS**

- Landslide Locations
- ~~Fault Lines~~
- ~~Ultra-Mafic Soils~~
- ~~Hard Rock Mine Sites~~
- ~~Regional Fuel Breaks~~
- Earthquake Locations by Magnitude
- Fault Line Locations by Age
- Fire Start Locations by Cause
- Fire Hazard Severity Classification
- Major Evacuation Routes
- Fire Protection Districts/Departments
- Ultramafic Rock/Naturally Occurring Asbestos Locations
- Airport Safety Zones (5 Airports)

**SECTION VI - APPENDIX**