

TRINITY COUNTY 2030

TRINITY COUNTY GENERAL PLAN SAFETY ELEMENT

Discussion Draft

General Plan Advisory Committee and Planning Commission

Joint Meeting – January 29, 2009

ACKNOWLEDGEMENT

Trinity County Board of Supervisors

District 1 – Judy Pflueger
District 2 – Judy Morris
District 3 – Roger Jaegel
District 4 – Howard Freeman
District 5 – Wendy Reiss

Trinity County Planning Commission

District 1 – Keith Groves
District 2 – Chuck Johnson
District 3 – Jim Jungwirth
District 4 – Tom McKnight
District 5 – Ray Bushman

Trinity County General Plan Advisory Committee (15 members)

District 1 – Lynton Scott
District 2 – Vacant
District 3 – Sandy Bechtold
District 4 – Greg Simmons
District 5 – Ross Burgess

Stakeholders

Travis Finch
Joan Carr
Bryan Taylor
Dennis Corp
Vacant

Interested Individuals

Carol Rogan
Ken McCoy
Kelli Gant
William Chambers
Vacant

Prepared by:

*Susan Price, Director
Department of Natural Resources and Long Range Planning
PO Box 1445
Weaverville, CA 96093*

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TRINITY COUNTY SAFETY ELEMENT

Introduction

Government Code Section 65302(g) of the California State law requires that a Safety element be included within the General Plan. The legal requirements are as follows:

A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of the Public Resources Code, and other geologic hazards known to the legislative body; flooding, and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, military installations, peak load water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

In order to maintain a high quality of life for Trinity County residents, the County must minimize natural hazard risks (e.g. earthquakes, wildfire, flooding), as well as manmade hazards and nuisances (e.g. noise, poor air quality, hazardous materials). The Safety Element contains goals, policies, and implementation measures designed to protect the public health, safety, and welfare of the community from any unreasonable risks while minimizing damage to structures, property, and infrastructure resulting from natural and man-made hazards. Development in hazardous areas not only exposes land owners to unreasonable safety risks, but can also result in rescue workers being placed in unnecessary, dangerous situations. Topic areas covered in this element are:

SECTION I – GOALS AND POLICIES

1. Wildland Fire Hazard
2. Fire Protection
3. Security
4. Emergency Response
5. Flood and Inundation
6. Air Quality
7. Geologic and Seismic Hazards
8. Airport Safety (*see Trinity County Airport Land Use Compatibility Plan*)
9. Hazardous Materials
10. Landfill and Transfer Facilities
11. Water Quality
12. Climate Change

SECTION II – IMPLEMENTATION MEASURES

SECTION III – BACKGROUND INFORMATION

SECTION IV – DEFINITIONS

SECTION V – MAPS

SECTION VI – APPENDIX

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 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 CAL FIRE.

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-1.3 Fuel Modification Programs. The County shall actively support fuel modification, reduction, and maintenance programs on all public and private lands throughout the County.

Policy S-1.4 County Ordinances, Resolutions, Policies. Development in areas subject to wildland fire hazard must conform to all related County ordinances, 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.

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.

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.

Policy S-2.3 Fire District Consolidations. The County shall encourage the Trinity County Local Agency Formation Commission to evaluate consolidation of fire and 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 CAL FIRE, BLM and USFS in providing fire protection services and fire prevention programs.

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.

3. SECURITY

Goal MAINTAIN EFFECTIVE AND COMMUNITY ORIENTED LAW ENFORCEMENT.

Policy S-3.1 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-3.2 Land Use Planning. Actively involve law enforcement personnel in land use planning decisions.

Policy S-3.3 Community Partnerships. The County shall encourage law enforcement programs through community partnerships to help reduce and prevent crime.

Policy S-3.4 Facilities. The County shall plan law enforcement facilities according to overall need and the distribution of growth within the County.

Policy S-3.5 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 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-4.4 Telecommunications Providers. Enable telecommunications providers to furnish safe, comprehensive and efficient communication services throughout the County.

Policy S-4.5 Prefire Management Plans. The County shall encourage fire districts, departments, and companies to develop and maintain prefire management plans and maps to assess and enhance the response to protect public and private assets from unacceptable risk of wildland fire damage.

Policy S-4.6 Emergency Medical Services. The County shall strive to improve emergency medical services for all County residents.

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.

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

Policy S-5.3 Development in Floodplain Zones. Special Flood Hazard Areas (as designated on maps prepared by the Federal Emergency Management Administration) should be protected and maintained through review of land use.

Policy S-5.4 Impacts to Downstream Properties. 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 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 CAL FIRE.

Policy S-6.2 Point Source Monitoring. Point sources of air pollution shall comply with County, State and Federal air quality regulations and standards.

Policy S-6.3 Dust Suppression. The County shall require dust suppression measures for grading, construction, and building activities as appropriate.

Policy S-6.4 Asbestos Hazards. All projects requiring earth-disturbing activities, or a building permit that would result in earth disturbance, in areas likely to contain naturally occurring asbestos must comply with North Coast Air Quality Management District regulations.

Policy S-6.5 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-6.6 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 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 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 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

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 Coordination. The County shall continue to coordinate efforts to identify locations of hazardous materials.

Policy S-9.2 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-9.3 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.

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 surface water quality through implementation of Best Management Practices for public and private construction activities.

Policy S-11.2 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-11.3 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 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 mixed-use projects designed to maximize housing and walking, bicycling and the use of public transit systems and the use of alternative energy vehicles.

Policy S-12.2 Forest Management. Encourage active management of forests to absorb greenhouse gas.

Policy S-12.3 Passenger vehicles and public transit. The County shall consider the purchase of passenger vehicles and public transit buses that use alternative fuels or technology. -Where feasible, the County shall require fleet vehicles to be low emission vehicles. Carpooling shall be encouraged when feasible.

Policy S-12.4 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 CAL FIRE and local fire districts/departments within the County.

Responsible Agency. , 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. CAL FIRE, 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. CAL FIRE, 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. CAL FIRE, Planning Division, Building Division

Timeframe. Ongoing

2. FIRE PROTECTION

Implementation Measure S-2.1 The County 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 to help offset costs for fire protection facilities and services.

Responsible Agency. Planning Division

Timeframe. Ongoing

Implementation Measure S-2.3 The County will collaborate with Fire Districts/Departments to review and analyze the potential for fire district and/or 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 County staff shall meet periodically with representatives from CAL FIRE, 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-2.5 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

Timeframe. Ongoing

3. SECURITY

Implementation Measure S-3.1 The County will 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.

Responsible Agency. Sheriff's Department

Timeframe. Annually

Implementation Measure S-3.2 The 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-3.3 The County will 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-3.4 The County shall coordinate with the Sheriff's Department regarding planning for future law enforcement facilities.

Responsible Agency. Planning Division, Building Division, General Services Division, Sheriff's Department

Timeframe. Ongoing

Implementation Measure S-3.5 The 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 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-4.2 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 conduct training programs for the public and staff 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-4.4 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-4.5 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 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.4.6 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 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 Special Flood Hazard Area. New development and divisions of land, especially residential subdivisions, within 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-5.4 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-5.6 Agencies maintaining emergency action plans for dam failure should meet to review each dam's Emergency Action Plan on a 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-6.3a In order to reduce dust impacts, any new major development shall pave or treat road surfaces.

Responsible Agency. Department of Transportation, Planning Division

Timeframe. Ongoing

Implementation Measure S-6.3b 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

Implementation Measure S-6.6 The County will maintain fact sheets regarding health effects of smoke and a list of available facilities for use by the public during unhealthy air quality days.

Responsible Agency. Department of Health and Human Services

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

8. AIRPORT SAFETY

SEE TRINITY COUNTY AIRPORT LAND USE COMPATIBILITY PLAN

9. HAZARDOUS MATERIALS

Implementation Measure S-9.1 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-9.2 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

Implementation Measure S-9.3 The County will actively work within communities to provide for the collection of household hazardous materials on a regular basis.

Responsible Agency. 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 construction activities that do not degrade surface water quality.

Responsible Agency. Planning Division

Timeframe. Ongoing

Implementation Measure S-11.2 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-11.3 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 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 – 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 continues, 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 lightning, is a natural phenomenon of ecological renewal in these landscapes. However, where fires encounter unnaturally high fuels in landscapes, 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.

2. FIRE PROTECTION

Trinity County fire protection is provided by 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 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.

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.

California Highway Patrol – Trinity River

The California Highway Patrol has an office in Weaverville and assists local law enforcement as authorized.

California Department of Fish and Game

Department of Fish and Game Wardens are available to provide assistance to the Sheriff's Department in emergency situations when requested.

U.S. Forest Service

Historically U.S. Forest Service officers have provided assistance to the Sheriff's Department when requested and available.

4. EMERGENCY RESPONSE

Emergency Medical Services

Medical services in Trinity County are provided by a variety of organizations

Evacuation Plans

There are in existence locally utilized evacuation plans in some communities in the County.

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 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.

5. FLOOD AND INUNDATION

Trinity County was originally an emergency participant in the National Flood Insurance Program (NFIP), administered by the Federal Emergency Management Agency (FEMA). 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. 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. However, many areas of Trinity County have known, but unmapped floodplains thereby making the Ordinance inapplicable in those areas because of a lack of mapped flood hazard areas.

The County Board of Supervisors can adopt additional flood studies as best available information for the purposes of issuing building permits.

The Floodplain Management Ordinance was incorporated into Section 29.4 of the Trinity County Zoning Ordinance (Ordinance No. 315), the Flood Hazard Zoning District. 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

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. 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.

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. 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. 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. 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. Trinity County Waterworks District #1 has an evacuation plan on file. Their office is located on Reservoir Road in Hayfork. A copy is also located at the Office of Emergency Services in Weaverville.

6. AIR QUALITY

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.

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.

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.

According to the California Division of Mines and Geology (1965), Trinity County lies in portions of two geomorphic provinces, and these are in sharp contrast with each other in topography, geology and mineral resources. The northeastern part, which covers nearly 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 feet. 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.

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.

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.

8. AIRPORT SAFETY

SEE TRINITY COUNTY AIRPORT LAND USE COMPATIBILITY PLAN

9. HAZARDOUS MATERIALS

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.

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.

11. CLIMATE CHANGE

Assembly Bill 32 (AB 32), the California Global Warming 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).

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 promote 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 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 discarded 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.

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

SECTION V – MAPS

- Landslide Locations
- 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