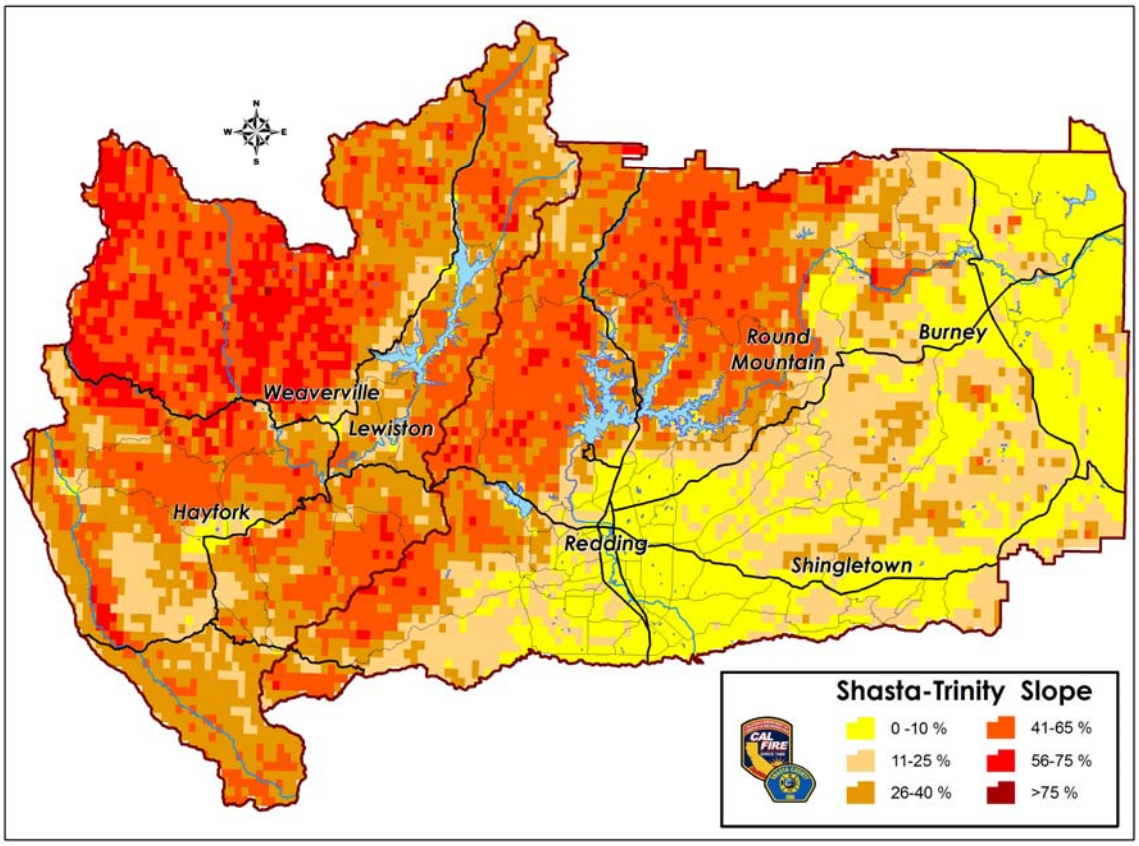
SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

The Shasta – Trinity Unit is located at the northern end of the Sacramento Valley. It encompasses most of Shasta County and portions of eastern Trinity County. Federal lands administered by the Shasta – Trinity and Lassen National Forest, Bureau of Land Management, Bureau of Indian Affairs, Bureau of Reclamation, and the National Park Service adjoin and are contained within the Unit.

Traveling west to east on Highway 299 from Weaverville to the Lassen County line is approximately 150 miles. South to north on Interstate 5 from Cottonwood to the Siskiyou County line is approximately 75 miles. In these distances there are distinct differences in climate, fuels and topography, all of which affect fire behavior and fire danger rating.

The "Topography – Slope" map indicates the variable nature of the geomorphic regions that intersect within the Unit.



The Unit includes portions of the Great Valley, the Southern Cascade and North Coast Ranges, and the Modoc Plateau. The Eastern slopes of Shasta County gently rise across the toe of the Southern Cascade Range towards the Modoc Plateau while to the West and North the land abruptly rises to the Klamath Mountains. Southern Trinity County and the southwest corner of Shasta County are partially located in the North Coast Range.

Having mountains to the north, west, and east, the Sacramento Valley to the south, and the Pacific Ocean 150 miles to the west makes weather forecasting difficult and produces some unique weather. The CAL FIRE State Responsibility Area (SRA) within the Unit is divided into five distinct NFDRS areas based on climate, topography, and fuels, and modified to match existing Wildland Fire Response Area boundaries. These Fire Danger Rating Areas reflect historical average burning conditions and have been used for fire dispatch and planning in the Unit since 1994. Areas of the Unit not included in the NFDRS areas are in the USFS Direct Protection Area and are mostly in the Interior Timber planning belt.

The Emergency Command Center uses the areas to determine the Fire Danger Rating and Dispatch Levels for the Unit based on daily weather observations taken from a Remote Automatic Weather Station in each area.

Fire Danger Rating Areas

Timber West

This area is the Douglas-fir/Ponderosa Pine forest of the CAL FIRE Direct Protection Area in Trinity County. The area is managed for timber production; therefore logging slash is a common fuel component. Sufficient undergrowth of ceanothus and manzanita is present to require consideration of a live fuel component. Fire Behavior fuel model 10 and NFDRS fuel model G are used in this area. The larger communities within this area are Hayfork, Lewiston, and Weaverville. Smaller communities exist as well as various areas of urbanization. Most of the urbanization lies in the lower elevations of Trinity County in valleys or along streams.

The terrain is very steep; there is a large amount of heavy fuels, and travel times are long in this area.

Trinity County has experienced several catastrophic fires in recent history such as the Lowden fire in 1999 burning 1,945 acres, the Oregon fire in 2001 burning 1,695 acres, the Junction fire in 2006 burning 3,130 acres and the Coffin fire in 2009 burning 1,098 acres damaging not only valuable timberlands, but also causing significant structure and private property loss.

Brush Area

The mid elevations (1,000 – 2,000 ft.) surrounding the Sacramento Valley are merged into the brush area. The area is typically chaparral with chamise and manzanita. These elevations include oak woodland fuels with a high mixture of brushy fuels. Communities include the City of Shasta Lake, Mountain Gate, Shasta, Keswick, and French Gulch.

Most of the lands to the northwest of Redding were void of vegetation by the early 1900's due to copper mining and smelter operations. This area now consists of mostly brush fields that are 50 years old or older. In 2004 the French fire burned 12,675 acres and in 2008, as part of the SHU Lightning Complex the Motion fire consumed 28,330 acres in this general area thereby reducing much of the dead fuel loading. While the fuels in the mountains off the valley floor were reduced by the Motion Fire, the brush fields just off the valley floor were not affected. These areas remain to have sufficient dead fuel and fine fuel to sustain large and damaging fires (Fire Behavior fuel model 4, NFDRS model F).

The lands to the west of Redding located at the base or lower levels of the mountains are covered mostly in brush or oak woodland with a heavy brush under story.

Most of the land west of Redding is highly urbanized which creates a high threat to life and property from wildfire. Subdivisions that were developed prior to 1982 often have narrow one-lane roads and no community water systems. Often the structures have a single access road. Some subdivisions were developed with "Fire Emergency Access" roads, however many of these roads are not maintained and are overgrown to the point of being impassable.

Communities in the Brush Area, west of Redding, include Igo, Centerville, Shasta, Keswick, The City of Shasta Lake, and portions of the City of Redding.

The brush area east of Redding is generally located in rangeland. However urbanization in the brush area exists in the western edge of the communities of Shingletown, Whitmore, Oak Run, Round Mountain, and Montgomery Creek. This area has experienced significant fires in the past and with the current urbanization can expect future fires to be more damaging.

Valley Floor (Grass Area)

This is the south-central part of the Unit extending from the Sacramento River outwards to an approximate elevation of 1000 feet. This is the most urbanized area of the Unit and includes the cities of Anderson, Redding, and the communities of Bella Vista, Cloverdale, Millville, Olinda, and Palo Cedro. The area is typically grassy woodland with blue oak, valley oak, gray pine, and annual grasses. There are also large areas covered by brush types and some of the woodland areas have a dense brush under story.

Significant fires have occurred on the valley floor such as the Canyon fire in 1999 burning 2,579 acres, the Jones fire in 1999 burning 26,202 acres and the Bear fire in 2004 burning 10,441 acres, especially during the North Wind events. Because the primary fuel is annual grasses, each year the fire danger is recurring.

The fine fuels react quickly to weather changes, especially wind. Fire Behavior model 2 and NFDRS model C are used.

Timber East

The Timber East area is the forested area east of Redding. The area extends from the 2,000-foot elevation of the Sacramento Valley to Highway 89. The majority of the area is managed for timber production. This is a mixed species conifer forest that varies from the Timber West Zone in topography, weather and some hardwood species. Slash and brush are part of the fuel component.

Several communities exist within this zone including, Shingletown, Whitmore, Oak Run, Round Mountain, Montgomery Creek, and Burney.

Significant damaging fires have occurred in this area such as the Burney fire in 1988 burning 3,264 acres, Fountain fire in 1992 burning 60,290 acres, resulting in large structure and timber loss and during the 2009 SHU lightning complex, the Chalk, Goose and the Cassel fires burning a total 16,970 acres.

Fire Behavior Fuel Model 9 and NFDRS Fuel Model U are used in this area.

Besides the County boundaries, three incorporated cities lie within the boundaries of the Shasta – Trinity Unit: Anderson, Redding, and the City of Shasta Lake. The remaining communities within the Unit are not incorporated.

Several independent special districts called County Service Areas (CSAs) provide other services such as but not limited to water and sewer. CSA 1 provides funding for fire protection for all the unincorporated areas within Shasta County that are not in a Fire District. Seventeen Special Districts provide services to Trinity County.

The Shasta-Trinity Unit is operated under one Unit headquarters and is located in Redding California. The State Responsibility Area of the Unit is divided into six field battalions, numbered from east of the Unit to the west. During declared fire season, the Shasta – Trinity Unit operates nineteen fire engines, three dozers, twelve hand crews, one Air Tactical Supervisor and two Air tankers. The Shasta – Trinity Unit employs one hundred twenty six permanent fire personnel and one hundred two seasonal firefighters during fire season.

Redding City Fire Department, eleven fire districts, and the Shasta County Fire Department provide local fire protection responsibility for improvements within Shasta County.

Five fire districts, four community service districts, three volunteer fire companies, and one PUD provide local responsibility fire protection within Trinity County.

Shasta – Trinity Unit has dispatch agreements with Shasta County Fire Department, Fall River Mills Fire Protection District, McArthur Fire Protection District, Burney Fire Protection District, Millville Fire Protection District, Cottonwood Fire Protection District, Mountain Gate Community Services District, Shasta Lake Fire Protection District, Happy Valley Fire Protection District, Anderson Fire Protection District, Shasta Community Services District (Old Shasta) and the Shasta College Fire Protection District.