

Assets at Risk

Protecting our local assets remains a concern whether they are man-made such as our communities, or natural like the giant sequoia redwood trees. One way to protect our assets is to plan projects where our fire occurrences are high and the reasons for these starts are known. The State maintains a GPS coordinate (lat. & long.) for all fire ignitions, and maps fires that burn 10 acres of timber, 50 acres of brush, 300 acres of grass, three or more structures, or cause more than \$300,000 damage in the SRA protection area. The Tulare unit requires all fires will be GPS coordinate (lat. & long.). The waypoints and track files are collected and used to create a data layer. At the end of each calendar year SRA ignition points and shape files are used to maintain accurate fire history and ignition location. Historically our fire starts occurred along the Highway 198 corridor and Highway 190 corridor. The GIS data collected is beneficial to determine specific fire cause locations and can direct prevention / education efforts to match historic ignitions.

Flooding / Soil Erosion

Another concern in the event of a large and devastating fire such as the Mc Nalley and Manter Fires is the aftermath. Analysis of the topsoil after these types of large fires shows a transformation from good topsoil to a hydrophobic soil. Hydrophobic soil happens when a large fire consumes the brush that has a natural protective wax on the leaves, leaving a waxy residue on the ground. The waxy residue left on the ground can be approximately 2” to 3” in depth and prevents the soil from absorbing moisture. This in turn creates flooding, mudslides and threatens other assets such as animal habitat, fisheries, and our communities. Extensive soil erosion can occur and replace our water supplies with silt, mud, and rocks. Disturbing the topsoil is a good way to disperse the waxy buildup and allow moisture to penetrate the soil. After the fire has passed, timber salvage operations is one way to reduce the fuel loading, help restore the land, and disperse the hydrophobic soil.

Timber

Timber is another important asset in Tulare County, especially to the small community of Terra Bella. Home to the Sierra Forest Products, this is one of the few major sawmills left in California. Logging has been a major part of Tulare County since the late 1880's. Redwood, pine, cedar, and oak have been sawed and lumbered to help supply the nation's lumber needs.

Fire History

Generally Tulare Unit's Fire History consists of several small fires and on a rare occasion, a large and damaging fire. Tulare Unit's last large and damaging fires were the Kaweah fire (1996) and the Case Mt. fire (1987). It should be noted that Sequoia / Kings National Park had the Buckeye Fire (1988), and Sequoia National Forest had the Stormy Complex (1990), the Manter Fire (2000), Mc Nalley Fire (2002), and the Deep Fire (2004) which were all considered large and damaging fires. In 2004 the Tulare Unit had four fires that were considered large and damaging. This was about average. With most of the fires occurring in grass covered rangeland. The Deep Fire occurred on the Sequoia National Forest directly adjacent to State Responsibility Area land and the Mountain Home Demonstration Forest. Secondary containment lines were created on the State Forest but the fire did not actually burn in Mountain Home State Forest.

Fuels

The fuels in Tulare County range from light grasses in the western end of the county, to Sequoia redwoods in the center portion of the county, to a high desert on the eastern end of the county. Most of the SRA lands protected by CAL FIRE are grasslands, type four brush, and areas of timber starting around the 4,000' elevation (see Fuels Map in Appendix). Prescribe fire has been a useful tool in reducing the accumulation of fuels in the unit. There is one burn well into the planning process moving towards implementation. We are looking into re-treatment of projects that we have completed in the past.

Weather

The weather during the fire season is generally hot, with temperatures between 85°-103°, humidity in the low teen's and a light wind about 3-5 mph from the NW. The light wind and somewhat higher humidity has helped in suppressing fires in the unit. The topography of the land is generally flat to the west and becomes steep very quickly from the center of the county to the east.