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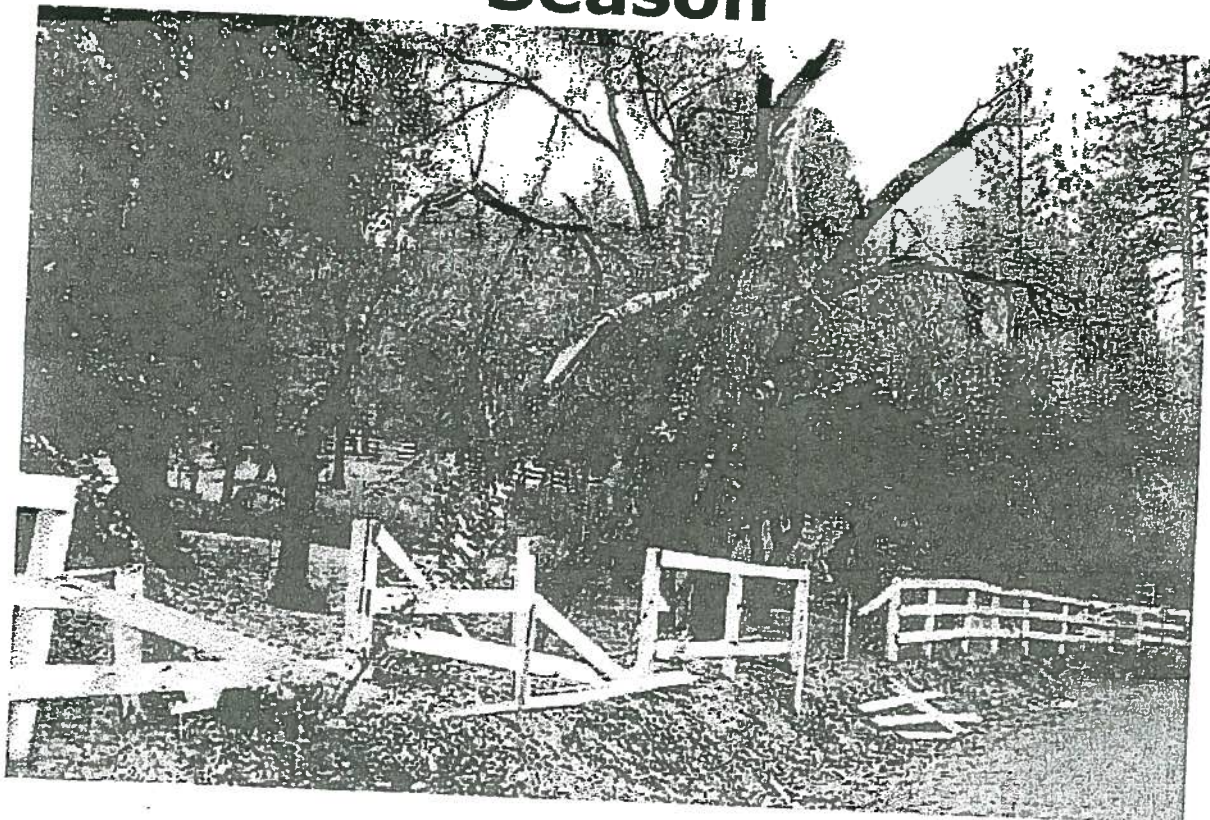
Amador-El Dorado Unit

Amador, El Dorado, Alpine, Sacramento, and portions of San Joaquin Counties and the
Tahoe Basin

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EL DORADO COUNTY

December 7th – 8th 2009 Snow Storm Generated Fuels Impacts & Their Anticipated Effect On The 2010 Wildfire Season



On December 7th, 2009 the CAL FIRE Amador – El Dorado Unit experienced an unseasonably heavy snowfall from a 2 day arctic storm. Snowfall accumulations ranged from 8 inches to over 2 feet across the region, and the snow level dropped to an unusually low elevation of 900 feet. The Camino Interagency Command Center received more emergency calls than on any other day in its history. Over the two day period of December 7th and 8th, the Camino ECC received a total number of 1,386 phone calls and dispatched a total of 528 incidents.

The predominant tree species present in the 900 to 3000 foot elevation range of the west slope of Amador and El Dorado Counties are California Black Oak (*Quercus Kelloggii*), Blue Oak, (*Quercus Douglasii*), Interior Live Oak, (*Quercus Wislizenii*) and Grey Pine (*Pinus Sabineana*). The lateral branch structure physiology of these mid elevation tree species does not shed snow efficiently and was unable to support the weight of the heavy snow and ice that accumulated on them in the early morning hours of December 7th 2009.

Throughout the region, large mature oak trees split down the center causing enough damage to kill the tree and create a significant number of future snags. Tree branches and tree tops snapped causing roadways to be blocked, parked cars to be smashed, structures to be damaged, and electricity to be cut to thousands of residents for nearly a week. The impact of the storm hit the most heavily populated portions of the Unit hardest, and the resulting damage was significant and widespread.

Since the end of the storm roadways have been cleared, damaged cars removed, utility lines repaired and structures fixed. However the resulting damage to the trees has created a continuous vertical arrangement of aerial fuels and standing snags that is highly conducive to spotting and resistant to suppression. In addition, a massive (roughly 1/3rd by dry weight) increase in wildland ladder fuels from a pre storm average of approximately 10 – 30 tons / acre to a post storm average of approximately 15 – 40 tons / acre, with ranges that could exceed 60+ tons/acre in localized areas has not been mitigated and is

expected to persist in the Unit for years to come. The increased fuel loading is seen along the sides of roadways, around homes and structures, and in undeveloped areas throughout the Unit. Most of the damage is in High and Very High Fire Hazard Severity Zones.

Over a given ten year period, 16 percent of AEU's wildland fires are caused by debris burns, 17 percent are vehicle or roadside related and 10 percent are arson, accounting for nearly one-half of all wildland fires in the Unit. We anticipate that the Unit will see a significant increase in the number of debris burn escapes during the 2010 fire season as residents seek to dispose of the dead vegetative material around their homes. Roadside fires caused by vehicles are expected to be more intense as a result of the added fuel loading. In addition, arsonists may view the increased fuel loads as an opportunity to create mayhem. AEU anticipates the potential for larger fires and expects a general increased demand on fire suppression resources in 2010.

Some examples include:

- Increased safety issues to firefighters & the public.
- Increased roadside fire starts and resulting fire intensities.
- Potential for many more debris burn escapes.
- Increased illegal dumping of vegetative material.
- Increased pile burning by homeowners & governmental agencies.
- Increased air pollution.
- Potential for partially broken branches and tree tops to come down on power lines.

An augmented initial attack will be critical to maintaining CAL FIRE's goal of containing 95 percent of all wildland fires to 10 acres or less and for the continued protection of life, property, and the state's natural resources.

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