

**Presentation by
Terri Marceron, Forest Supervisor
Before the
Legislative Committee for the Review and Oversight
of the
Tahoe Regional Planning Agency (TRPA)
and Marlette Lake Water System**

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Good afternoon. My name is Terri Marceron and I am the Forest Supervisor of the Lake Tahoe Basin Management Unit. I appreciate the opportunity to be here today and provide you with an overview and update of the Angora Fire. The Forest Service administers approximately 165,000 acres in the Lake Tahoe Basin and spans Nevada and California, including five counties and Carson City.

The Angora Fire started on Sunday, June 24, 2007 at around 2:00 p.m. on a Sunday afternoon. It was contained on July 2nd and controlled on July 20th. It is not yet been declared out. There are still areas closed to protect public safety and the resource. Angora turned out to be the largest and most devastating fire in history in the Lake Tahoe Basin.

The three elements that have the most impact on a wildland fire are: wind, drought and fuels. Of the three, the only one land managers have any control over is fuels. Because of low precipitation, and little or no winter snowpack, the Basin was at record-setting dryness and June fuel conditions were similar to August.

On the day of the fire, the winds were in "red flag" conditions; about 20-30 miles per hour with gusts up to 50 miles per hour and higher. The wind, combined with the dryness of the forest, temperatures in the mid-80's and fuel conditions, created a serious fire environment.

The fire started in an area known as Seneca Pond, which is popular with walkers, hikers and other recreationists. The fire was caused by an illegal campfire and ultimately burned more than 3,100 acres over a three day period. The fire spread rapidly and within two to six hours the majority of homes that burned were destroyed in that time period.

The fire progressed through the night on Sunday and a hand line was established at the South Lake Tahoe High School with support from a hose line. As the winds subsided in the evening, firefighters were able to gain some ground, which included saving the High School.

EXHIBIT C-1 TAHOE

Document consists of 5 pages.

☒ Entire document provided.

☐ Due to size limitations, pages _____ provided. A copy of the complete document is available through the Research Library (775/684-6827) or e-mail (library@lcb.state.nv.us).

Meeting Date 11/05/07

We were fortunate that the fire occurred early in the season and firefighting resources were available. Our Fire Management Officer in the Basin, Kit Bailey, was on site within minutes and established command. Within the first hour, there were at least 11 engines on the fire. Because of the agreements the Forest Service has with the other fire agencies in the Basin, when the call went out, there was an immediate, high priority response. Helicopters and aircraft were ordered and the helicopters worked throughout the afternoon. However, the large tankers were grounded after only two drops due to unsafe winds conditions. Maximum number of resources on the fire were 2,180 personnel; 164 engines; 51 crews; 21 helicopters; 13 fixed wing aircraft; and 4 dozers.

As the fire quickly grew, evacuations were initiated. A Unified Command was established with the Lake Valley Fire Protection District, City of South Lake Tahoe Fire Department, and the Forest Service. A Type II Team was ordered immediately and assumed command Monday morning, June 25 at 6:00 a.m. A Type I Team was called in and took command on Tuesday, June 26 at 6:00 a.m.

Some homes were lost due to ember intrusion. Garage doors were left open, allowing sparks and embers to enter, igniting the home. Most homes were lost from structure-to-structure ignition. As the houses became fuel, fire crews were cutting off decks, using garden hoses, and doing whatever they could to save homes. Winds were gusting at over 50 mph causing downed power lines and access and egress problems.

245 homes were completely destroyed in the Angora Fire. The first structure was lost within two hours and the majority within the first two to six hours. Most of these were full time residents. 71 outbuildings were destroyed. 37 homes within the perimeter of the fire were damaged and saved by extraordinary firefighting efforts, defensible space, and in some cases, pure luck.

Many agencies, businesses and organizations stepped up to the plate and performed admirably. All fire agencies in the Basin were involved in this fire. The volunteer effort was heroic. Shelter, food, supplies, water, security were invaluable to assist evacuees and firefighters. The community stepped up not only with tangible donations, but with signs of support and encouragement all over the Basin.

Over 700 acres inside the fire perimeter had been treated to reduce forest fuels between 1995 and 2006. The fuels treatment affected the fire behavior by moving it from the crowns of the trees to the surface. When this happens, it provides the opportunity for firefighters to establish and hold fire lines.

A study was initiated within a day of the fire on the effect of fuels treatment in the fire area. It found that the treatments reduced the intensity at the forest boundary and allowed for a more direct attack. Treatments also enabled an aggressive house-to-house suppression effort by the firefighters. Engines and crews were able to engage, withdraw and move on to other structures safely and the general forest treatment areas served as "black" safety zones.

The Santini-Burton Act provided for the acquisition of environmentally sensitive lots in the Tahoe Basin. There were over 100 of these urban lots in the fire perimeter. 70 of these lots, which had received hazardous fuels treatments, were evaluated for effects on fire behavior; 68 of the lots exhibited surface fire which burns at low intensity.

One of the ongoing discussions that came out of Angora is the importance of defensible space. There are approximately 42,000 structures in the Lake Tahoe Basin. Based upon the recent completion of the Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy, the majority do not have adequate defensible space.

Green lawns give firefighters the chance to protect the structure. Pine needles should be cleared from roofs and around homes; wood piles should not be against the house; small trees have been taken out; shake roofs are a hazard. Unfortunately, there are homeowners with no defensible space. It is a continuous challenge to educate people on the importance of maintaining defensible space.

There have been many community outreach programs lately urging citizens to “take charge” of their communities. Nevada has been on the forefront on this effort. Over 18 fire safe chapters have been established around the Lake Tahoe Basin – in CA as well as NV – under the umbrella of the NV Fire Safe Council. Many of these Chapters are actively planning or already engaged in fuels treatment work in the Wildland Urban Interface. When a local community is ready to do their work, the Forest Service will work with them and treat the forest acres near the community. A good example of this was near Chimney Rock. Forest System lands were scheduled for treatment in that area for a different time. The community there was ready to go forward with their treatments and we adjusted our schedule and treated national forest system lands there so that the treatments would be more effective.

Within days of the fire start, a coordinated effort between multiple agencies affected in the Basin was developed. The seven land management agencies and representatives for private land owners began debris cleanup and restoration work within the neighborhoods impacted. The debris cleanup is almost complete.

The LTBMU resource mission of rehabilitation and restoration is underway. There are three phases of rehab: (1) fire suppression rehabilitation; (2) Burned Area Emergency Response (BAER); and (3) Long Term Recovery.

The first phase began during the fire when lines and roads were rehabbed.

The Second phase is what's known as “BAER” – Burned Area Emergency Response. An assessment of the burned area has been done, the values at risk identified, and a treatment plan prepared. Almost all the BAER work has been completed.

The last phase is Long Term Recovery. Elements of this phase have also been started, including hazard tree removal and reestablishing property lines. There is ongoing coordination on certain projects between the Forest Service, El Dorado County and the City of South Lake Tahoe. In the spring, additional treatments will be considered for implementation under long term recovery.

Land treatments were implemented under BAER in the urban interface. They include the following: Approximately 110 acres were treated with rice straw; 15 acres treated with wood straw. The wood and rice straw treatments were done mainly in the urban interface for stabilization of the soils. Six log check dams were installed to aid with erosion control.

There are three steps in hazard tree removal. First, hazard trees that posed an imminent threat were removed within a week of the fire. Further assessment of burned trees has been conducted and trees have been identified that may become hazardous in the future, mainly on USFS urban lots. To date, most of the urban lots have also been cleared of hazard trees. A proposed plan for the general forest and long term hazard tree removal has been sent out for public response. This phase will focus on about 225 acres and eight miles of roads and trails.

Hydromulch, a green mixture of wood, paper and a tackifier to hold it together, was dropped by plane. Four units totaling 636 acres were treated in the high burn severity areas. These are areas that if left untreated would be expected to impact sediment and ash delivery.

Many different agencies and crews were involved in the BAER effort, including two crews from Nevada Division of Forestry and two crews from the Nevada Conservation Corps. Due to existing relationships and agreements with Nevada, the request for the crews was filled immediately. These crews worked over a seven week period.

I've shared with you the overview of the fire and what's been done to date on rehab and restoration. In addition to fire suppression funds, the Forest Service has dedicated almost \$3.5 million to fire suppression rehab and the BAER work. However, this is only the Forest Service part. The U.S. Army Corp of Engineers, Natural Resources Conservation Service, the State of California and local government agencies have also contributed over \$5.2 million toward rehab and restoration efforts. There's more that still needs to be done, including:

- Long-term restoration planning and implementation
- Continuing to dialogue with the regulatory agencies on how to get fuels work done efficiently and in a cost-effective way in the Basin. I'm involved in conversations currently with TRPA to revise the Memorandum of Understanding and make changes to enhance our ability to do fuels work.
- The research and ecosystem people will continue to conduct monitoring of water and soil quality, habitat condition and response, and ecosystem function. My staff

has developed the monitoring goals with multiple agency partners and will engage in collaborative implementation and analysis of the results.

- Multi-agency coordination between the Forest Service and state and local agencies on infrastructure and protection needs and the permitting process. One of the ways we're doing this is through active participation in the CA-NV Fire Commission.

Much has been accomplished in a short period of time to stabilize and treat the burned area. There is still much to do. The Forest Service will continue to work with our partners and other agencies in the Basin to treat and reduce hazardous fuels.

Once again, I appreciate the opportunity to be here today and give you an overview of the Angora Fire. I'd be happy to answer any questions you have.

