

# **California Department of Forestry and Fire Protection**

**Review Report of Serious Injuries, Illnesses, Accidents and  
Near-Miss Incidents**



**Fire Engine Burnover with Firefighter Burn Injuries  
Placer County Fire Department  
Brush 73 & Brush 75**

**June 11, 2008**

**Nicolaus Fire  
CA-NEU-012363  
CA-CNR-000035**

**Northern Region**

## OVERVIEW OF ACCIDENT

---

On June 11, 2008 at 9:49 A.M., Placer County Fire units were dispatched to a vegetation fire at Nicolaus Road near Dowd Road, west of the City of Lincoln in Placer County. The fire dispatch included Placer County Brush 75 (BR75), Placer County Engine 70 (E70) and Placer County Brush 73 (BR73). BR75 was the first resource to arrive at scene and reported a 5-acre fire.

Approximately seven minutes into the fire, E70 (Incident Commander) reported that units were being burned over. The firefighter from BR 75 sought refuge to the south of the apparatus on an access road. The fire intensity continued to increase and he retreated to safety into a stubble field to the east. The firefighters from BR 73 tried to seek refuge in the cab, but were quickly overrun. They retreated through the flame front into the burn.

All firefighters were treated and transported to UC Davis Medical Center. The Nicolaus Fire was contained at 11:40 A.M. to 65 acres on June 11, 2008.

## SEQUENCE OF EVENTS

---

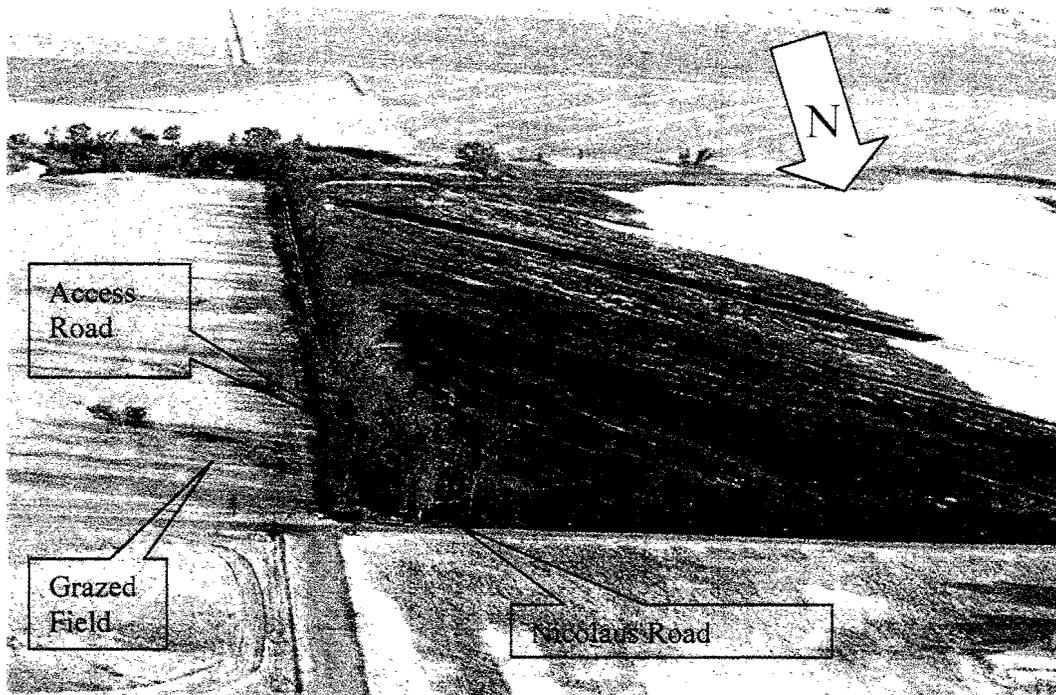
On the morning of June 10, 2008, the National Weather Service identified a Red Flag Warning for the Sacramento, CA area. The Warning, issued at 5:00 A.M. Pacific Daylight Time (PDT) predicted “Gusty northerly wind and low humidity” for Tuesday, June 10, 2008 and to remain in effect until 5:00 P.M. PDT on Thursday, June 12, 2008. The wind was predicted to be northerly at 15 to 30 miles per hour (MPH) with gusts to 40 MPH or more.

At 9:49 A.M. the Emergency Command Center (ECC) for the Nevada-Yuba-Placer Unit received a 911-telephone report of a vegetation fire on Nicolaus Road near the intersection of Airport Road. The ECC initiated a standard wildland fire response with an augmented response by the Lincoln Fire Department. Placer County Brush 75 (BR75), staffed with one Placer County volunteer operator at Station 75, located approximately 1.25 miles west of the fire on Nicolaus Road, responded to the fire. Placer County Engine 70 (E70) and Placer County Brush 73 (BR73) each staffed with a CAL FIRE operator and a CAL FIRE firefighter, responded to the fire from Gold’s Gym, located 1.7 miles east of the fire on Nicolaus Road.

At 9:52 A.M. BR75 arrived at scene and reported a 5 acre, wind-driven fire. The fire was on the south side of Nicolaus Road burning through a field of annual grass. Unable to make access on the right (west) flank due to a drainage ditch and barbed wire fence, BR75 continued past the fire and made access through a locked gate, east of the fire, and continued south on a dirt road lined on both sides with Eucalyptus trees. The fire at this time was burning in the field to the west and had not reached the access road. BR75 continued south on the access road.

At 9:54 A.M. E70 arrived at scene and assumed the role of Incident Commander (IC) of the fire. The IC requested an additional water tender and type 3 fire engine. BR73 arrived at scene at 9:55 A.M. and the IC assigned BR73 as Division A. During the review of the accident, the IC said he instructed BR73 to establish an anchor point and not to make a frontal assault on the fire. Other witnesses reportedly heard, via radio, the

IC instruct BR73 to follow BR75 south on the dirt access road on the left flank of the fire to determine if access could be made for a mobile attack. BR73 drove down the access road on the east side (left flank) of the fire. The crew on BR73 was examining the barbed wire fence on the left side of the road to determine if they could make access into the grazed field on the other side.



During this time, BR75 continued south on the access road approximately 750 feet. BR75 stopped when the operator observed the fire crossing the access road approximately 100 feet ahead. BR75 then backed up approximately 30 feet into a reduced fuel zone. The operator on BR75 exited the vehicle, donned his web gear and walked west across a dry irrigation canal. The operator, after observing the left flank of the fire, decided to begin fire suppression. The operator returned to the driver's side of BR75, and pulled the hose on the reel line, located behind the cab of the engine. The operator returned to the west side of the canal with a charged hose line.

BR73 arrived at BR75's location and the operator from BR75 made contact with the operator on BR73. The operator from BR75 asked the operator of BR73 how many firefighters were on the engine and explained he was staffed 1.0 on his engine. After

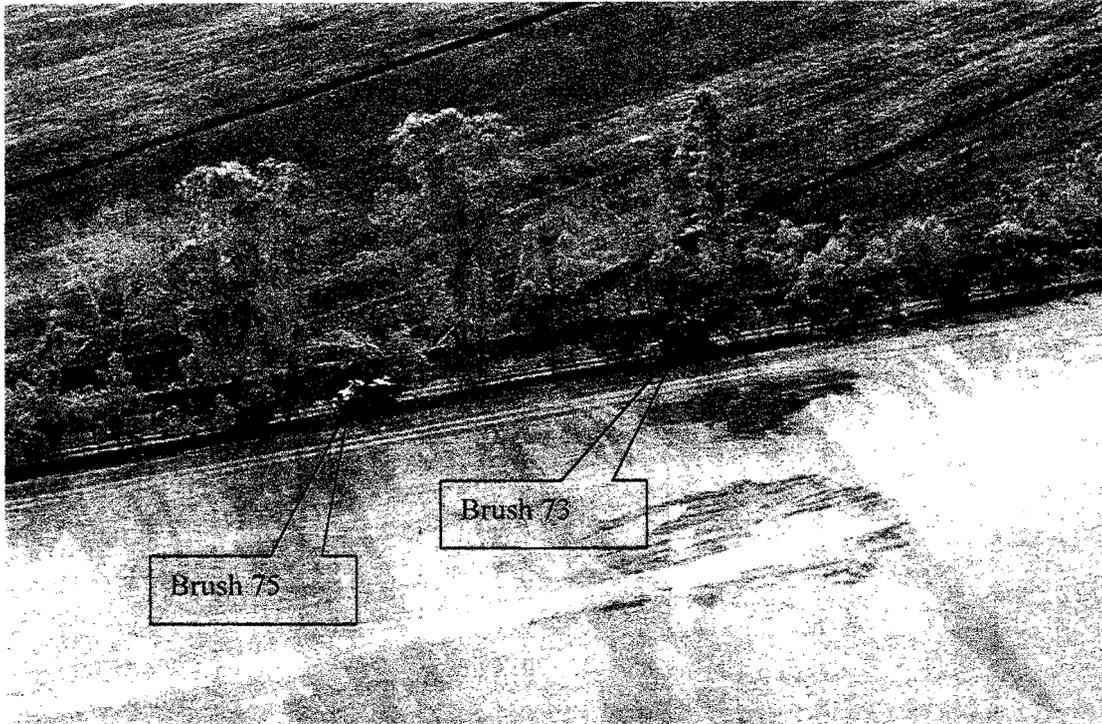
---

determining there was no additional staff to assist the operator on BR75, the operator on BR75 returned to the nozzle on the reel line.

According to the operator from BR75, the operator from BR73 approached and after discussing the situation, it was determined to disengage suppression tactics and back out. The crew from BR73 began assisting BR75 with rolling in the reel line. After reeling in most of the line, the operator on BR75 told the crew from BR73 to return to their engine and begin backing out, and he would finish reeling the hose.

The operator and firefighter from BR73 did not recall the discussion to disengage or assisting the operator of BR75 in reeling in the hose line. The firefighter and operator on BR73 recalled the conversation pertaining to the extra firefighter. However, according to the firefighter on BR73, after the operator on BR75 returned to BR75, the operator on BR73 instructed him to utilize the front discharge to suppress the fire. The firefighter exited the cab and went to the back compartment to retrieve his webgear. The firefighter donned the webgear as he walked around the driver's side of the engine. As the firefighter was attempting to pull the front discharge, he felt a blast of intense heat. The operator of BR73 was out of the cab and the firefighter told the operator he could not pull the front discharge line out due to the heat. The operator and the firefighter retreated to the driver's door of the engine and entered the cab. The operator entered the cab first and moved across the seat to the passenger side of the cab to make room for the firefighter. The operator began making a distress call on the command frequency that the cab was filling with smoke and it was difficult to breathe.

The firefighter, sitting in the driver's seat, then began backing BR73 to the north on the access road. The firefighter stopped when he observed water spraying the back window, thinking there was another engine behind him.



Due to the smoke, he was unable to observe any apparatus behind him, so he continued backing slowly in anticipation of additional fire equipment on the road. BR73 backed approximately 80 feet when the crew on BR73 heard a loud sound, possibly a brake system failure and the fire engine suddenly stopped moving. The operator and firefighter recognized the fire engine was on fire and exited the cab on the passenger side to escape through the black. The operator, sitting on the passenger side, exited the cab of the engine first and tripped, landing in hot ash with his hands before running into the burn. The firefighter also fell after exiting the cab, making contact with the hot ash with his hands and a knee before continuing through the burn. The operator and firefighter met in the burn and radioed to the IC to advise of the burnover and their status. Both continued north toward Nicolaus Road until making contact with the crew from E70.

During this same time, the operator on BR75 was attempting to finish rolling the hose on the driver's side of the engine. In preparation of leaving, the operator placed his webgear inside the cab of BR75 and returned to rolling in the reel line when flame impinged on his legs from under the engine. The operator dropped the hose and retreated to an unburned area on the access road to the south, in front of BR75, to wait for the fire to

---

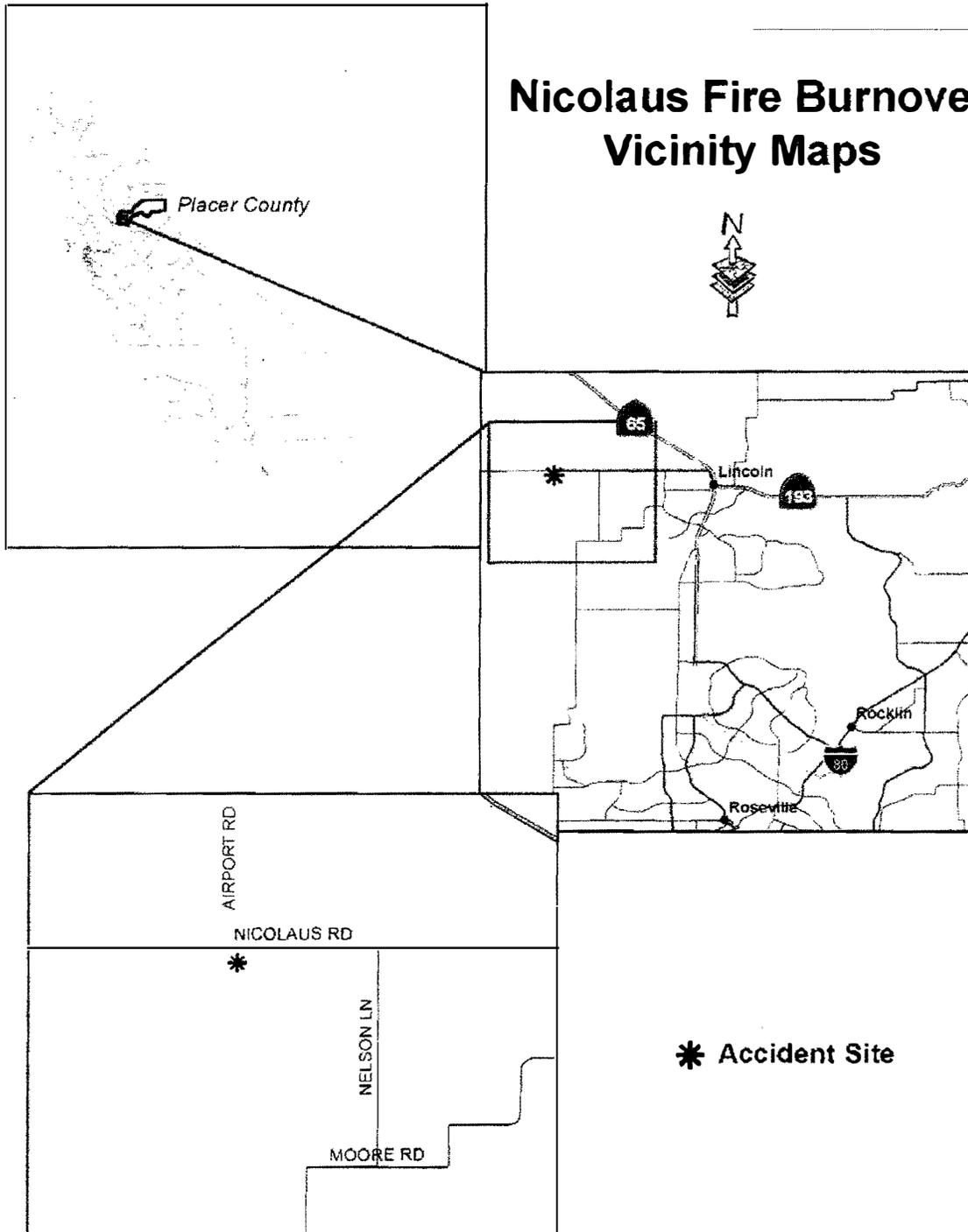
pass. The operator attempted to reach for the nozzle of the hose on the ground to protect the engine, but had to back away due to the heat and smoke. The operator retreated to the east, jumping a barbed wire fence into the grazed field. The operator traveled to the north, through the field, meeting with Lincoln City Engine 35 (E35) and assisted with the extinguishment of BR73. When the operator from BR75 was notified the crew from BR73 was safe, he sought medical treatment.

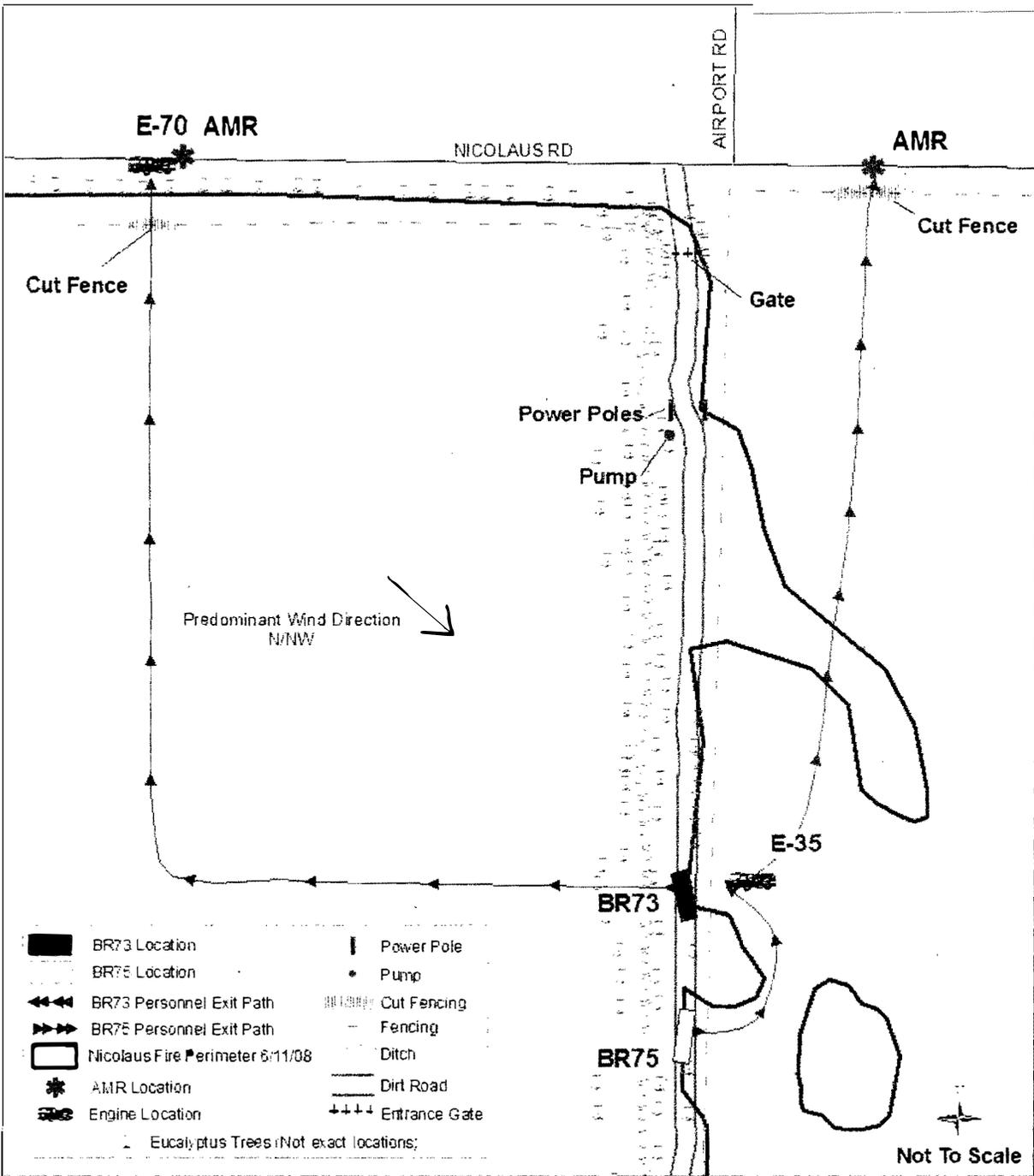
All three personnel were treated for their injuries and transported to the University of California (UC) Davis Burn Center. The operator on BR73 was transported by air ambulance first. The firefighter on BR73 was transported next by air ambulance and the operator on BR75 was transported by ground ambulance.

The operator on BR73 suffered first and second degree burns to the face and palms of both hands with second degree burns to the backside of both hands. The firefighter on BR73 suffered first and second degree burns to the face and ears and second degree burns to the palm of the left hand and left knee. The operator on BR75 suffered first and minor second degree burns to the nose.

Both BR75 and BR73 fire apparatus sustained major fire damage and are considered a total loss. Some equipment was able to be salvaged from the rear compartments on BR73.

# Nicolaus Fire Burnover Vicinity Maps





**Nicolaus Fire Burnover  
Detailed Area of Accident Site  
June 11, 2008**



Not To Scale

