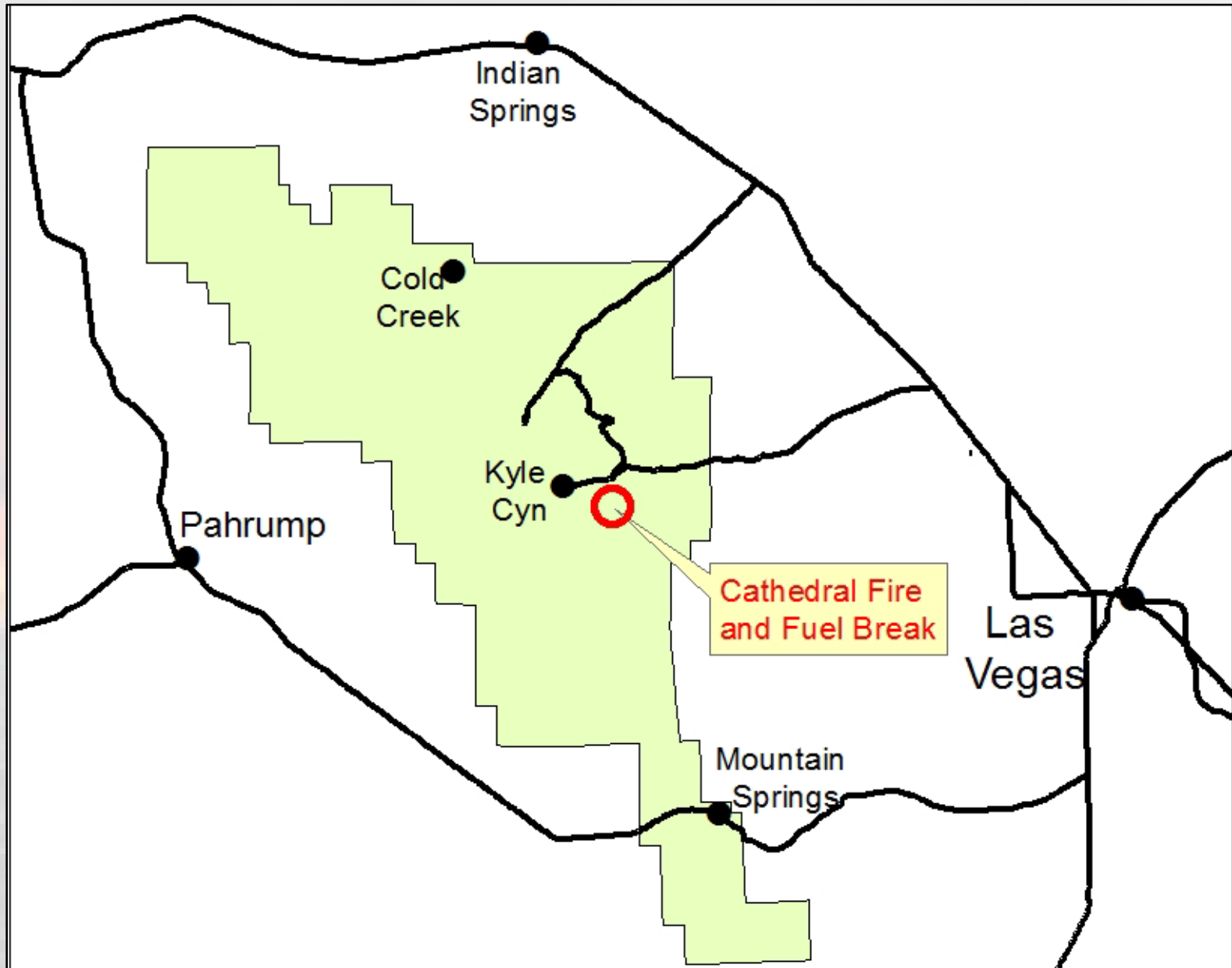


Nevada Wildland-Urban Interface
Fire Summit 2012

The Cathedral Fire: a Success Story in Fuels Management on the Humboldt-Toiyabe National Forest

Greg Emerson,
Fire Planner for the HTNF
October 2, 2012

Overview Map of Fire and Fuel Break Location



Background on the Rainbow Canyon Fuel Break

In the 1990's, a shaded fuel break (the Rainbow Canyon Fuel Break) was created by Black Mountain Interagency Hotshot Crew surrounding the Rainbow Sub-division, which is located in a side drainage of Kyle Canyon just outside of Las Vegas.



Rainbow Canyon Fuel Break contd



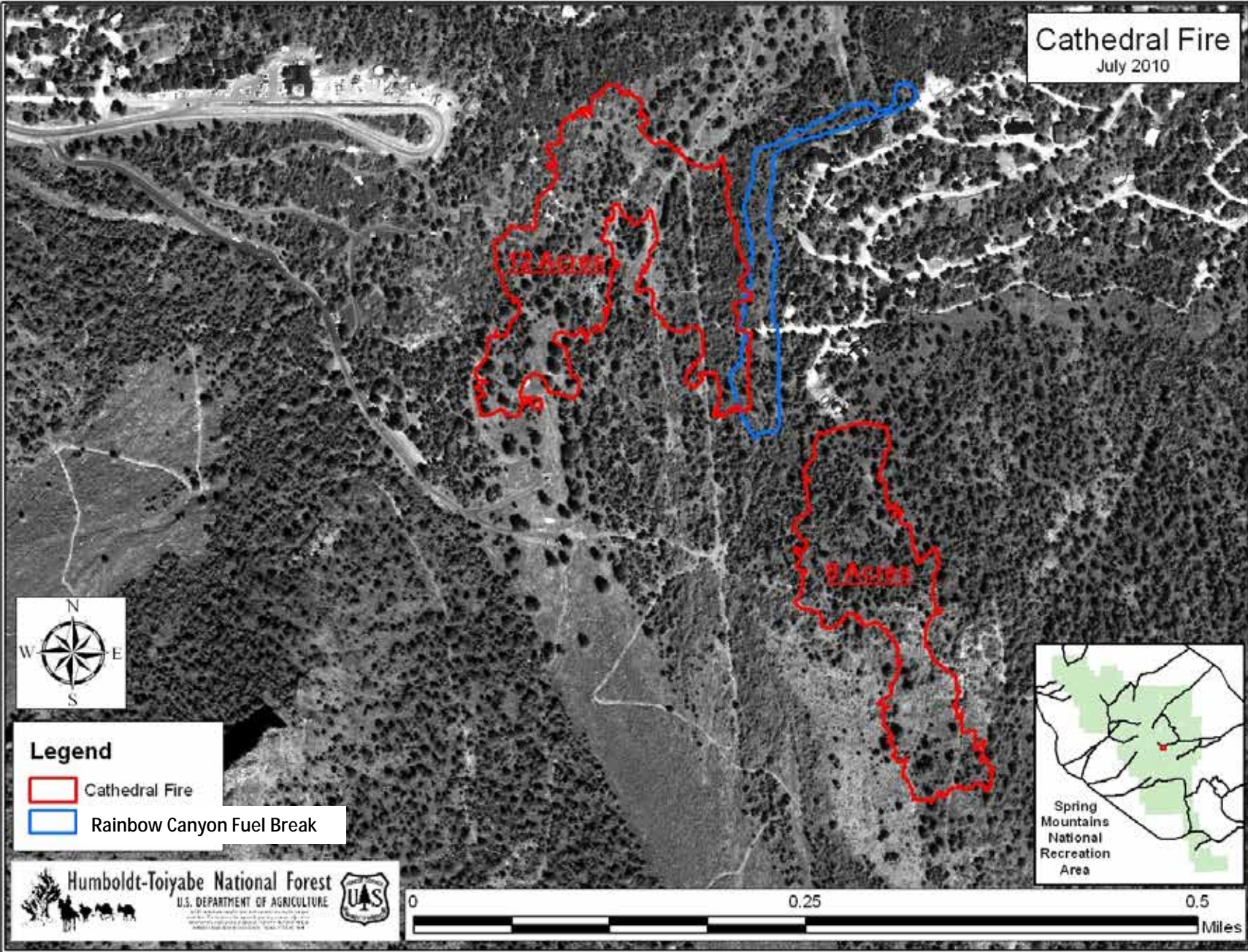
- The fuel break is a 50-100 ft wide buffer with 15-20 foot spacing between trees and minimal pruning. Maintenance work took place on the fuel break in 2007 when slash piles were removed from the site, and again in 2009 when any remaining piles were chipped and scattered.
- The original treatment consisted of cutting and piling small diameter fir, Ponderosa pine, and other woody material.

Morning of July 1, 2010

- Around 10:00 am, a smoke column was seen near the Cathedral Rock Picnic. Resources from the USFS, Nevada Division of Forestry (NDF) and the Mount Charleston Volunteer Fire Department (MCVFD) responded.
- The fire, named the Cathedral Fire, had a point of origin approximately 100 yards from the Rainbow Sub-division, on the other side of the Rainbow Canyon Fuel Break.

Cathedral Fire

July 2010





12 ACRES

2 ACRES

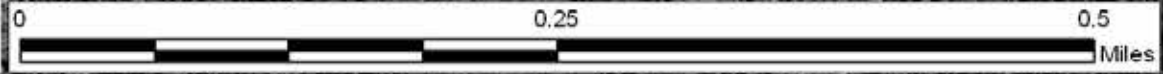


Legend

-  Cathedral Fire
-  Rainbow Canyon Fuel Break



 **Humboldt-Toiyabe National Forest**
U.S. DEPARTMENT OF AGRICULTURE



The Fire Progresses

The head of the fire progressed up the draw towards the fuel break and homes in the Rainbow Subdivision; the fire intensity was moderate to high, with isolated torching, a high rate of spread (ROS) and flame lengths between 15' and 20'.

As the fire grew in size and spread towards the Rainbow Sub-division, resources from the Forest Service were creating an anchor point and constructing direct fireline from the heel of the fire towards the Rainbow Sub-division. Resources from NDF and the MCVFD positioned themselves near structures in the sub-division to defend the homes from the approaching fire front.



The Fire Hits the Fuel Break



As the fire approached the fuel break it was fully consuming all ground litter and other surface fuels, but as it entered the fuel break, fire intensity decreased to low to moderate, taking on a slow creeping habit. Flame lengths decreased to 1-2 ft and scorch heights later measured between 2-4 ft.

The Fuel Break Helps to Make a Difference

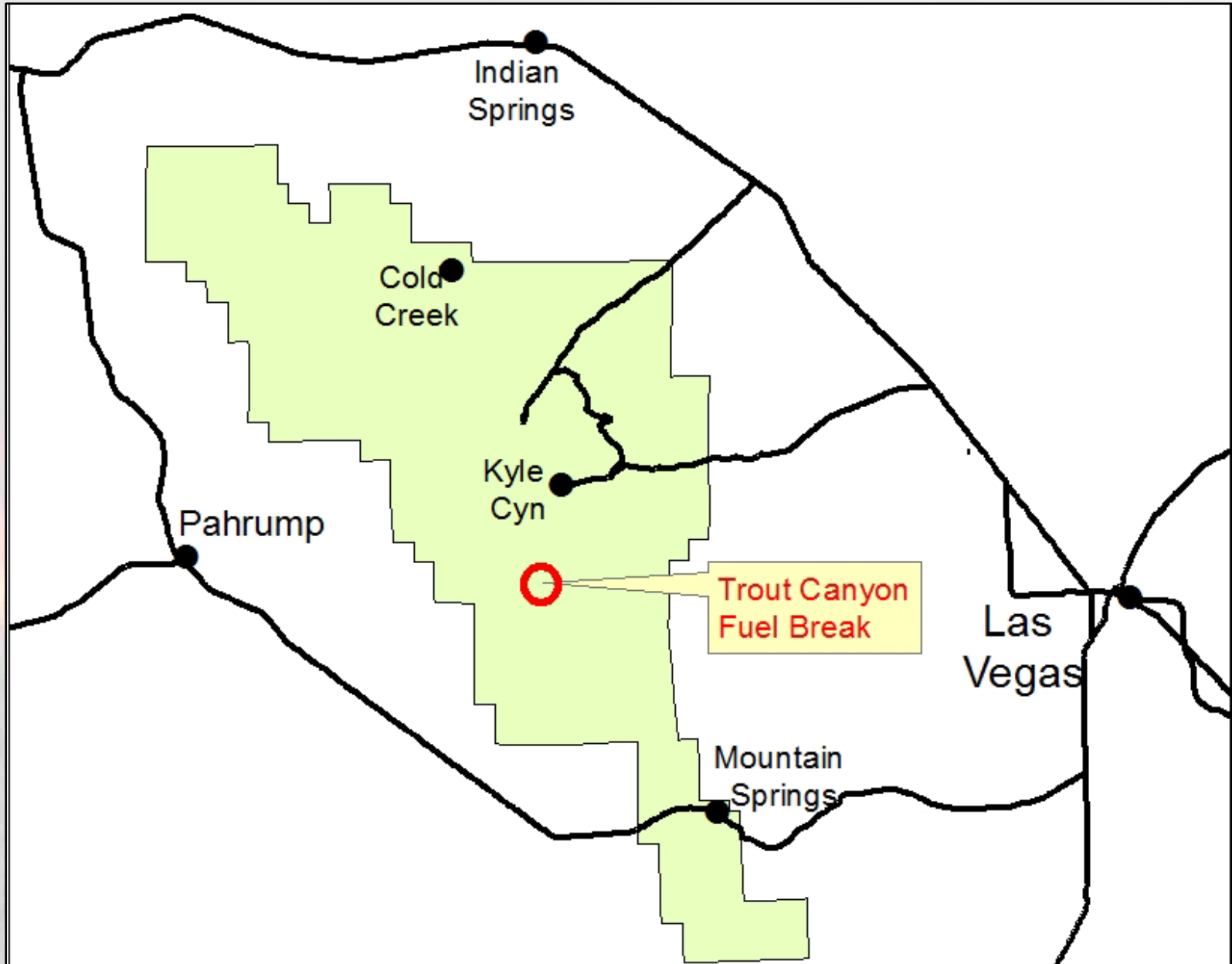
- With the fire slowed by the fuel break, firefighters were able to continue effective suppression and structure protection. The fuel break was tested multiple times during the course of the fire with reports back that the fire intensity was dramatically reduced within the fuel break area.
- According to one firefighter: "It is my belief that the fuel break helped save numerous homes in the Rainbow Sub-division."



The Rainbow Canyon Fuel Break as seen from a far ridge. Would this scene have been as green without this treatment?

Special Thanks to Clinton Gould, captain of Engine 453 (first unit on scene at the Cathedral Fire), for his account of the fire. Thanks also to Mike Frank and the rest of the SMNRA staff for making this fuel treatment a reality.

Overview Map of Trout Canyon Fuel Break Location



Trout Canyon Fuel Break



Recent Fuel Treatments on the SMNRA

- ✓ Fuel treatments combine one or more of the following: thinning, chipping of fuels, compacting/crushing fuels, piling fuels by hand or machine, pile burning, pruning, wildland fire use, yarding fuels away from site by dragging or carrying.

<i>2008</i>	
Project Name	Acres
MOUNTAIN SPRINGS FUEL REDUCTION	134.8
SMNRA WILDERNESS WFU	6
STEVENS ACT PROJECTS 2008	20
TROUT CREEK	5
total	165.8

<i>2010</i>	
Project Name	Acres
KYLE HELI/HAND	135
KYLE MIDDLE 3	161.4
LOWER KYLE	250
LOWER KYLE 3	88
MIDDLE KYLE 4	137
MIDDLE LEE	213
UPPER LEE	126
UPPER LEE 3	206
UPPER LEE 4	107
total	1423.4

<i>2009</i>	
Project Name	Acres
ANGEL PEAK FUEL REDUCTION	796
COLD CREEK FUEL REDUCTION	313
DEER CREEK FUEL REDUCTION	434
LEE CANYON FUELS REDUCTION	391.4
MTN SPRINGS FUELS REDUCTION	157.1
TROUT CREEK	260
total	2351.5

<i>2011</i>	
Project Name	Acres
DEER CREEK FUEL REDUCTION	65
KYLE MIDDLE 2	31
LEE CANYON FUELS REDUCTION	43
LEE HEALTHY FOREST RESTORATION	62
MIDDLE KYLE 3	12
UPPER LEE	7
UPPER LEE 4	63
total	283

And thank you for doing your part!
Always remember:

