

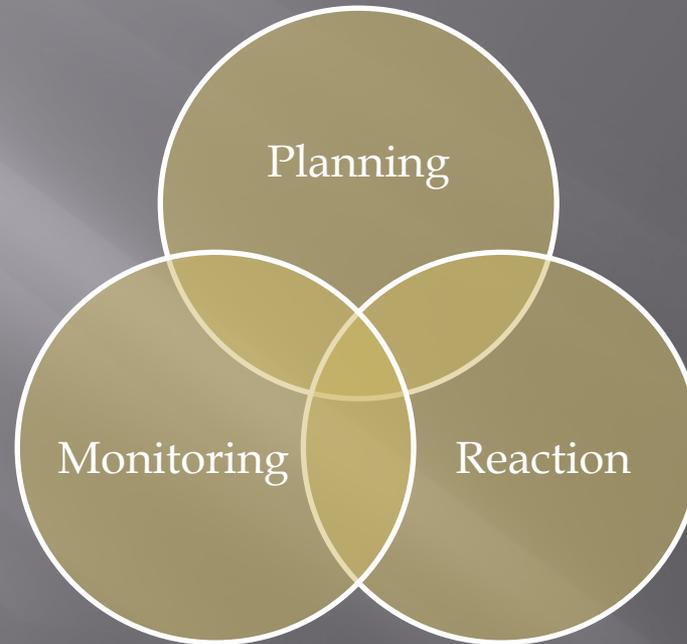
# KUEHSTER ROAD HOMEOWNERS

Lower North Fork Fire Review

August 13, 2012

Prepared For: Lower North Fork Wildfire Commission

# How can this Tragedy be Avoided?



# Prescribed Fire Review

*“Only error was decision not to monitor third day”*

- *Bill Bass, Review Team Leader*

*Report conclusions are not complete.*

*(Based on reported data)*



# Residential Burn Requirements

- Prior approval of the Sheriff's Department and Local Fire Department before a burn permit is issued.
- 2 inches of snow on the ground
- No bigger than a 6' by 6' by 6' pile
- Final approval on burn day
- Fire **DEAD OUT** (smokeless) by 4 PM of Burn Day



Are these Precautions Consistent  
with CSFS Requirements?

# Planning

High Risk Rating Definition:

- Limited Containment Opportunities Exist
- Additional resources (people and equipment) would be required

*CSFS Plan Rated this Risk "Moderate" and as a Result Assigned:*

- Day 2 - 1 person for 4 hours
- Day 3 - Unmanned
- Day 4 - Wildfire Breakout 3 people

Are Burn Plan Risk Assessments Critically Reviewed?

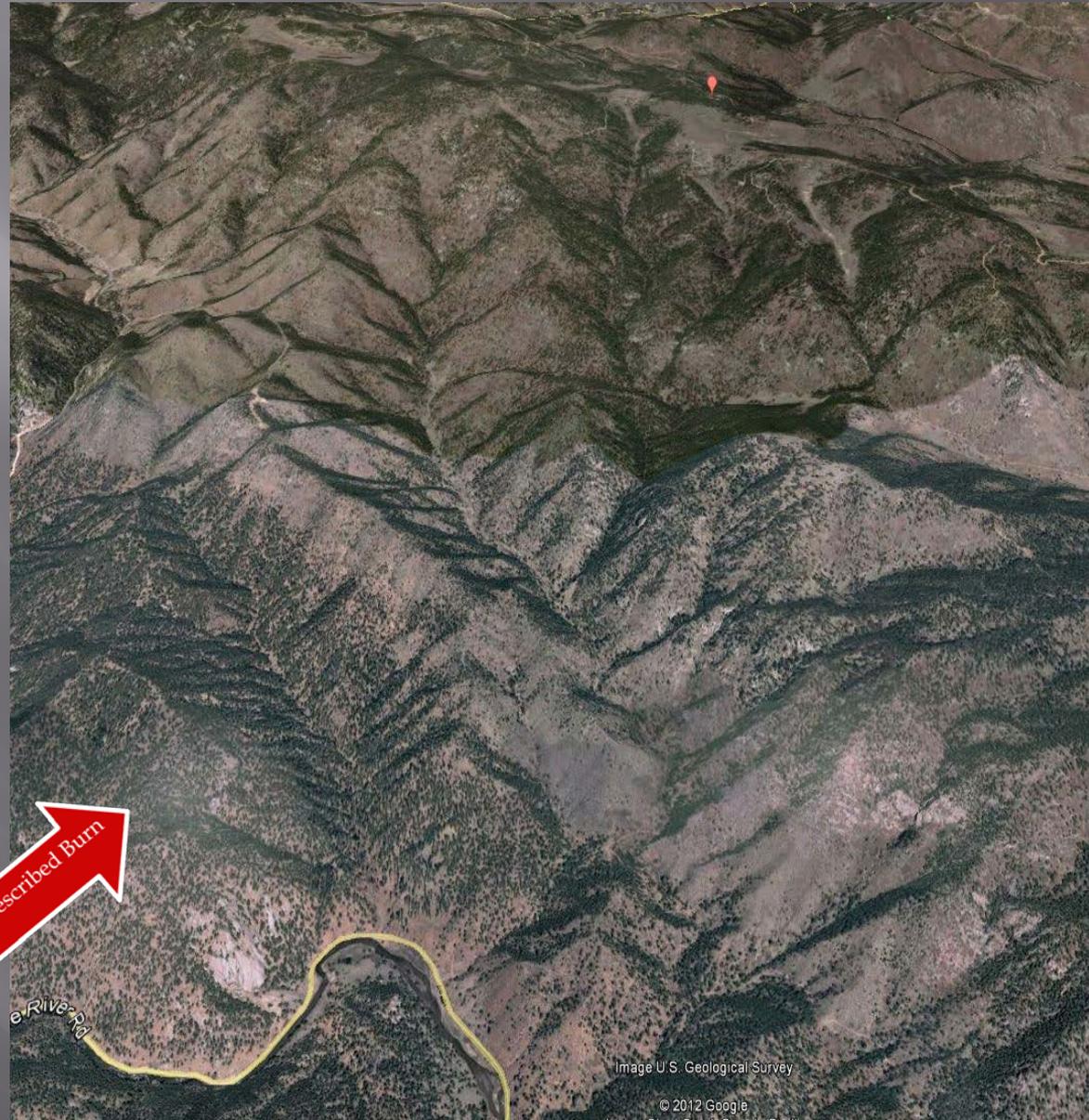


Image U.S. Geological Survey

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# Planning

## CSFS Burn Plan

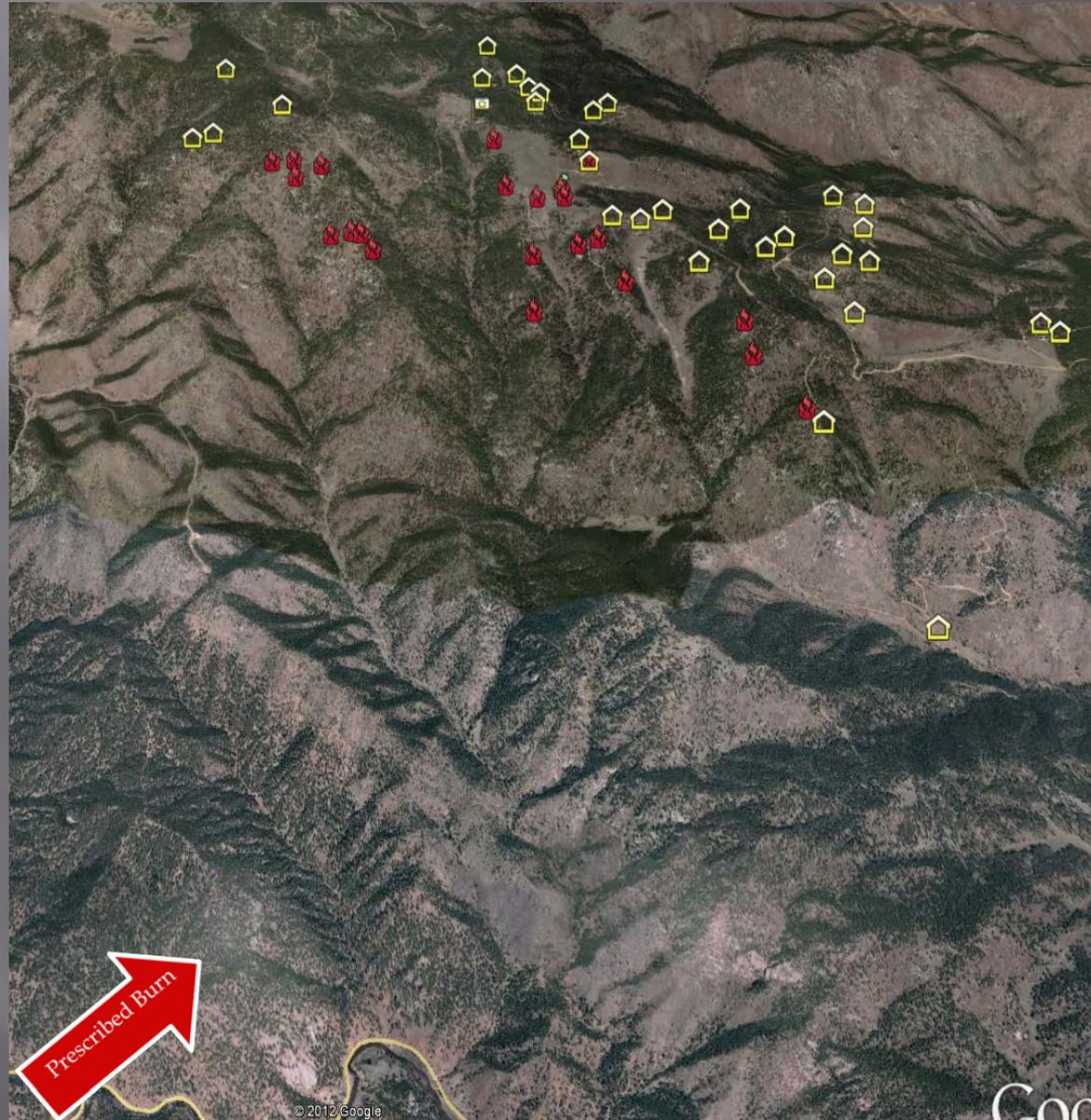
### Assessed Risk

*"Moderate Damage to Vegetation, Habitat or Improvements."*

*"No Residences Expected to be Involved."*

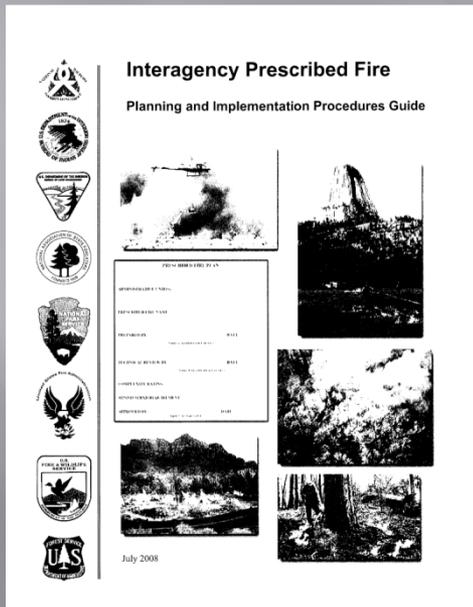
No Evacuation Trigger Points Identified in Burn Plan

Is there a Culture of Risk Acceptance?

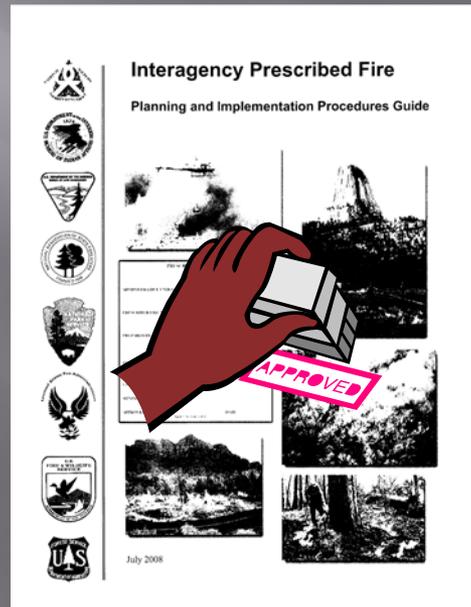


# Planning

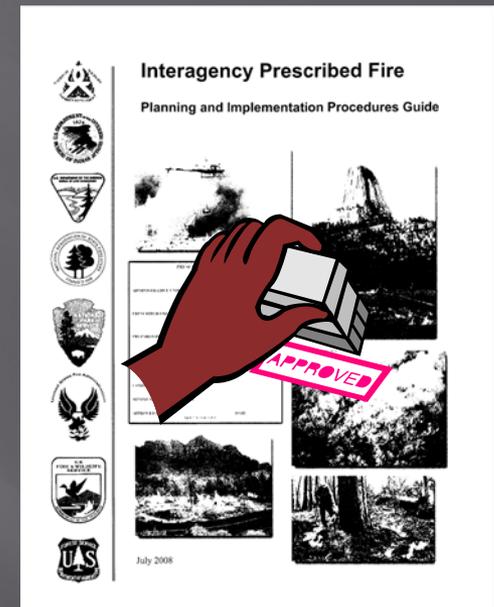
October 15, 2011 Prescribed Burn Escape



2006



2011



2012

Is There a Critical Process to Incorporate Changing Planning Assumptions?

# Planning

## High Risk Rating Definition:

- High fuel loadings or concentrations present
- Terrain encompasses a wide range in slope steepness, abrupt changes in slope, and several directional aspects that lead to . . . Unpredictable local winds and microclimate differences.
- Resulting variations in fire behavior may present major control challenges.

Was this Tragedy a result of “Freak Weather Conditions” or Poor Planning?

# Mastication

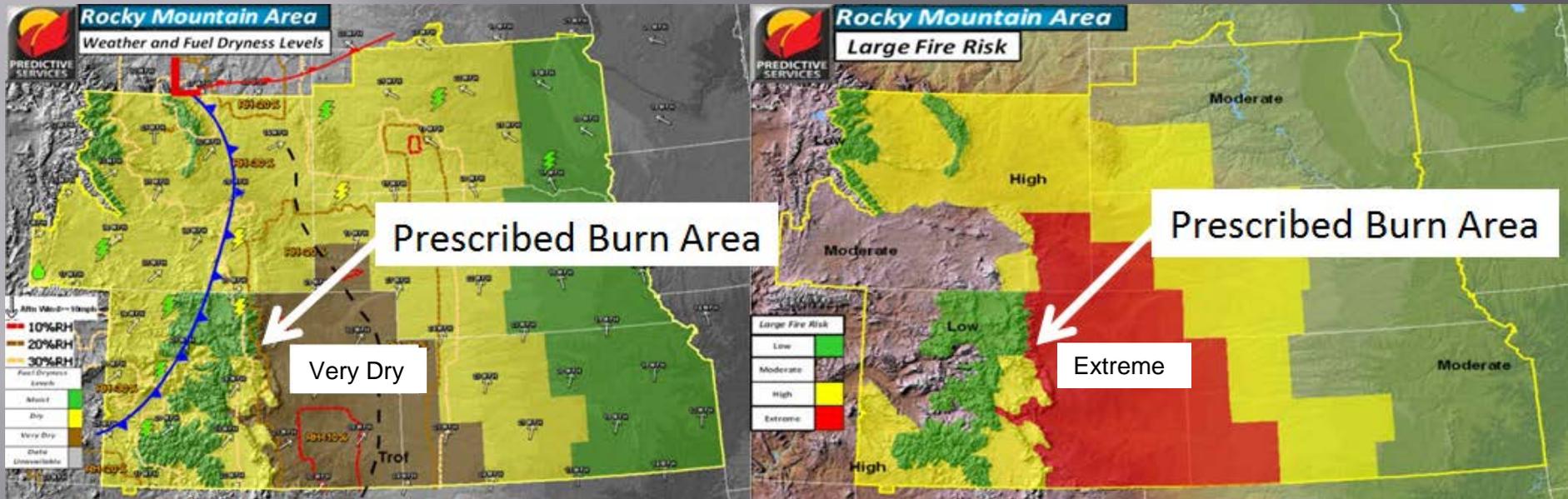


*“By design mastication . . . increases surface fuels which are much drier and more easily ignited.” - Prescribed Fire Review 4/13/12)*

*“A comparison of different treatment techniques showed that masticated treatments supported the highest rates of spread, fire intensity, flame lengths and levels of tree mortality.”*

Based on this Knowledge... Should Masticated Fuels be Burned in Hot & Dry Conditions?

# Monitoring Rocky Mountain Area Fire Potential



- Issued March 21, 2012. Valid through Monday March 26, 2012
- Weather and fuel dryness (left) indicate widespread increasing winds and low humidity
- Large Fire Risk Outlook (right) showed high to extreme risk

Was Evidence Available Before the Prescribed Burn Indicating Extreme Caution Required?

# Monitoring

Smoke seen from Kuehster Rd  
Saturday Afternoon

NOAA Weather Forecast for  
Sunday March 24<sup>th</sup>

“SW winds 19 to 20 MPH with  
gusts to 45”

*“Weather was found to be the  
immediate causal factor in nearly  
50% of the escapes reviewed.”  
(Dether and Black, 2006)*

CSFS Decides to Not Monitor  
Burn Site on Sunday



**Are These Facts Consistent with the Decision Not  
to Monitor on Sunday?**

# Monitoring

*“Called to a smoke investigation in the area of Lower North Fork prescribed burn, Had dispatch contact CSFS they advised all the smoke is within the black their engine was in the area earlier, CSFS advised NF units could stand down.”*

*Curt D, Rogers, Chief - North Fork Fire Department  
Stand Down Report – March 24<sup>th</sup>, 4:30 PM*

- Fire was unmanned from 2 PM Saturday until 10 AM Monday – 44 Hours
- NOAA Saturday March 24<sup>th</sup> Forecast called for gusts to 50 MPH by Monday afternoon
- CSFS decides to send in 3 man Mop up Crew with no Back-up Plan or Resources



Shouldn't Changing Weather Conditions  
Modify the Monitoring Plan?

# Reaction

- Problems with Communications
- 2:30 PM Curt Rodgers (NFVFD) Identified Need for Evacuation Trigger Points to CSFS
- 4:50 PM Evacuation Notice Issued
- 5:02 PM Reverse 911 Calls – Many Calls to Wrong Addresses
- No Call Back from Previous 911 Callers as Promised, including Our 3 Neighbors that were Killed
- Was Operational Testing of This Critical Capability Ever Accomplished?

Why Didn't Contingency Planning and Operational Testing Identify Flaws?

# What Caused This Tragedy?



- Planning
  - No Useful Contingency Plan in Area of Previous Fire Escape
  - No Change in Burn Plan after Escapement
  - Plan did not capture contingencies for a worse case scenario which became the Actual Scenario
- Monitoring
  - CSFS Ignored Forecasted Increasing Winds and Did Not Show Up for 2 Days
  - CSFS Stood Down a Responding NF Fire Engine Saturday March 24, Ignoring Increased Fire Activity at Burn Site
- Reaction
  - Incorrect routing of automated Reverse 911 and NO CALL BACK to previous callers who had been told it was “only a controlled burn”

# Financial Impacts Beyond Insurance

- ▣ Land Value has Decreased at least
  - 15% for Stigmatized Property
  - 75% for Total Devastation
- ▣ Reclamation Costs
  - \$2,000 to \$5,000 per Acre for Nominal Damage
  - \$7,000 to \$12,000 per Acre for Steep Slopes and Severity
- ▣ Tree Removal Costs
  - \$130 per Tree on Nominal Slopes
  - \$ 10,500 per Acre If Trees can be Marketed

# What's Been Done to Help the Fire Victims

- Waldo Canyon Fire - 1 Month Ago
  - Governor requested and received National FEMA funds for victims
- High Park Fire – 2 Months Ago
  - State already spending funds to reseed/mitigate area
- Lower North Fork Wildfire - 4 ½ Months Ago
  - No commitment made to victims
  - No funding support
  - No Mitigation/Reforestation support

Accountability/Justness?