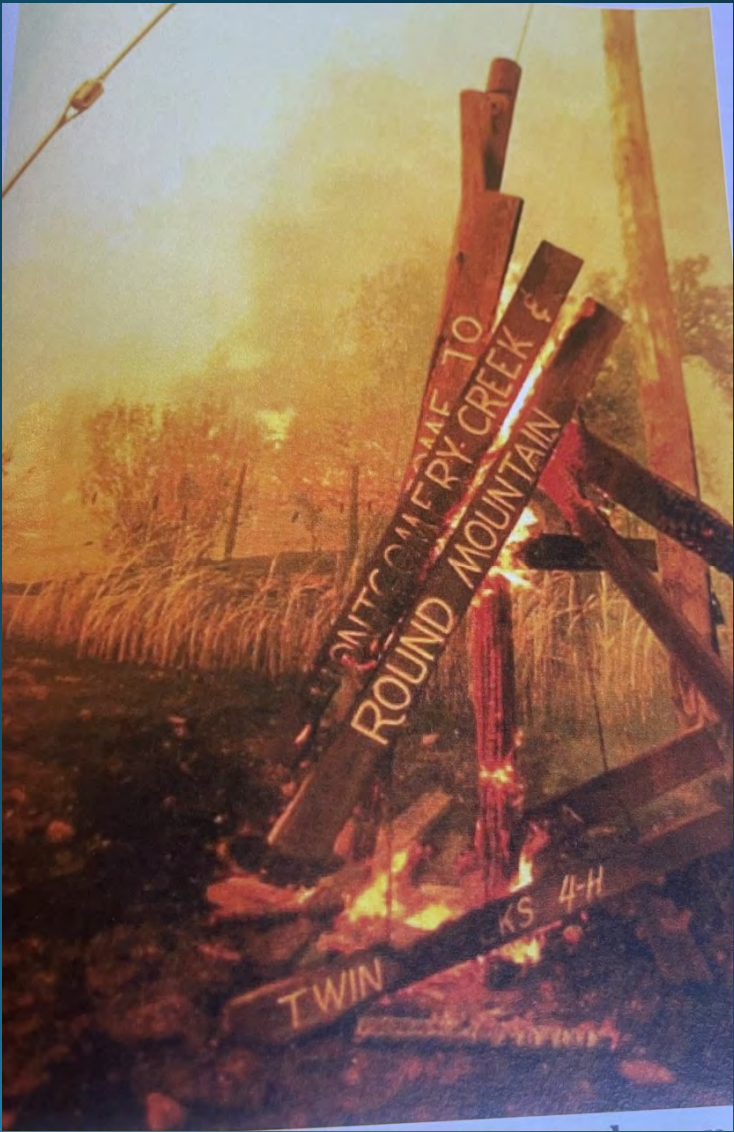


The Fountain Fire



Why we are here

The Problem

San Francisco Examiner
Saturday
AUGUST 22, 1992
HOME DELIVERY
THIRTY-FIVE CENTS

SPORTS EXTRA
A's McGwire is injured in loss to Orioles [C-1]
Reserves lead 49ers to pair of TDs to beat Chargers [C-1]
Giants hitting returns in time to defeat the Pirates [C-1]

YOUR MONEY
Pitfalls in coin collecting [A-12]

ARTS & LEISURE
Discovering 'Christopher Columbus' [B-1]
Crants for the Arts '92-93 funding announced [B-1]
Best of the weekend: Joan Baez in Saratoga [B-1]

SATURDAY

'Everything's gone' **A third of fire claims unpaid**

Blaze rages in Shasta County

Fire controlled in Calaveras, but 35,000 acres burn up Highway 299

FIRE AT A GLANCE

1. FOUNTAIN FIRE 20,000 acres near Round Mountain in Shasta County. More than 100 structures burned. 1,275 firefighters with more on order. No estimate of control or containment.

2. BARKER FIRE 2,000 acres in unincorporated area outside Highway 99 in Shasta County. All areas west of Highway 99 extinguished. No estimate of containment.

3. OLD GULCH FIRE 10,000 acres in the heart of Gold Butte county in Calaveras County. 85 structures damaged, including 40 houses. \$2 million in damage. \$1.5 million in firefighting costs. 3,000 firefighters. Contained Friday night.

HOUSTON — If you paid attention to each party's national convention, you might conclude your choice for president is between a straggling Democratic wimp named Bill Clinton and a splenetic Republican panderer of the rich named George Bush. Each party has become so skillful at sowing and feathering the

August 22, 1992 (started August 20th)

What is a Disaster?

I will show what an emergency manager does

I am your Emergency
Manager today

Evolution of Emergency Response

- 1960's
 - 1962: Ash Wednesday East Coast storms – 300 million dollars
 - 1964: 9.2 Alaska Earthquake and CA Tsunami kills 123
 - 1965 Hurricane Betsey
 - 1969 Hurricane Camille – Cat 5, Killed 259+ and \$1.42 billion damages
 - Equivalent to \$9.9 billion today



[Remember Camille for 3 Reasons](#)

A Need for FEMA/More Change

- Over 100 Agencies responsible for risk and disaster
- 1978- Jimmy Carter forms FEMA
- Many Academic Disciplines – fragmented until...
- Two Disasters Change Everything
 - 9/11
 - Hurricane Katrina (Aug 2005) – 1,856 dead and 705 missing over 30,000 rescued (Fed \$100 billion, insurance \$35 Billion, NFIP \$16.1 million
 - Go back to Camille 1969 (Cat 5)
 - Levee's: "False sense of Security"
 - July 2004 simulation "Hurricane Pam"

Terry Mill and Surrounding Areas



Terry Mill 1918

Burned during fire



Buffum 1907

Buffum Homestead- had been cleared but still had many trees like this during fire



Buffum's After Fire

My Property Before And After



Risk Assessment

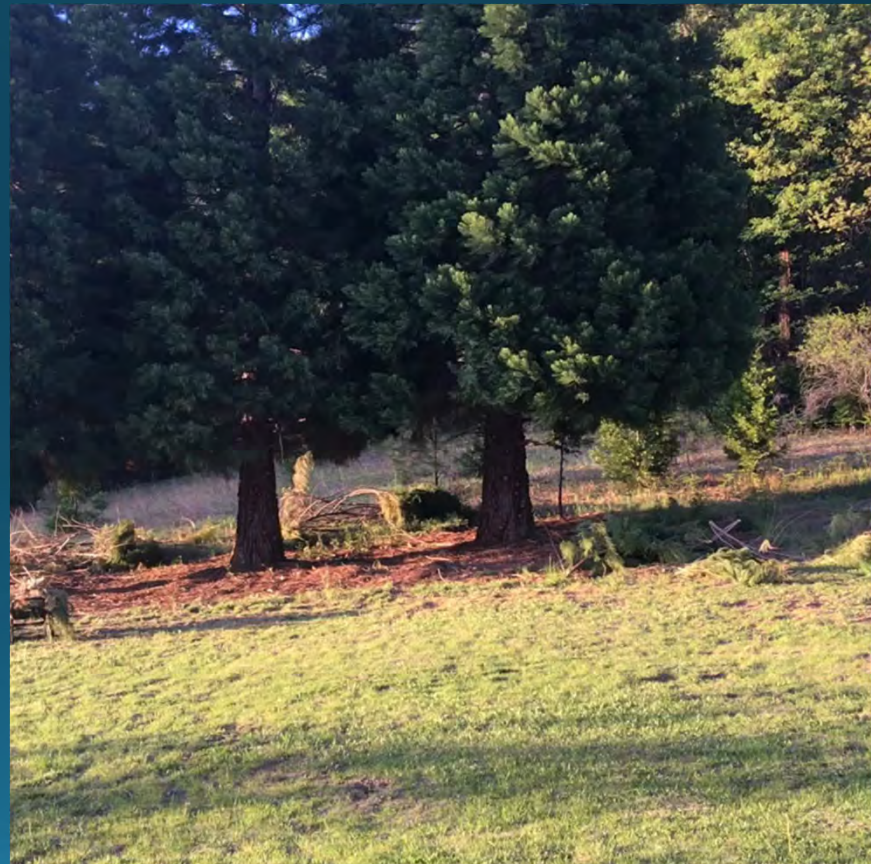
- Clear Around Most Vulnerable Places First



August 2016



August 2020



Comments to DEIR and response

- I wrote brief version of my Thesis in 7 pages between 2-762 and 771
- Cal Fire Says areas around project “can expect future fires to be more damaging” (3.1-6)
- “Please... let that sink in with the description I gave... before looking at the impacts.” ... “Never address capability or how some firefighting options are restricted” (2-771)
- Response: “The County does not, as is suggested... deny these facts. Instead, these facts pervade the analysis... area’s fire history (45-41)

This is what pervade the analysis???

- the Fountain Fire destroyed approximately 600 structures in Round Mountain, Montgomery Creek, and the surrounding area and burned approximately 64,000 acres in 1992. A burn scar from that fire remains evident on the landscape within the Project Site. The Project could increase the demand for fire protection and response services due to the possibility that Project-related vehicles or infrastructure could ignite a fire. (3-1.23)

THIS IS A HUGE FAIL AT RISK ANALYSIS

WHAT YOU THINK OF WHEN YOU HEAR FOUNTAIN



What those in project think of when we hear the word FOUNTAIN



YOU DIDN'T UNDERSTAND IT AND AN EMERGENCY MANAGER NEEDS TO KNOW

by Tuesday. On Friday the fire had
Aug. 1-2, 2009, burned 9,356 acres before it was
But most of that addi-
—Please See Page 8
Residents watch Reading Fire following com-
munity meeting Sunday at Old Station fire hall.



20 YEARS AGO...

'We've Never Seen A Fire Like This'

-Manny Sousa
August, 22, 1992

—Please See Page 6 (ection District board of directors) provides information to motorists about the fire.

'We've not had a fire in Shasta County that's done the structure damage this fire has done'

-Capt. Mike Witesman, fire prevention officer for California Department of Forestry and Fire Protection, August 22, 1992

...most incredible burning situation many of us have ever seen (Dave Mack, Chief Dir. CDF)

... most extreme, bizarre, and awesome fire in my 35 year career" Chief Stewart, Shasta-Trinity Unit

PA

'A fire that no matter what you did, you just didn't save anything'

FOUNTAIN FIRE SPEAKS FOR ITSELF

First spotted at 12:50 PM Buzzard Roost Rd.

August 20, 1992

what people near the project site think
of when they hear the word fountain



12 Miles in 3 Hours – at fastest 6mph

Fire Reported at 12:50 PM

- Conflicting Origin Points
- 1st Aircraft takes 17 Minutes
- First CDF Engine 40 Minutes
- Already Crowning
- First Air drop 58 minutes

**DIFFICULT TERRAIN, NOT ENOUGH
FIREFIGHTERS**



By Day 3 Still only 10% of resources needed

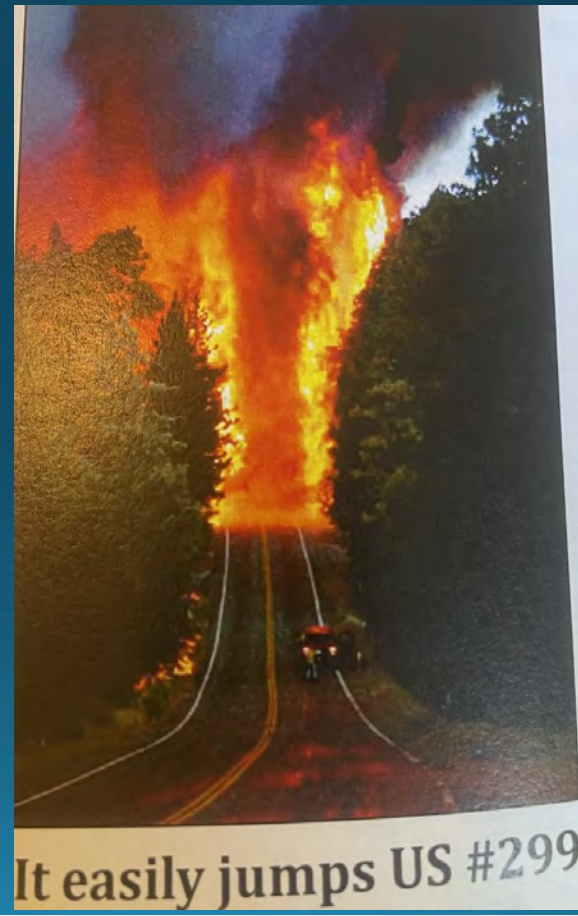


The first fire engines and aircraft were used to save homes. These efforts were hampered by narrow roads, extended travel

5

times, the crowning, spotting, fire, the high voltage power lines, the heavy fuel loading and lack of clearance around many residences. Moderate, erratic "shifting" winds also hampered control efforts as wind shifts (up to 90 degrees) often changed the fire's direction.

Erratic, Fast, Crossed 299 Quickly



Do you want to stand here for 5 hours in 2,000+ Degree Temps with Turbines on that Ridge?



14 people trapped in meadow at end of Frisby road with wall of flames that look like this –ridgeline will now have turbines

Only Evacuation Route Cut Off



Caravan's followed old-timers down old logging roads that wind around to Burney

August 21st- Morning After

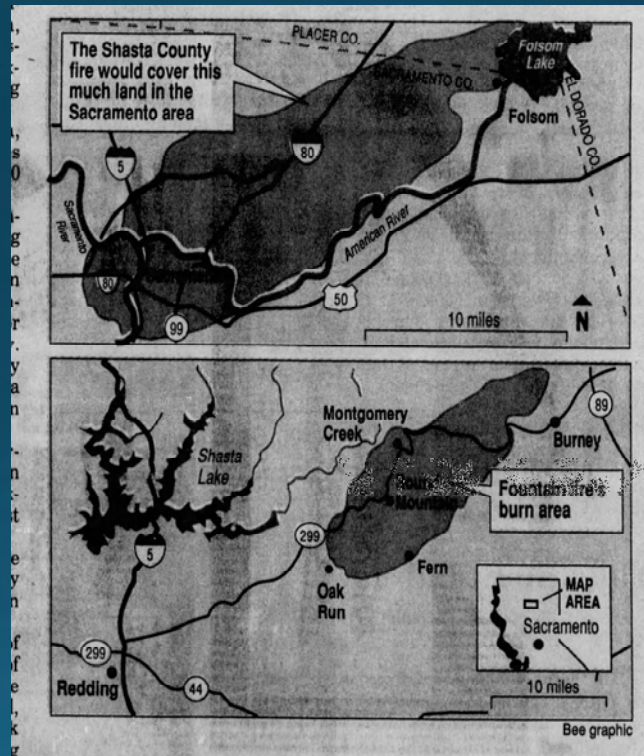


Past Montgomery Creek/Round Mountain aerial firefighters
had never seen something like this before

An Emergency Manager Needs This!!



If it had been Sacramento



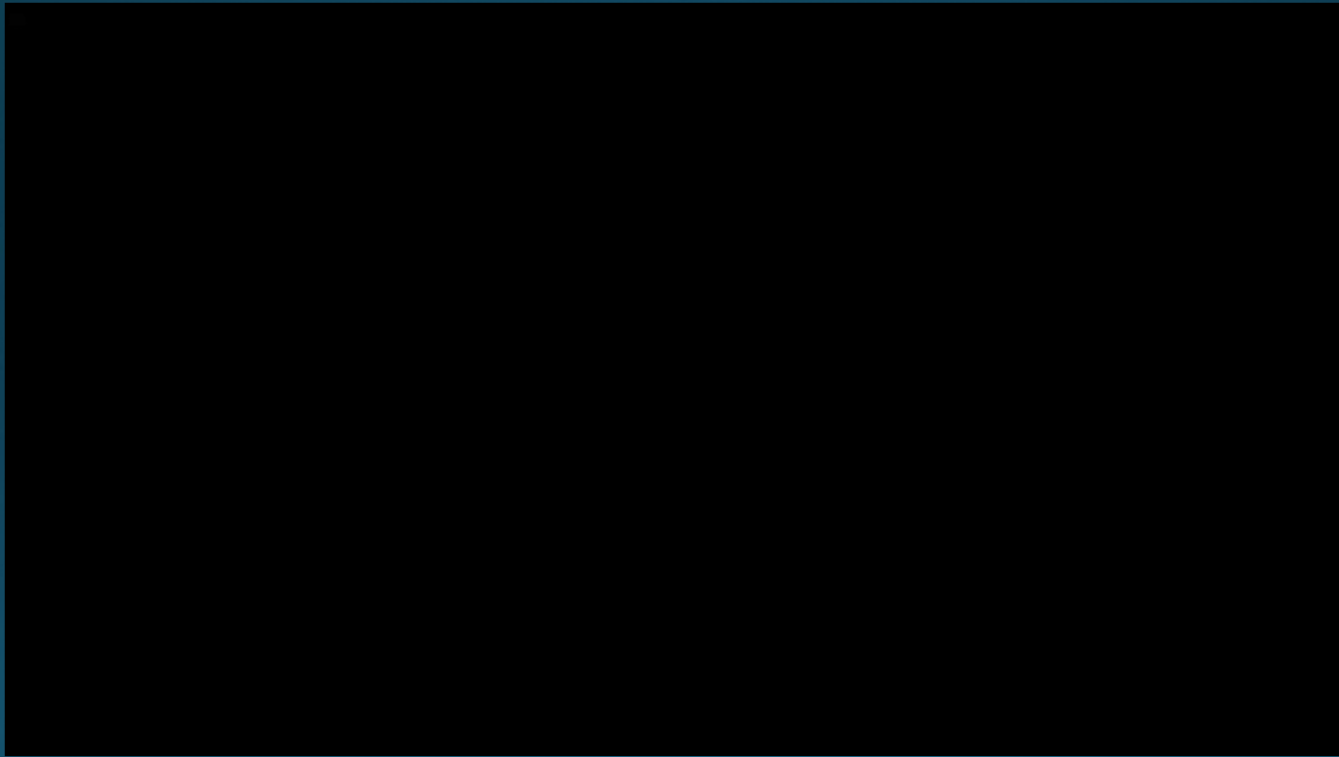
What This Told Me

- Remote Roads
- Hard to Get to (rugged, steep)
- **Air Attack Essential**
- **Miracle no one died (except 3 salvage process)**
- Firefighters couldn't fight it – ran for lives
- Scarce resources – Normal according to news
- One of Fastest Fires Ever
- Destroyed my town in 1 hr
- One Egress Route – Most could not get to
- Worst fire many foresters and Director of CDF had seen
- Like a Cat 5 hurricane if we measured fires
- **EIR Risk Analysis/baseline/fire history left out most important information**
 - **Downplayed the severity of this fire and gave no details that told me anything**

July 24, 2018 Montgomery Creek



Crestline Fire July 24, 2018



Lightning and Fires



August 21, 2019 Lightning Fire

Without proper Analysis can't make a plan – what I know and don't know

- What are current response times, resources available and how close are they
- How people get information about fires – needing to evacuate
- Will that Info work
- Baseline (faulty assumption to include climate change as baseline is current state and not variable – I don't know exactly how climate change will affect this area – can't be part of baseline)
- How many people – how congested 299 will be if it is not blocked
- Are there more Egress routes?
- Response time will be much longer than Carr or Camp Fire because these resources are further away – base camp was in Anderson over an hour away
- What has changed since 1992? More infrastructure? More or less people? More or less resources?
- FIRE SEASONS ARE LONGER, WORSE, MORE SEVERE and simultaneously affect the state and much of the west – resources will be spread out during fire season

P45-35 Referring to my Thesis

- Commenter's input is based on Academic research *thanks*
- Difference of opinions based on facts???

Does not affect sufficiency of EIR's Analysis??

- 2-769 County only has 144 volunteers when they can have 385
- Montgomery Creek Volunteers only have 7 out of 20
- 1/3 of firefighters in California are volunteers, past 3 decades 10 percent decline in volunteers while emergency calls have tripled
- “additional background information does not affect the sufficiency of the EIR's analysis or conclusions....” (45-37 response)

Adding a New Hazard (Hatchet Ridge 2021)



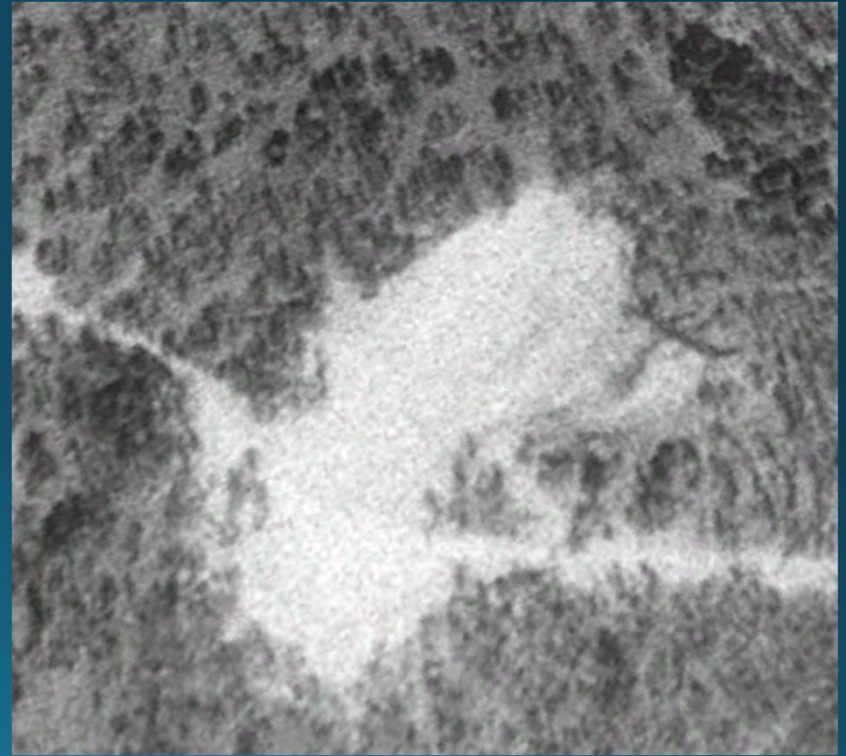
P45- 71

- “The comment references a specific location at turbine ‘15.’ However, there is no turbine location with this attribution.

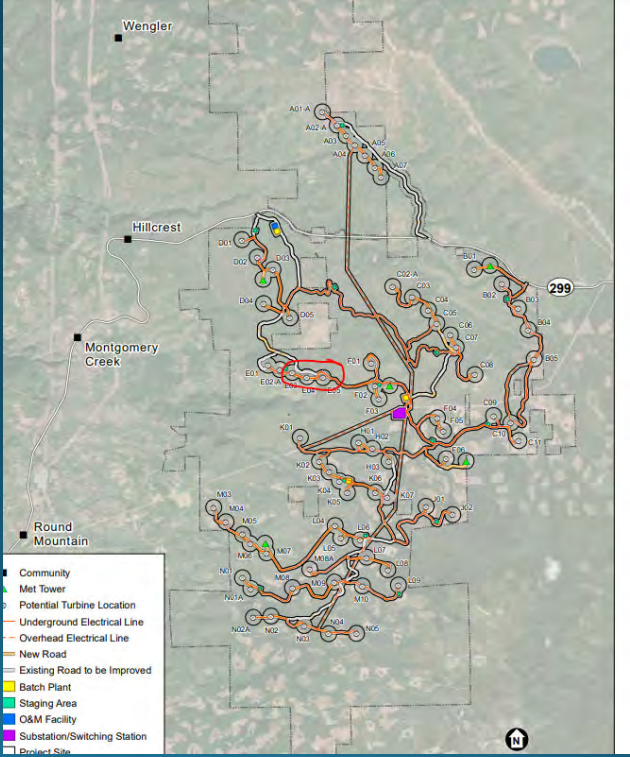
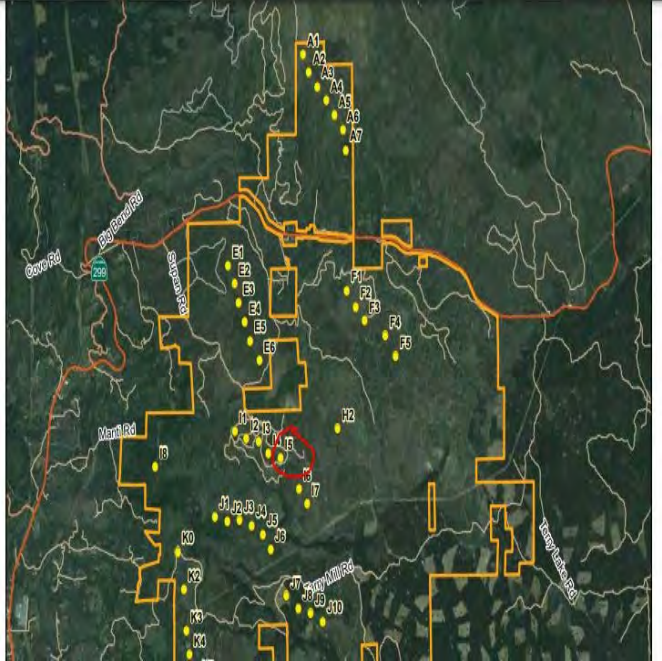
“DEIR: “There are no known landslides in the project site,” (3.9-16)



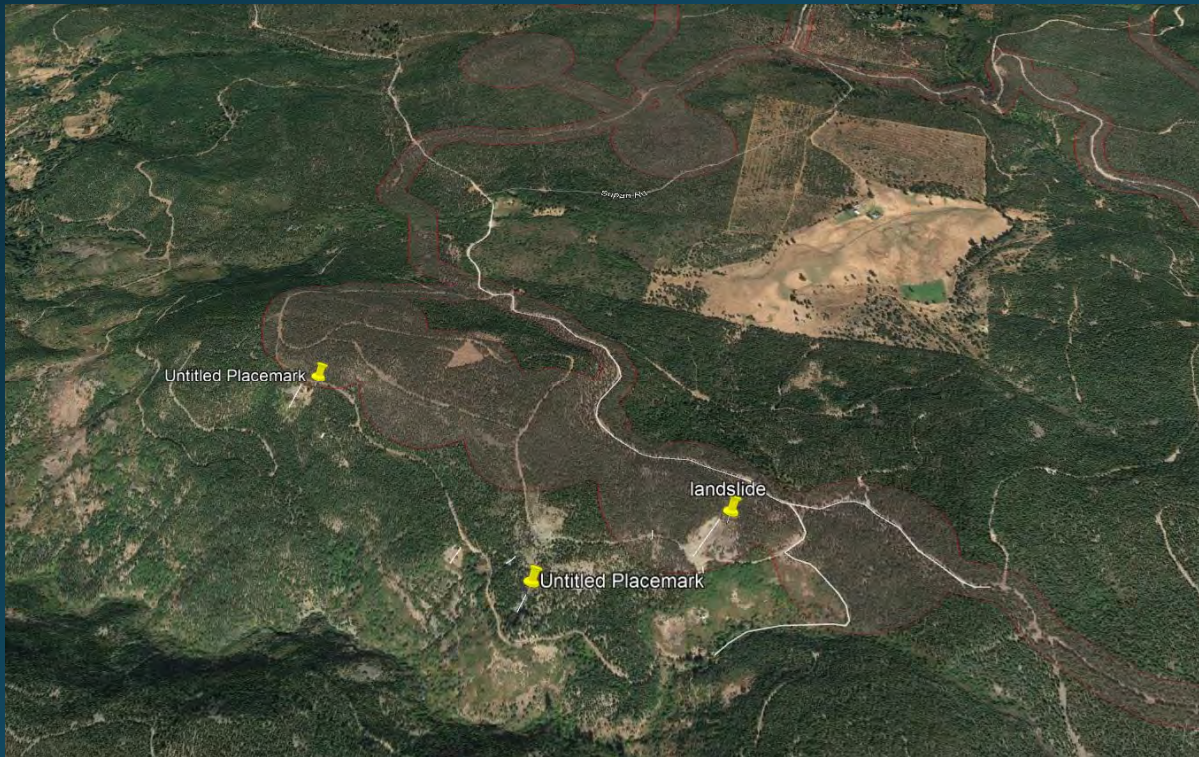
"15" Turbine



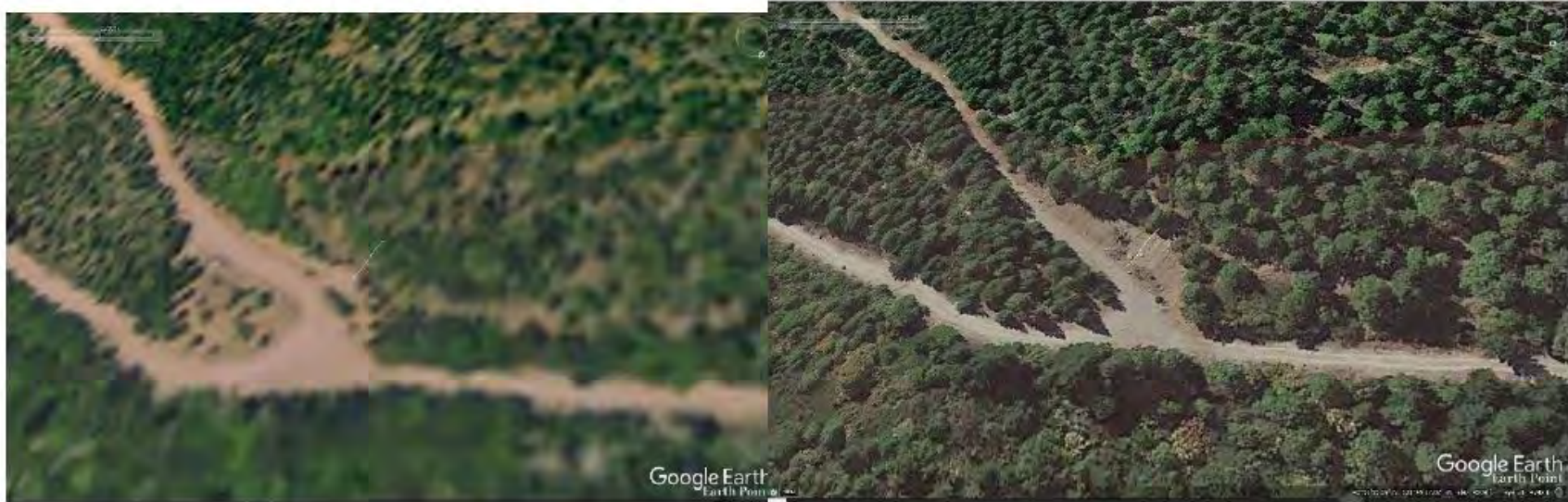
Turbines



Ah Ha- Turbine is here



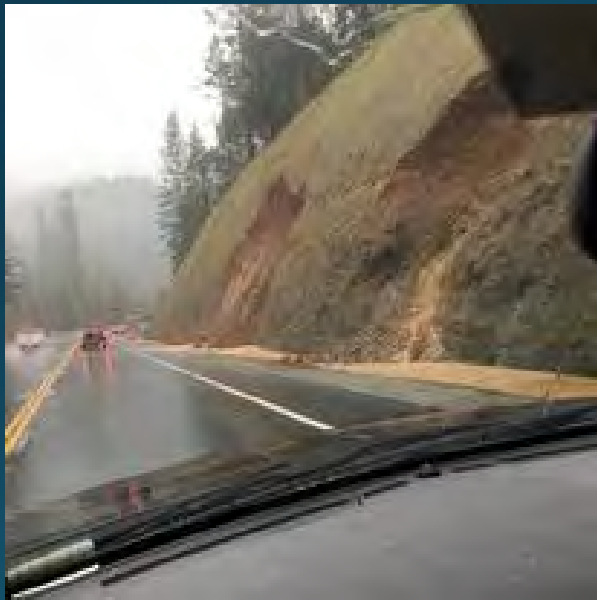
2-804 through 806 - Why Does it Matter



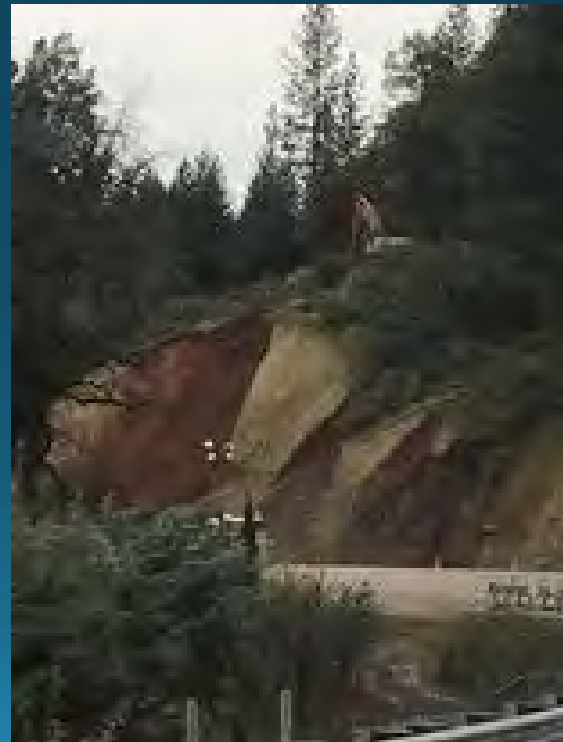
Likely Rock Slide/Slide near A6/A7 (left picture 2005/ right 2016)

Slope Stability – Real Problem

Dec 15, 2016



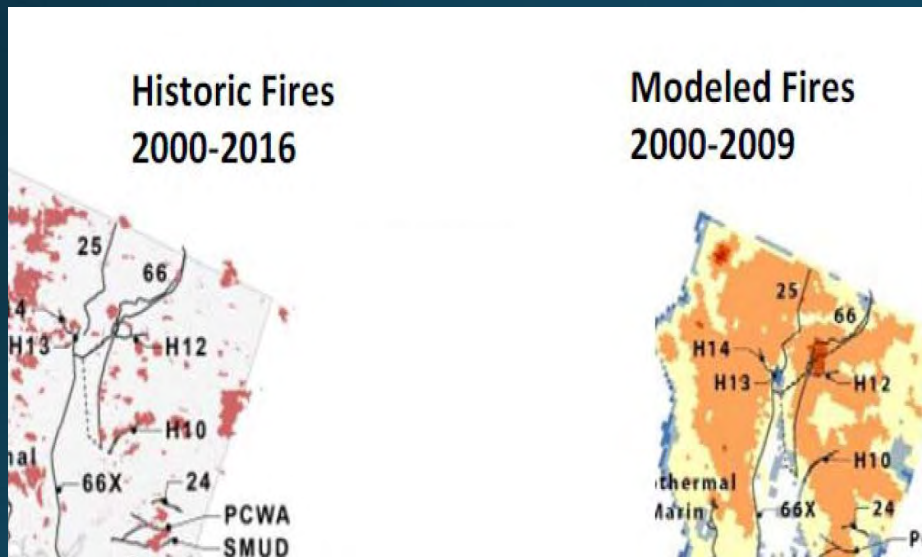
Dec 20, 2016



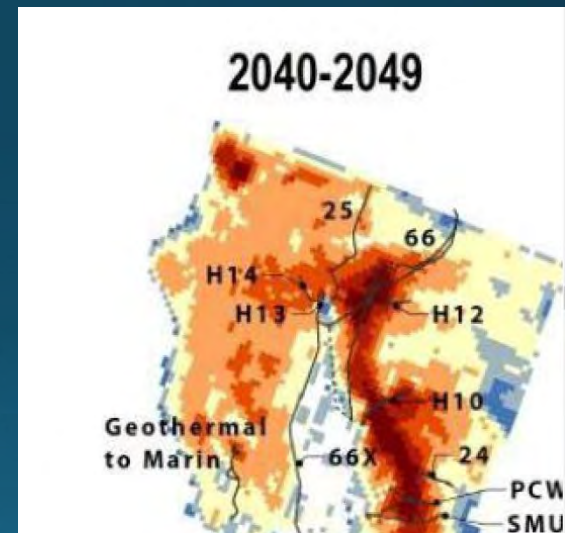
DEIR Wildfire Impact b

- “Due to slope, prevailing winds, and other factors, whether the project would exacerbate wildfire risks... expose... a significant risk of loss, injury or death from a wildfire or the uncontrolled spread of a wildfire”
- “...would reduce the potential for the project to result in the uncontrolled spread of wildfire”

Increase to Fire Near Utility Lines



Notice Fountain Fire was before this and destroyed 100s of miles of lines



Area of project site one of most at risk in future in this county

Red Flags to an Emergency Manager

- Scada
- Lightning
- Sparks from stopping the blades
- Most Turbine accidents happen complex terrain with varying slope
- Fires from turbines cannot be located as they are called “structure fires” in database so you only see them in the news (watch Firetrace webinars that try to sell you fire detection for turbines and suggests bigger problems will occur with bigger and more turbines) Under Reported
- Adding more electrical infrastructure increases more ignitions points
- More roads/people increases more ignition points
- No Aerial Firefighting and ground crews hampered

Other Risk Analysis for Turbines

- Will fuels in Nacelle act like jetfuel as planes did in 9/11 if they all catch fire – will this increase temp of fire burning (regardless of what caused it)
- How the localized temp increase will affect dry weather/fire season HERE
- How far can sparks fly from turbine
- How will lightning that does not hit the turbine (not detected by scada) be detected
- What happens when it is not 9-5 Mon through Friday, where will the employees be
- I KNOW aerial attack won't happen
- Incident commanders will not fight within certain feet only attack spot fires
- MANY MANY MANY MORE

THESE ARE NOT BLACK SWAN EVENTS CPUC in
response to PGE Fire Mitigation Plan 2021

Failures

Potential Problems



Frozen Turbines Texas
2021



Oil Pipeline Hack-
How likely SCADA
data

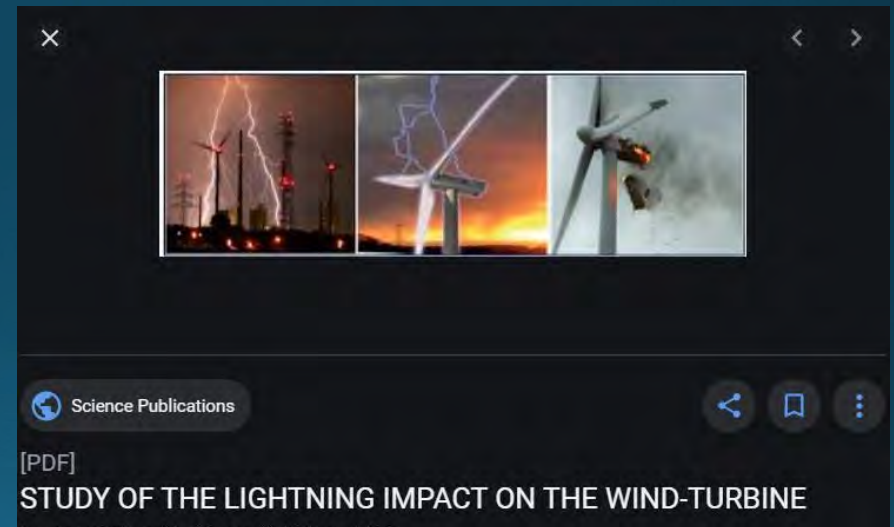
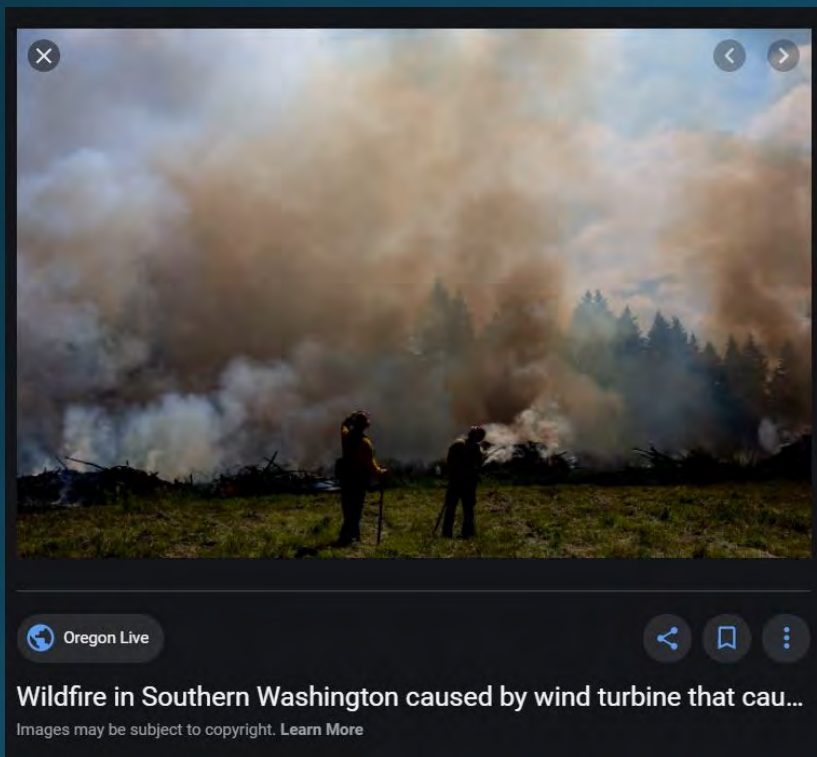


March 13, 2021 Locust
Hill Windfarm

What's the Difference in Fire Risk?



Fires are rarely caused by turbines?



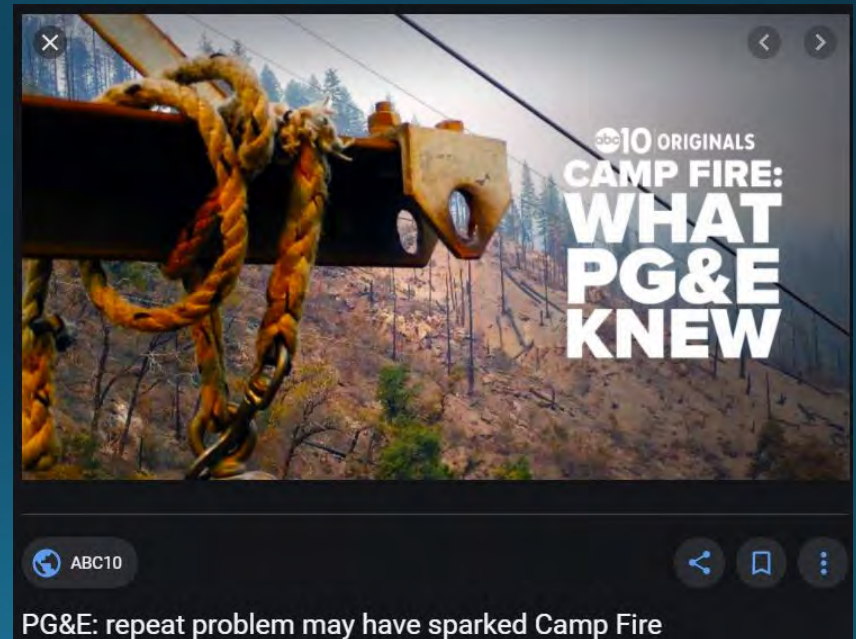
My Risk Analysis for You

Option 1

Erin Brokovich



PG&E: Camp Fire...



Option 2



