

“Granada, A Synonym for Paradise”

The Ocean Shore Railroad Years – Barbara
VanderWerf (1992)

Barbara VanderWerf Coastside Historian – Author – ‘Granada,
A Synonym for Paradise’

“If I still lived in El G, I would join you at your power point to emphasize that there is no historic basis for preserving the eucs — other than as a monument to the landscape design folly of town developers at the turn of the nineteenth century.”

Background

The Paradise fire brought home the devastation caused by high winds, hot temperatures and low humidity.

Quarry Park is 1 square mile of eucalyptus that could make El Granada an actual synonym for Paradise.

The following slideshow was initiated due to a 2017 trip to Portugal where we saw how similar the area looked, with it's eucalyptus and broom. That fall, massive wild fires killed 45 people in the area we had visited.

The last time El Granada burned was in late November 1929 when a wildfire raged from Pescadero to Montara.

So far, we have been fortunate, but we cannot rely on luck!

Eucalyptus Crown Fire



The Good News

- We live in the high humidity coastal fog belt which, historically, rarely sustains a major fire.
- In the past, only the ridgetops and inland areas have experienced major fires.
- Unfortunately , seasonal humidity is decreasing and temperatures are rising.

Background

- El Granada has historically been the site of at least 1 major wildfire. This fire, documented in the San Mateo Times and the LA Times, occurred in late November 1929.
- In 1929, El Granada was a very small town and Quarry Park was not a park nor a highly flammable eucalyptus grove.

Diablo Winds

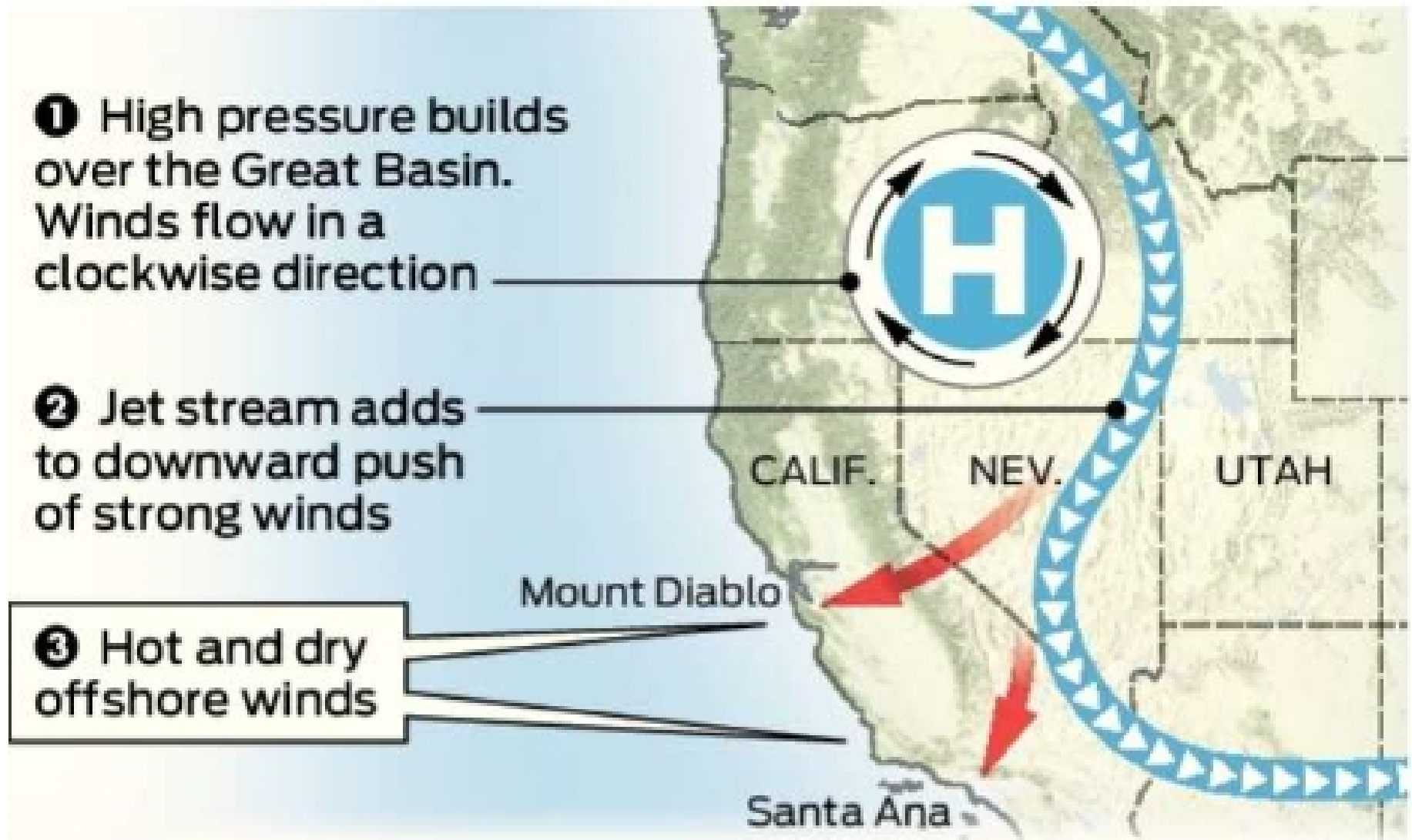
- "The term Diablo winds refers to winds that flow from east to west up and over the Diablo Range over the East Bay region of the San Francisco Bay area," - AccuWeather Senior Meteorologist Dan Kottlowski
- These winds fan catastrophic Northern California fires that are most dangerous in late summer and fall. Wind speeds up to 80 mph make fighting these fires extremely difficult and dangerous.

Diablo Winds - Hot Dry Offshore Winds

❶ High pressure builds over the Great Basin. Winds flow in a clockwise direction

❷ Jet stream adds to downward push of strong winds

❸ Hot and dry offshore winds



Fires Propelled by Diablo Winds

- El Granada (1929) Wild fire burned from Pescadero to Montara ??
- Oakland Hills (1991) Wind gusts to 70mph
- San Rafael (2017) Wind gusts to 70mph

11/20/1929 LA Times

SEVERAL RESCUED

Two men fell head first into the flames after being overcome by smoke, but were dragged to safety by companions. In coast side towns virtually all able-bodied men and boys, as well as some women, were on the fire lines from Montara on the north to Miramar on the south. At Moss Beach, only one man and one woman remained in the town, the woman reporting the progress of the flames and the man standing guard to protect against flying embers.

Three employees of the Half Moon Bay Gun Club were rescued after being hemmed in for nearly twenty-four hours. Constable Simmons and twelve men fought a way to them, the process taking six hours.

Fences on the outskirts of the town of El Granada were burned before flames there were turned back. A sizeable pine grove near there was declared burning fiercely, with El Granada Park already in ashes.

Montara

MONTARA WIPED OUT BY FIRE; FLAMING WALL SWEEPS INLAND

**25 HOMES, CHURCH, CATTLE
BURN; 6 FIRES RING COUNTY
AS RED CROSS RUSHES AID**

Cities of central San Mateo county were raged on three sides by flames today as giant brush fires raged outward over the mountain of the surrounding San Mateo mountains, after furiously wiping out one small city last night.

More than a score of persons have been made homeless, nearly 50 homes, a church, and other public buildings have been destroyed, cattle have been burned to death in dairy herds, and damage estimated at more than \$200,000 has been done. Eighteen homes were destroyed at Montara, as householders fled, saving only the clothing worn at the time.

Nearly a thousand men, recruited from highways, cities, and ranches were on the front.

The fire in the north end west of San Mateo and Burlingame, largest of six raging throughout the county, was being fought back today from the skyline by several companies of the Spring Valley Water company, while another monster blaze, roaring last night in Fountaine valley, was within two miles of the San Mateo County Memorial park, blazing through giant redwoods after having swept to within half a mile of the north-west corner of Fountaine.

FIRE RACES AUTO

Fleeing before the flames in North region at Montara last night, Mr. and Mrs. A. B. Wagner and Mrs. Maude Barry, mother of Mrs. Wagner, moved their lives while the fire, riding a 10-mile wind, outstripped their automobile to a ruin at Montara. Five dairy sheep and scores of hay and grain in four herds of the Wagner ranch, near San Saba, in the vicinity of Montara, were also destroyed.

As the flames swept through the ranch of Montara, the house of Mrs. Wagner was destroyed, and the family fled to the city.

Chas. of "Montara" County, near Montara, by the flames.

**L. A. OPENS BIG
DRIVE TO GET**

PUBLISHED DAILY
San Mateo Times
DEVOTED TO THE INTERESTS OF SAN MATEO COUNTY

AND DAILY NEWS LEADER

VOLUME XIV

SAN MATEO, CALIFORNIA, FRIDAY, NOVEMBER 22, 1925

TWELVE PAGES

NUMBER 1249

S. M. CALLS ON ARMY

**CLEMENCEAU
ON DEATHBED,
SCORNS DEATH,
MOCKS FOES**

Iron Will and Constitution of
"Tiger" of France Make
Orator Superior to War

DOCTORS FEAR END FEAR

Stateman Says Secret Plans for
Roll Backward to War

**Better Shop
Before Noon,
Wires Warned**

Shoppers are urged to do their shopping before noon, as the wires are warned of a possible fire in the city.

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**LOGGING ROADS
ONLY NEED OF
NORTH, CALIF.
IS S. P. CLAIM**

Great Northern National to
Kiddie Company, De-
veloping Property

WAS NO AGONY

Says Irrigation Is Important

**HIGH SCHOOL CLOCK DRAWS
FIRE OF S. M. HEIGHTS CLUB**

Protesters are urged to do their shopping before noon, as the wires are warned of a possible fire in the city.

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**SHERIFF ASKS
SOLDIERS' AID
FIGHTING FIRE
NEAR BELMONT**

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RED FLAG WARNING



North Bay Hills
through
5 PM Thursday

East Bay Hills from
11 PM through 5
PM Thursday

Santa Cruz Mtns from
11 PM through 5 PM
Thursday

Mtns of
Monterey and
San Benito
counties from
11 PM through
5 PM Thursday

Impacts:

Any fires that develop will
spread rapidly. Outdoor burning
is NOT recommended

Winds and Humidity:

- North to northeast winds
20-30 mph with gusts to 50 mph
- 10-20% humidity with nighttime
recovery values between 30-40%



PUC Fire Map

The latest PUC Fire Map shows that we are a very high risk area, due to the eucalyptus trees and pines in Quarry Park and median strips. Residents are currently being denied fire insurance due to the threat of a eucalyptus wildfire that could be as uncontrollable as the Oakland Hills Fire or the 2017 Portugal fires.

Worst Case Scenario?



Firestorm!

- If you look up the term *firestorm* in *Wikipedia* you will find reference to the atomic bombing of Hiroshima, aerial bombings of Dresden, the 1906 San Francisco earthquake and a list of recent forest fires in Australia.
- A firestorm is a conflagration (a great and destructive fire) which attains such intensity that it creates and sustains its own wind system which both fans the fire and feeds it oxygen. It is capable of creating fire tornadoes and temperatures of more than 1800 degrees Fahrenheit.
- Trees can explode into fireballs four times their height. Fire can race across the tops of the tree canopy feeding off the leaves and oil particles (the blue haze). It can send burning wood and leaves more than 15 kilometres ahead over roads, rivers, creating multiple new fires.

Lessons from “Down Under”

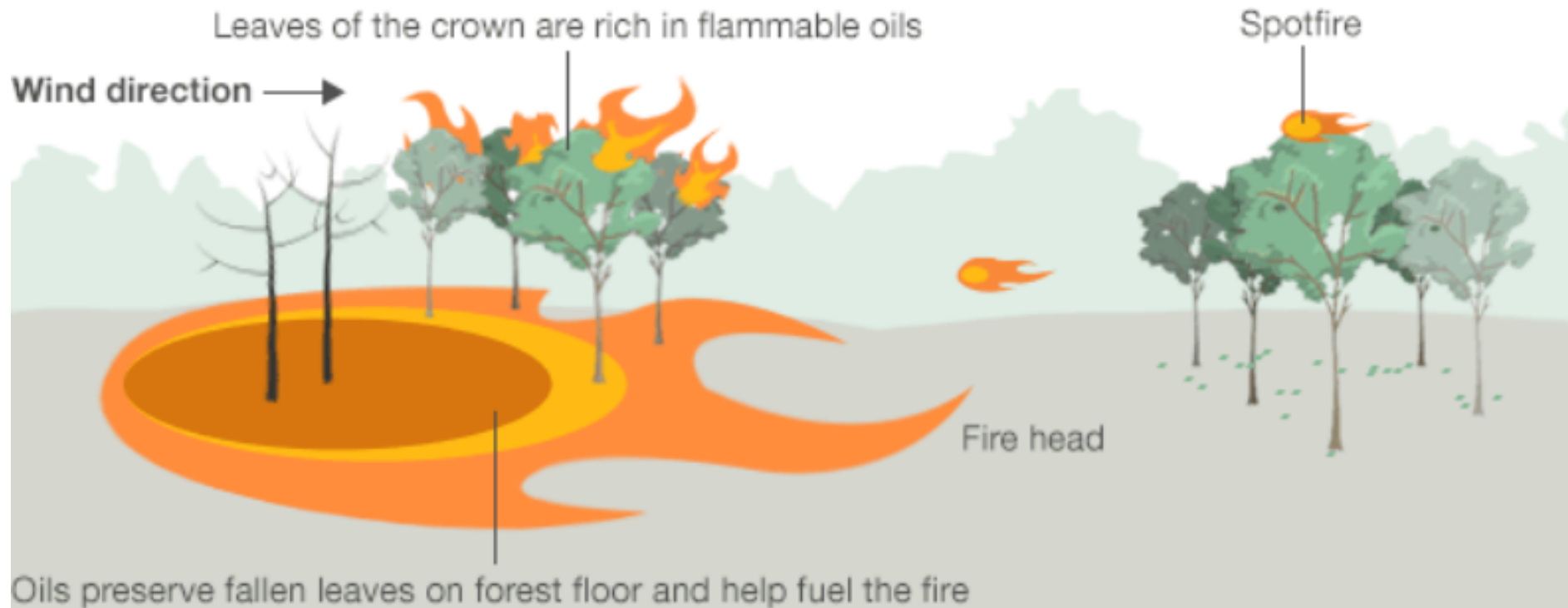
- Inspector Rolf Poole: "There is sufficient scientific evidence that Australian fires are becoming more intense and more frequent" - a change he says many fire fighters have experienced for themselves.
- "We are in a new world where **we have to accept losses**," says Dr Wardell-Johnson.
- Fires in eucalyptus forests, which cover huge areas of Australia, can be particularly intense. Those trees have "very high biomass, are very flammable, and have a lot of oil," Dr Grant Wardell-Johnson.
- In fact, the trees' oil, and their hard, drought-resistant leaves, are thought to be ways the trees have evolved to encourage fires, which eliminate competition while providing a fertile environment for the trees' quick regrowth.
- The ferocity of fires also depends on factors like climate and topography - fires burn more quickly on slopes, for example.

Quarry Park Terrain



700 ft Elevation 30%-70% Grade

Slope X Wind + Ignition = Quarry Park Crown Fire?



Fire Probability

- The probability of a major fire in El Granada is relatively low in that we have few low humidity, high wind days.
- However, September, October and November have days with 40+ mph winds and temperatures in the upper 80's. These factors cause high flammability conditions within a single day.
- Although the probability of a eucalyptus crown fire in Quarry Park is relatively low, the outcome would likely to be total destruction of El Granada.

Canopy Fire Prevention

- Remove mature trees to establish defensible perimeters.
- Prioritize large tree removal over ground fuel clearance even if fuel remains on the ground.
Brush fires are suppressible, crown fires are not.
- Establish fire webcams for Quarry Park
- Post volunteers as FireWatch during Diablo wind events.

Funding and Liability

- Potential Loss of \$250,000,000 (256 Residences x \$1 million)
- Does the county have liability in the event of a eucalyptus fire due to lack of proper maintenance?
- What is the cost to clear cut 1 square mile of eucalyptus?
- How can we fund clearcutting 1 square mile of eucalyptus?
- Is there a Firebreak Strategy that would protect El Granada?

What Now?



Supplemental Materials

In “worst case” scenario -

Are there defensible perimeters?

What is the “live ember” carry distance for eucalyptus in a highly sloping terrain?

Does CalFire have the capacity to put out a eucalyptus crown fire with ground equipment?

What is the maximum effective height of a hose reach? Will that reach the top of trees from the bottom of a slope in quarry park? What is water availability below CCWD storage tanks (highest at 730 ft. ?) What is infrastructure above tanks ?(generators & pumps ?)

What is local Coastside firefighting capacity? What is available by access time – Pacifica, Pescadero, and Highway 92 (multiple jurisdictions)

- What is airborne unit availability?(What are access requirements and priorities?) What is the reasonable maximum perimeter length that could be currently controlled in worst case scenario (Quarry Park burning – El Diablo wind from east, low humidity)
- Are there Helicopter agreements or rules in place for suppression. What Distances are involved, what Flight times
- Can fire equipment effectively navigate to all areas within quarry park?
- In a major eucalyptus crown fire, would crews be sent into quarry park?
- What is San Mateo County’s liability for fires spreading from a major fire within Quarry Park.

Paul Cole Article

- Cole says he was shocked at the catastrophic damage to homes in a fire that ate through 3,400 acres of Montara in 1929. Other fires reportedly torched hundreds of acres of El Granada and wild land east of Half Moon Bay, as recently as 1955.
- [https://
www.hmbreview.com/news/fire-season-ignites-call-to-action/article_0a9762a3-2320-53f3-89ae-9ceb59ab9ce4.html](https://www.hmbreview.com/news/fire-season-ignites-call-to-action/article_0a9762a3-2320-53f3-89ae-9ceb59ab9ce4.html)

Water for Suppression

- Increased High Altitude Water Storage
- Increased Pipes & Pumping Capacity
 - Mobile
 - Fixed
- High Altitude Storage (Medio Creek or Deer Creek ?)
- Salt Water Pumping?

Evacuation Routes

- “Guaranteed” Fire suppression Line – West of Highway 1?
- Highway 1 North will be the “single exit in theater when someone yells ‘fire’”
- Probable closed tunnels to allow fire equipment access?
- Most likely scenario is “Shelter in Place” – “In place” being coast side.
- Fortunately there is lots of “defensible space” in ag fields and parks -

Ignition Sources

- Lightning (likely in Diablo wind event?)
- Urban Interface Accidents
 - Wiring
 - Engine sparks (Including Generators)
- Fireworks
- Cigarettes
- Arson
- Powerlines