



THE TOWN OF
Corte Madera
California

Climate Adaptation Plan



adaptation
international



May 9, 2018

Hillside Discussion Agenda

6:30 pm Snacks and Conversation

Opportunity to gather, grab a snack, and get settled

6:40 pm Introduction and Meeting Objectives

Brief welcome and overview of the project

6:50 pm What does it mean for the Town of Corte Madera to be Resilient?

Group discussion

7:10 pm Climate Adaptation Plan – Process and Hillside Risks

Brief presentation on the Adaptation Plan and current risks to hillside neighborhoods from wildfire, drought, and deluge.

7:25 pm Key Focus Areas and Concerns (Breakout Session)

- When does weather go from a nuisance to a problem in your neighborhood?
- What are the biggest climate change concerns for the Town in 20-years?
- Has your neighborhood already taken action to be better prepared for the future?
- What opportunities do you see to enhance that preparedness?
- How does action now help us achieve our vision of resilience?

8:15pm Wrap-up and Next Steps

The survey and other opportunities for input
Help spread the word and stay involved

8:30 pm Adjourn



Introductions (1-2-4-All)





NEWS NORTHERN CALIFORNIA WILDFIRE

Toxic SF air quality gets worse

"Unhealthy" conditions continue

By Adam Brinklow | Nov 15, 2018, 8:12am PST

f t SHARE

The Mercury News N

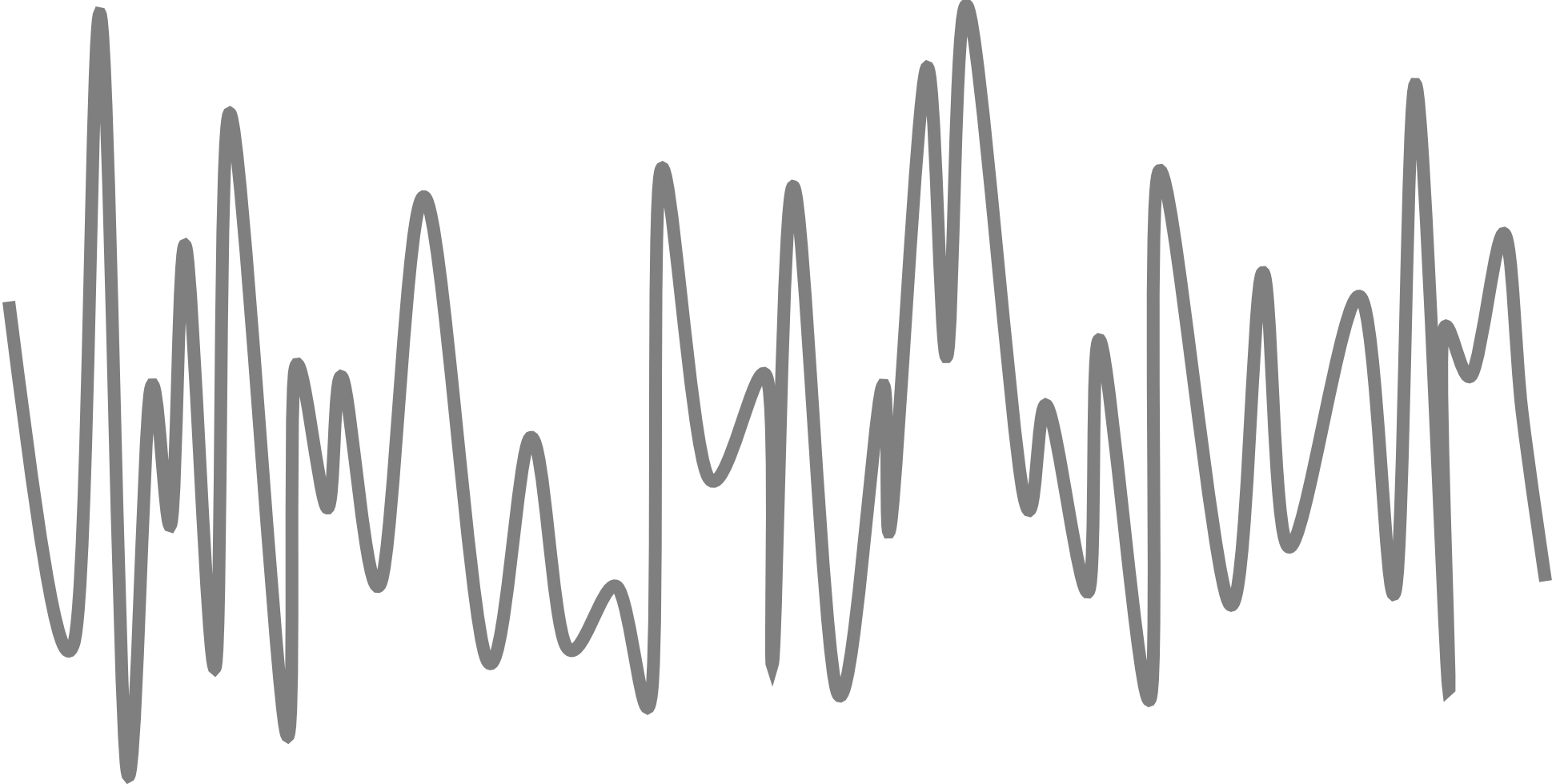


Photo by Justin Sullivan/Getty Images

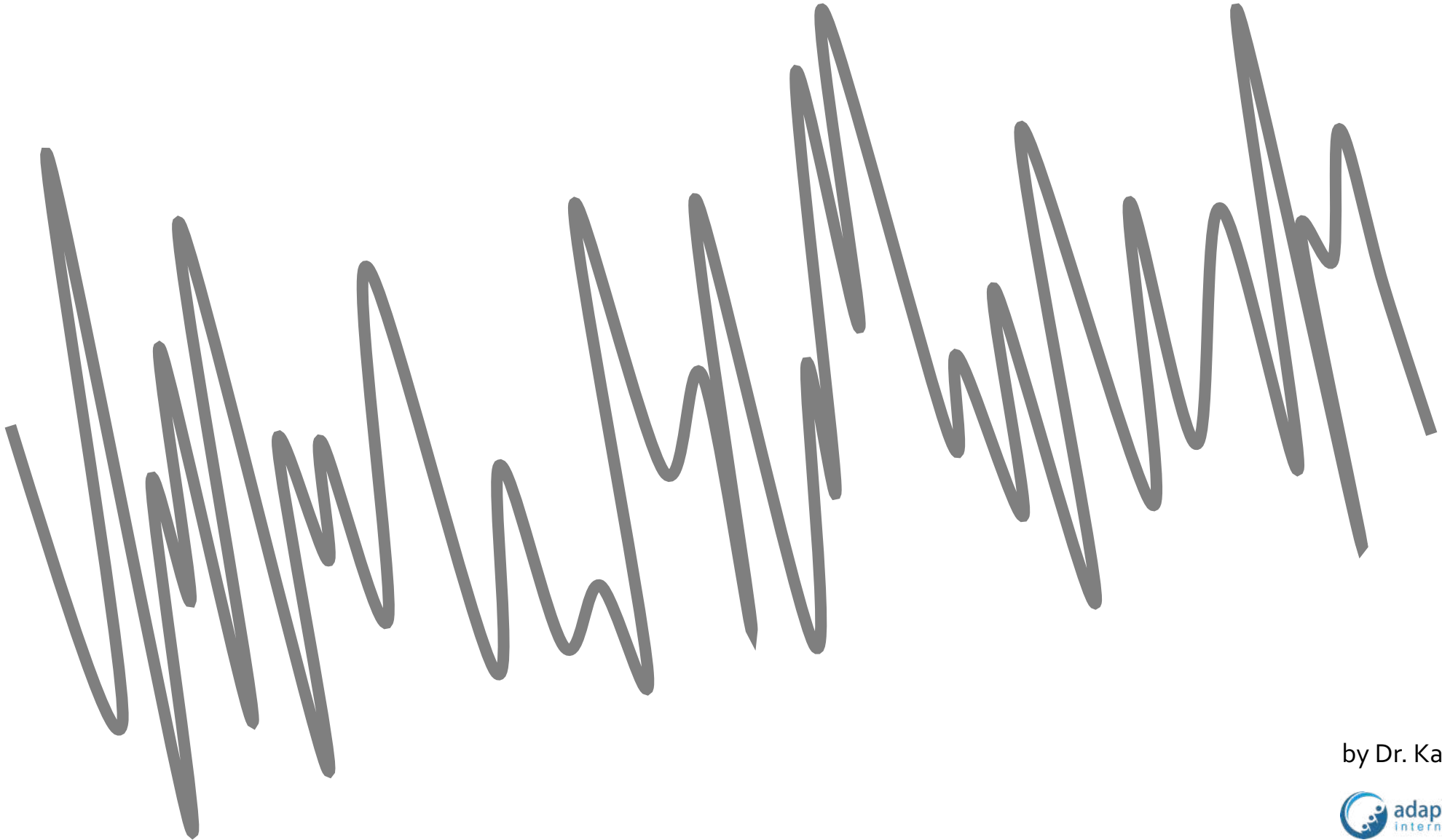
Update: AQI now at purple with a score of 211—worse than this morning when the air was level red at 177.



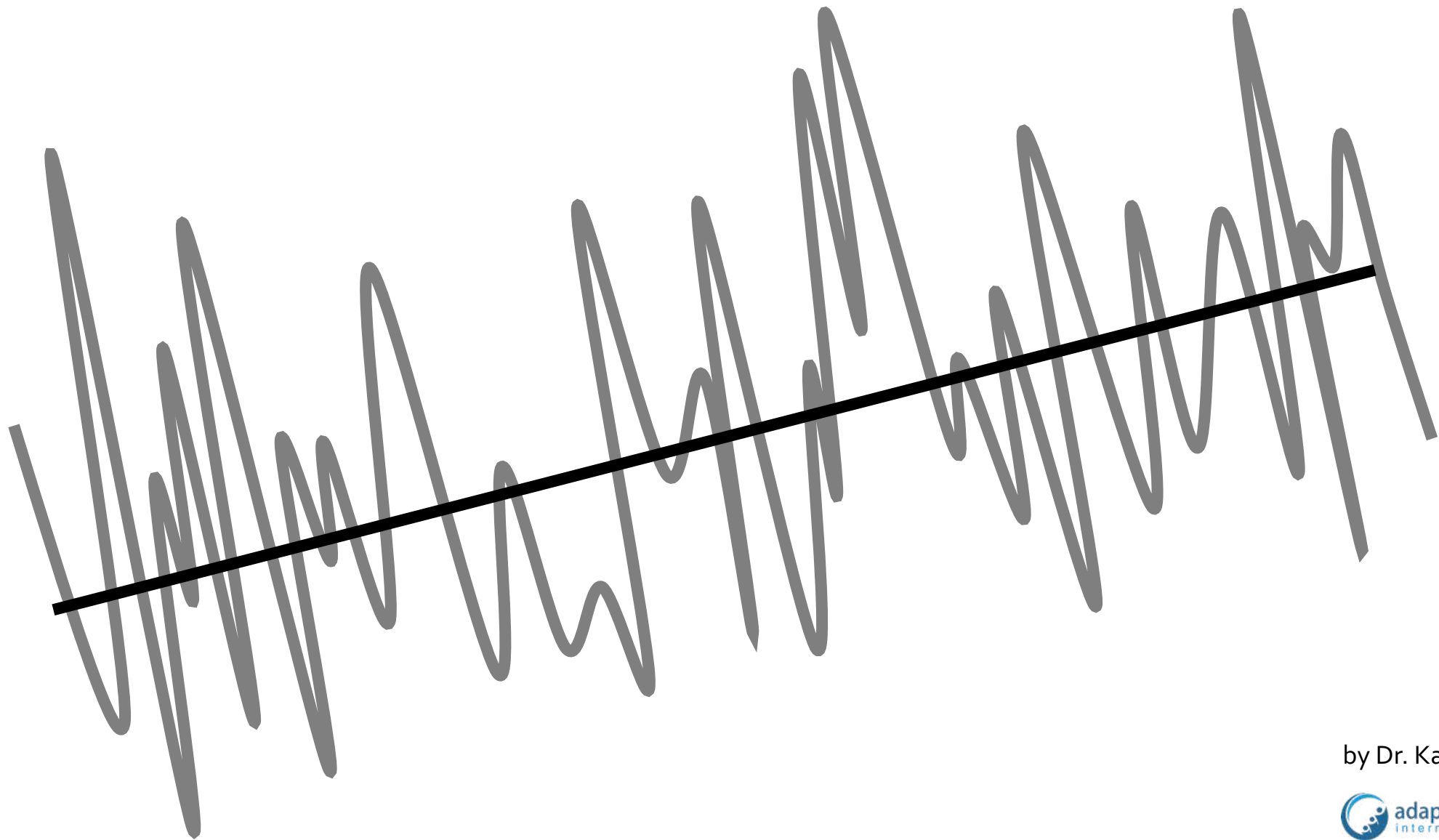
Climate and Weather



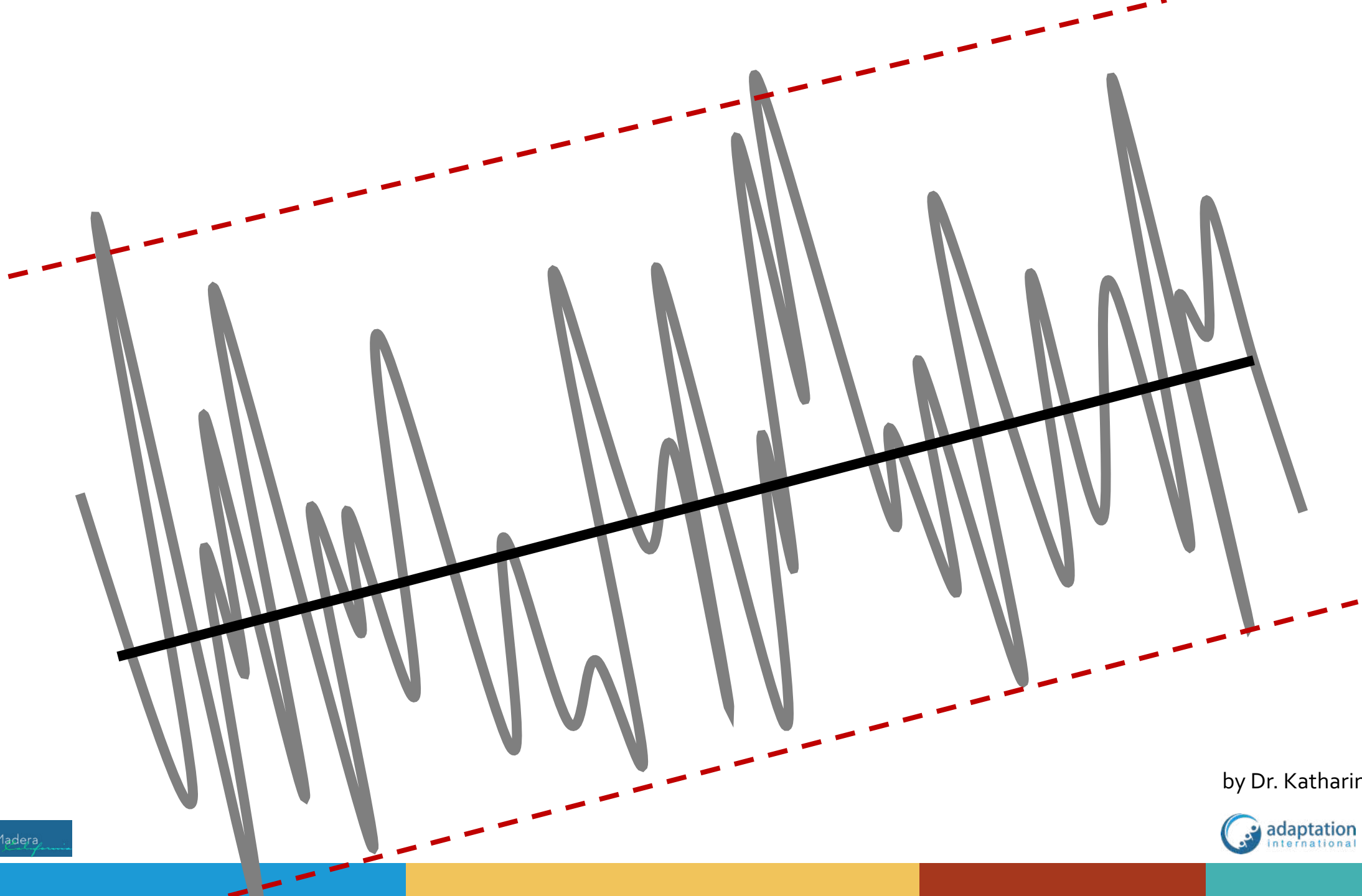
by Dr. Katharine Hayhoe



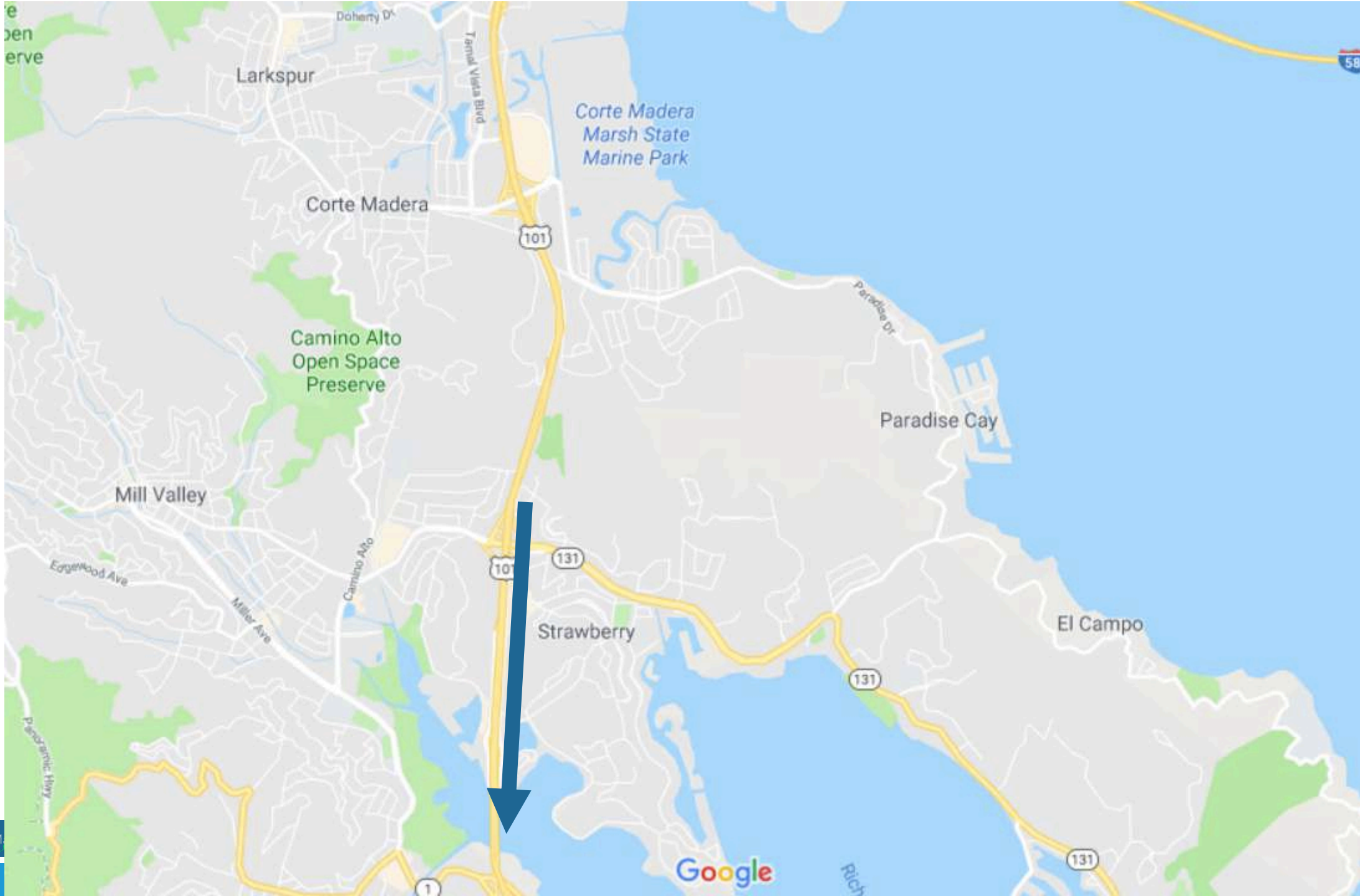
by Dr. Katharine Hayhoe



by Dr. Katharine Hayhoe



by Dr. Katharine Hayhoe



Driving using
the rear view
mirror won't
work

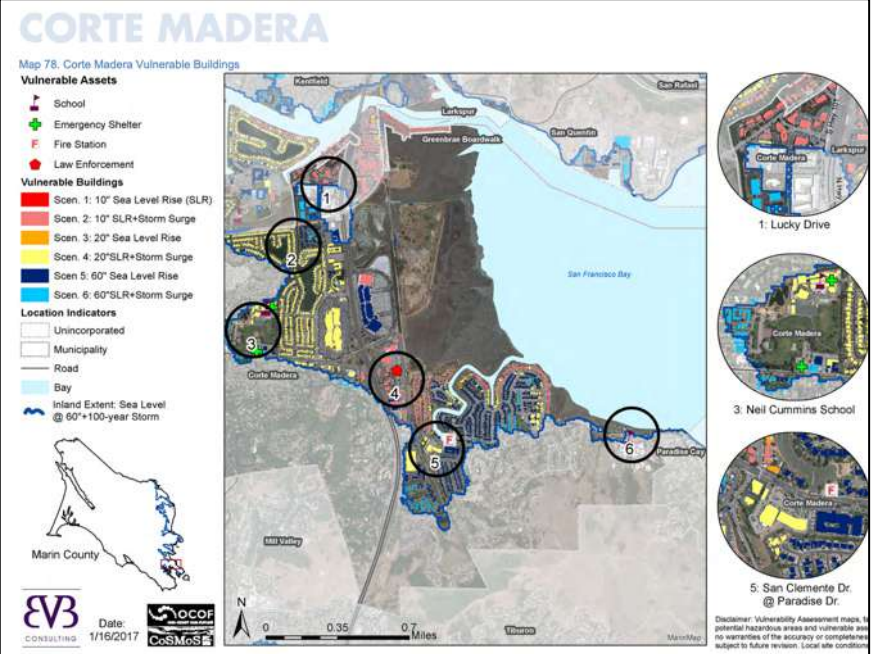
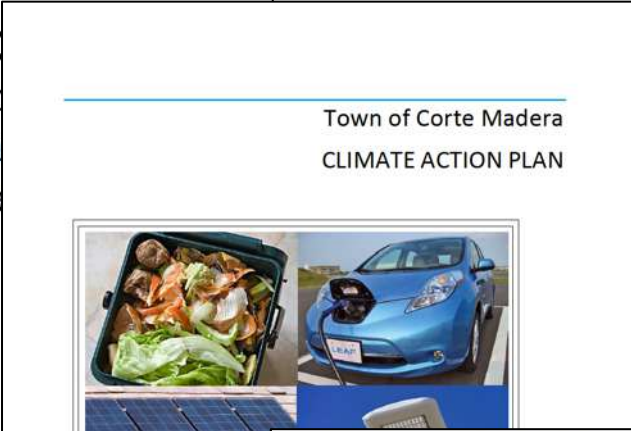
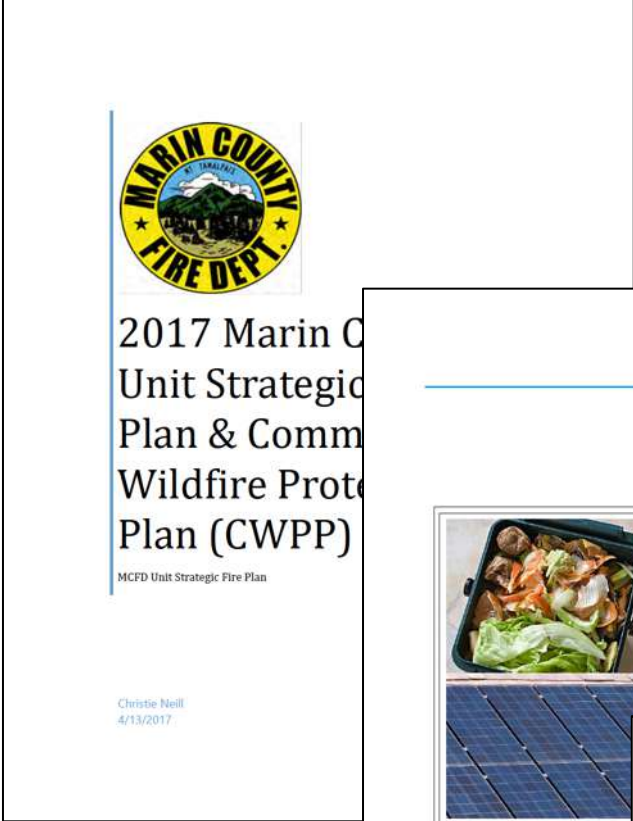






Values Driven and Science Based





Project Timeline

- ❖ Purpose: enhance the resilience of our community
- ❖ Scope: all sectors, Town-wide, long range
- ❖ Likely Outcomes: Framework for investment and change

2019



Laying the
Foundation



Engaging
on
Adaptation



Exploring
Adaptation
Options

2020

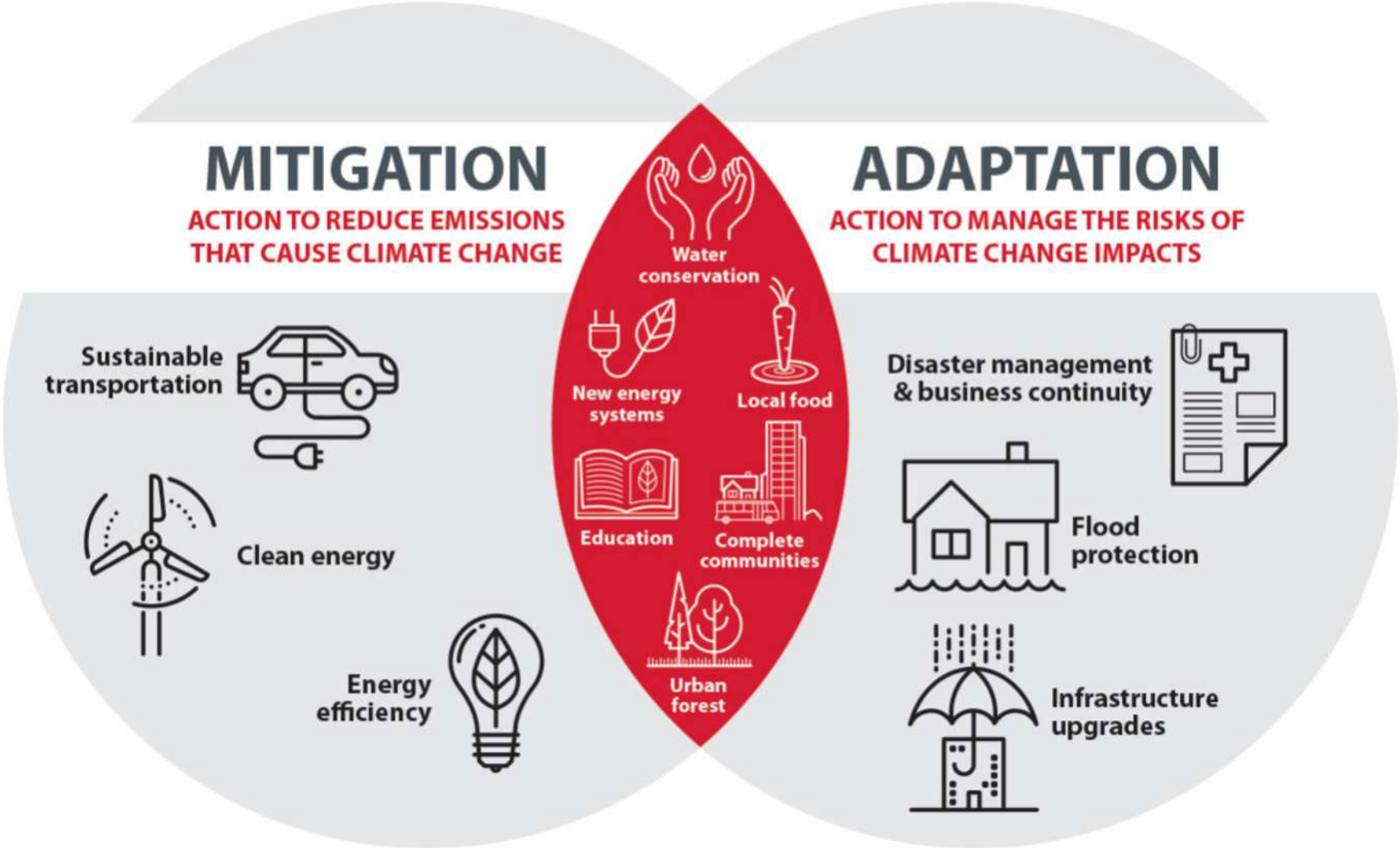


Refining
Adaptation
Approaches



Draft and
Finalize
Adaptation
Plan

Building Climate Resilience





Changing Conditions

(History as a Prelude to the Future)

Historic Wildfire Perimeters

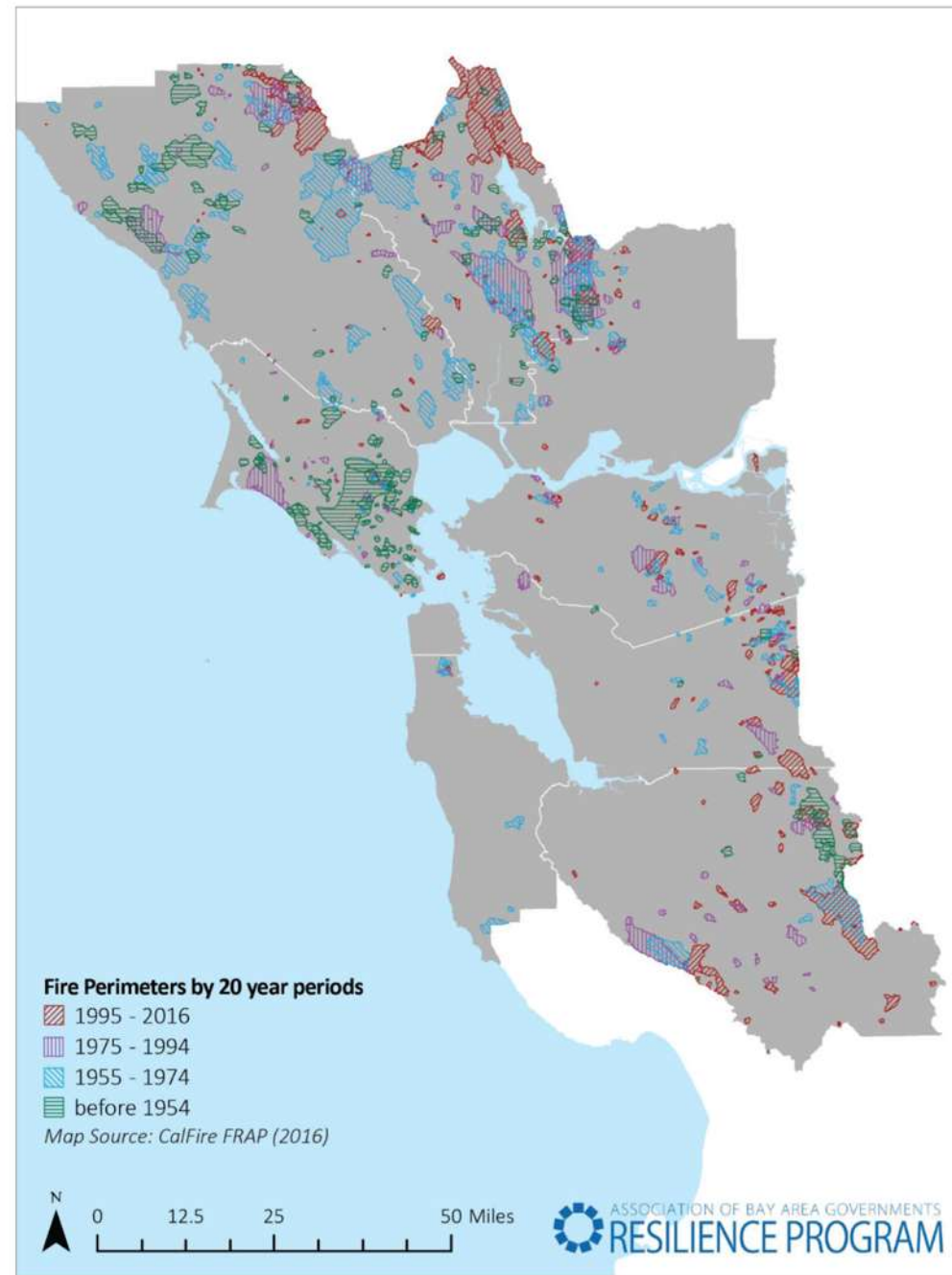
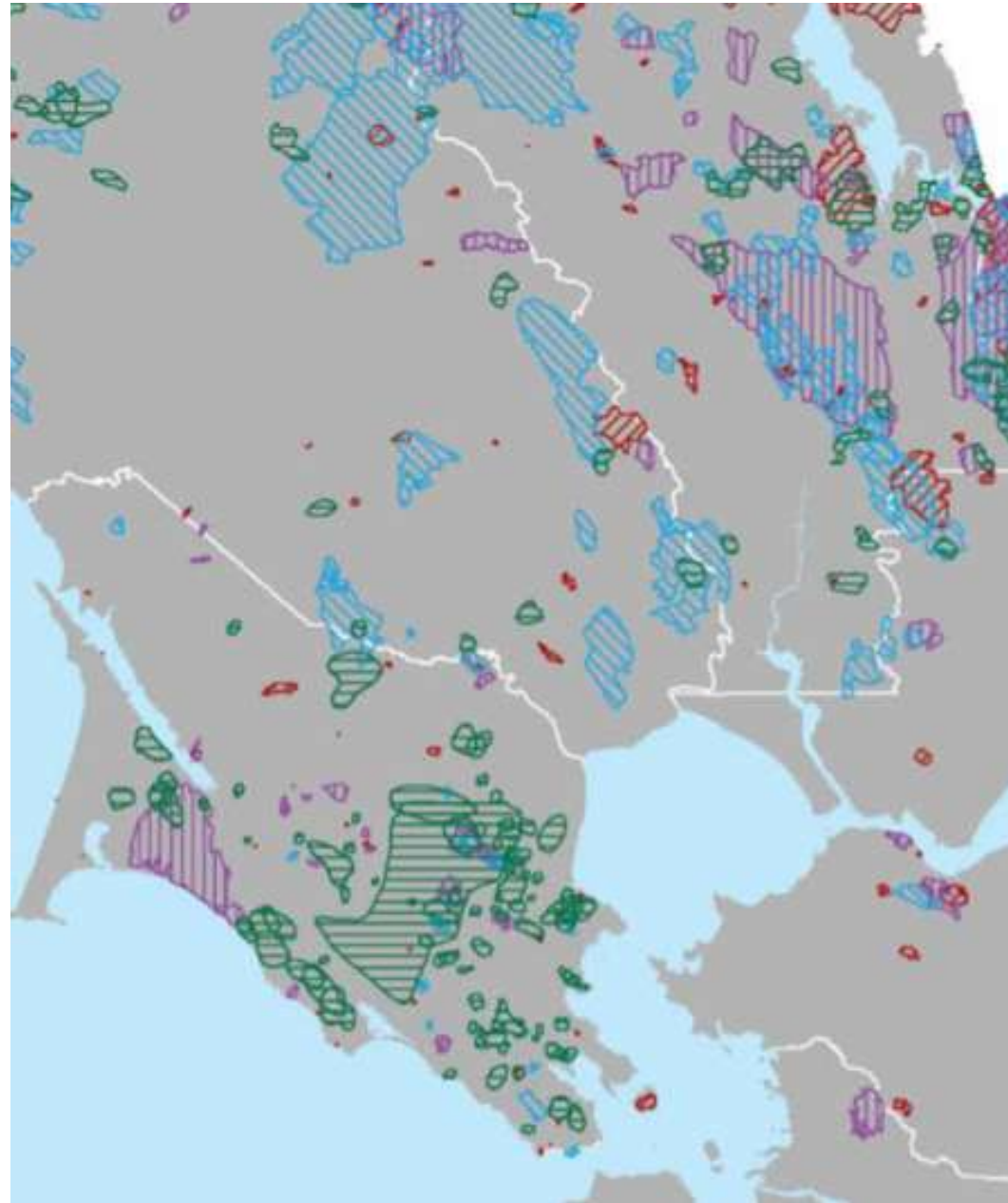


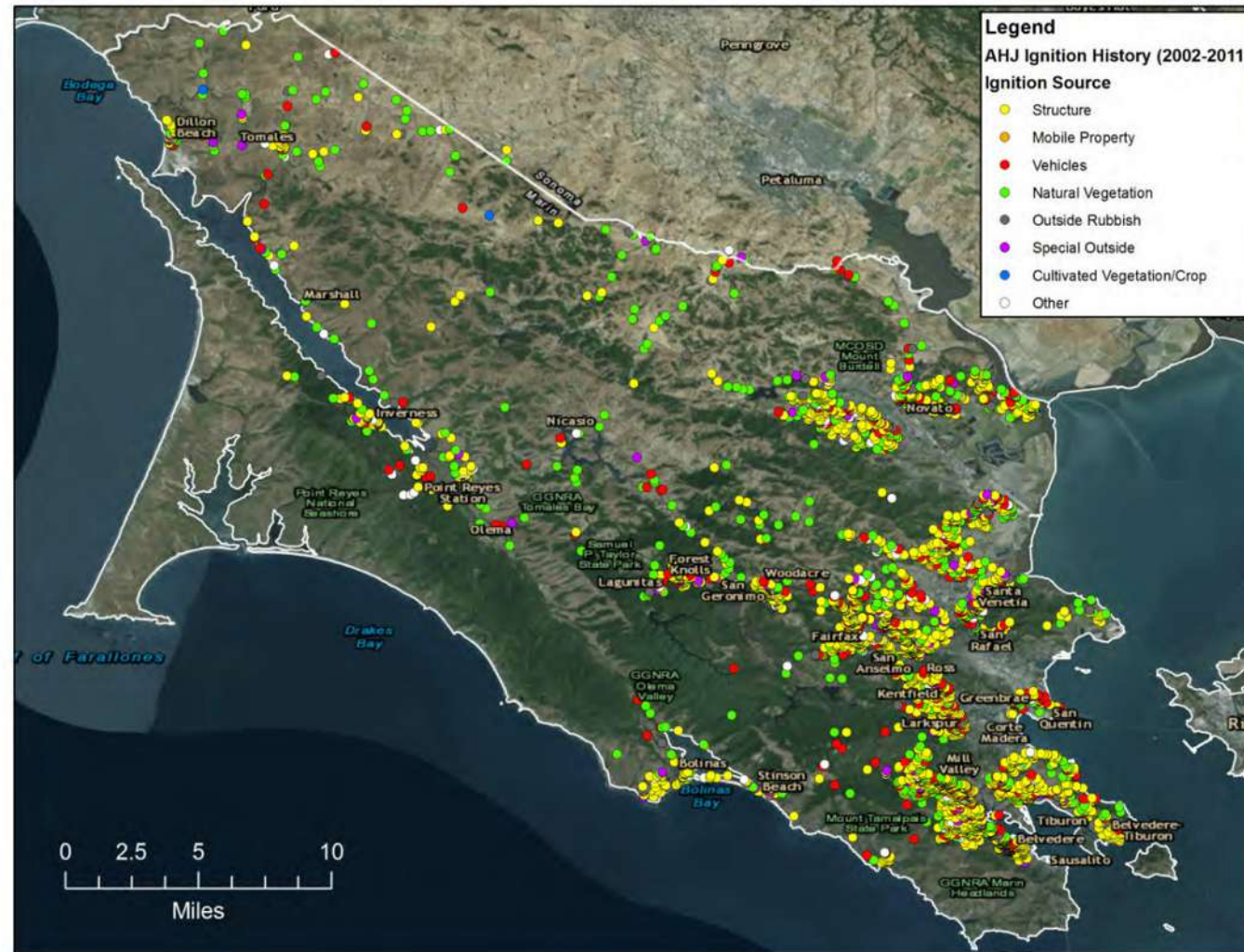
Figure 2 Historic Bay Area Fire Perimeters 1955 – 2016

Historic Wildfire Perimeters



Fires by Ignition Sources

Figure 3-10. Map of ignition history data for all authorities having jurisdiction in Marin County from 2002 to 2011.



Wildfires Affect Air Quality

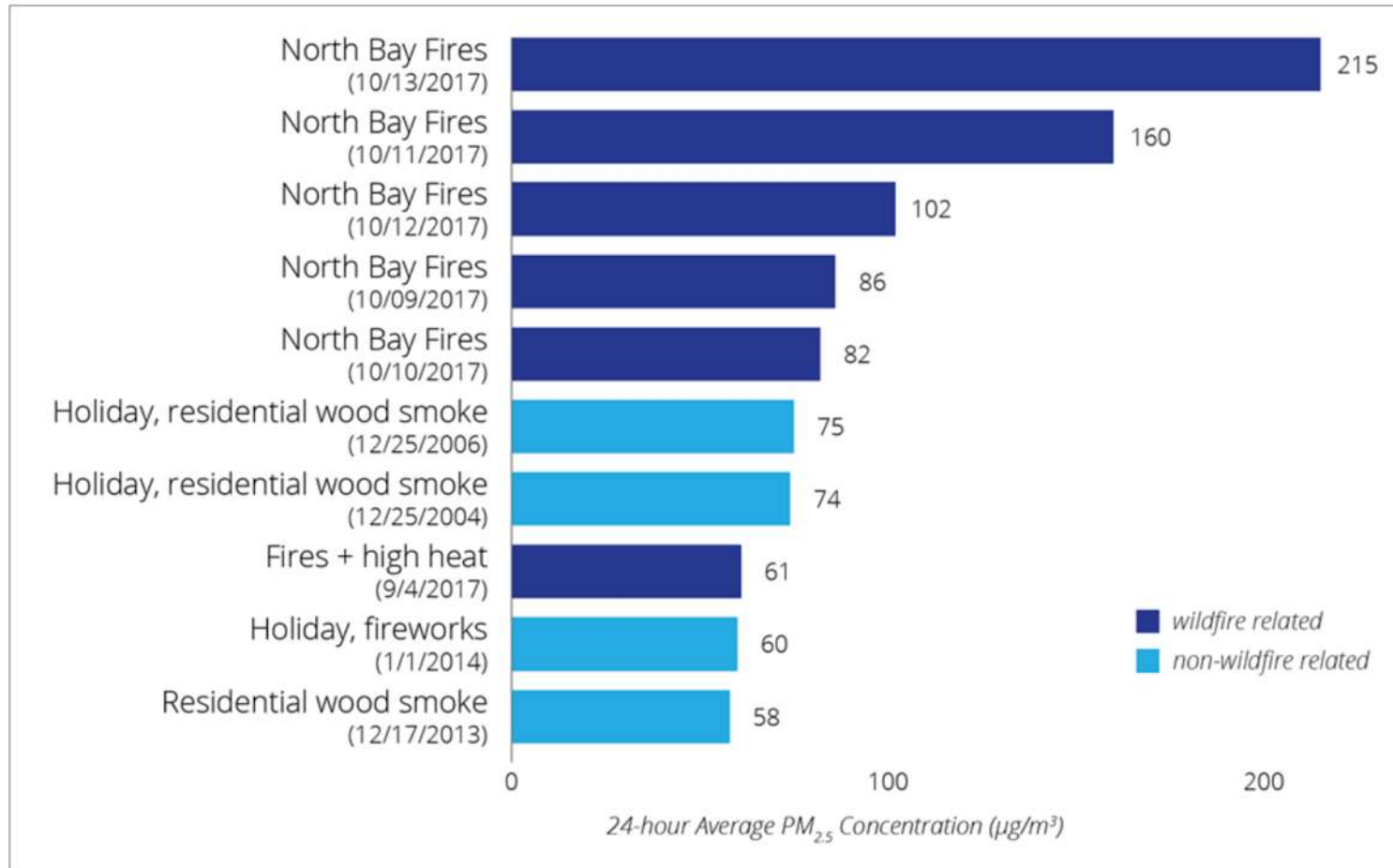
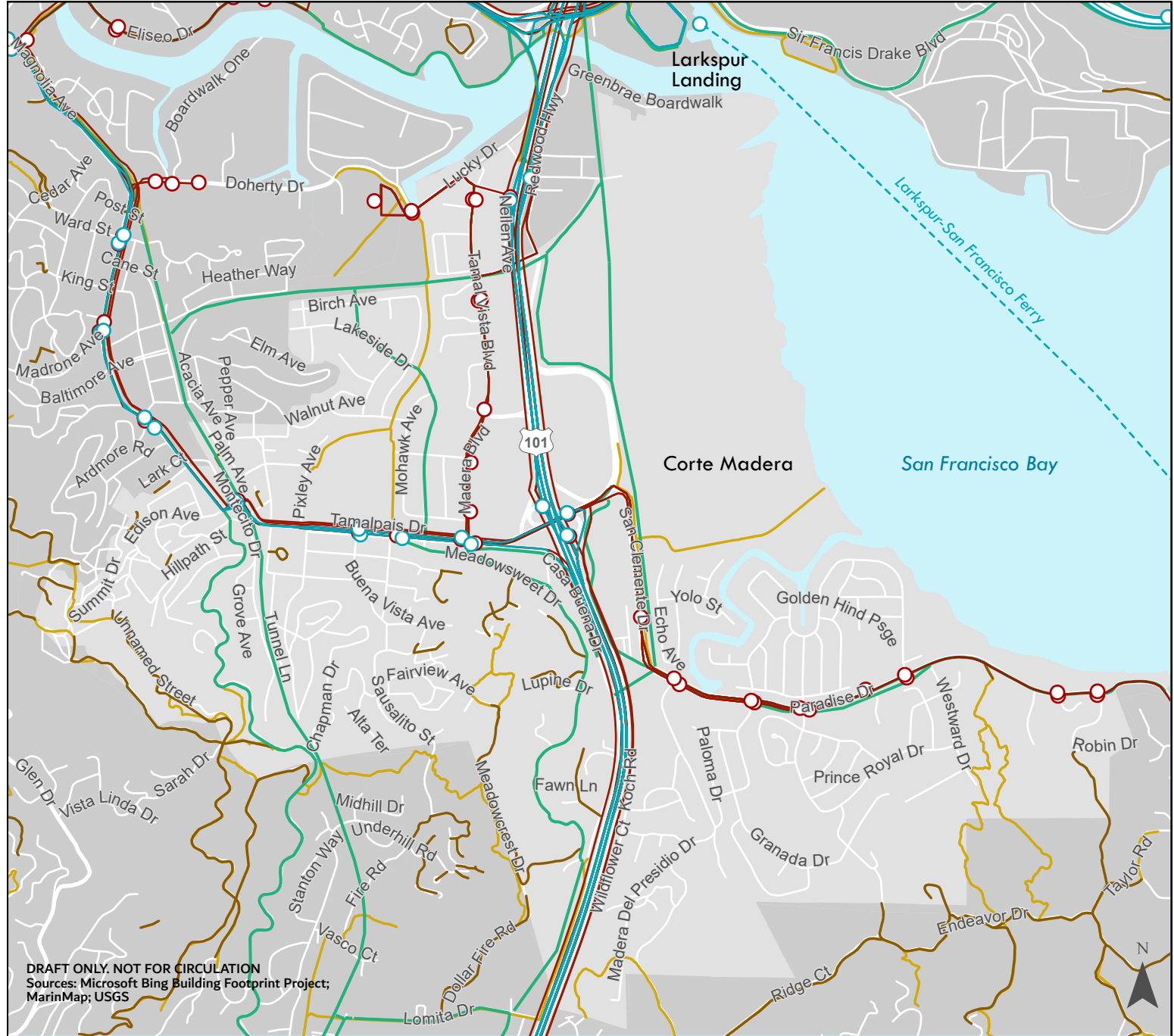







Figure 9 Top Ten PM_{2.5} Days in the Bay Area Since 2003 (BAAQMD, 2018)



Transportation

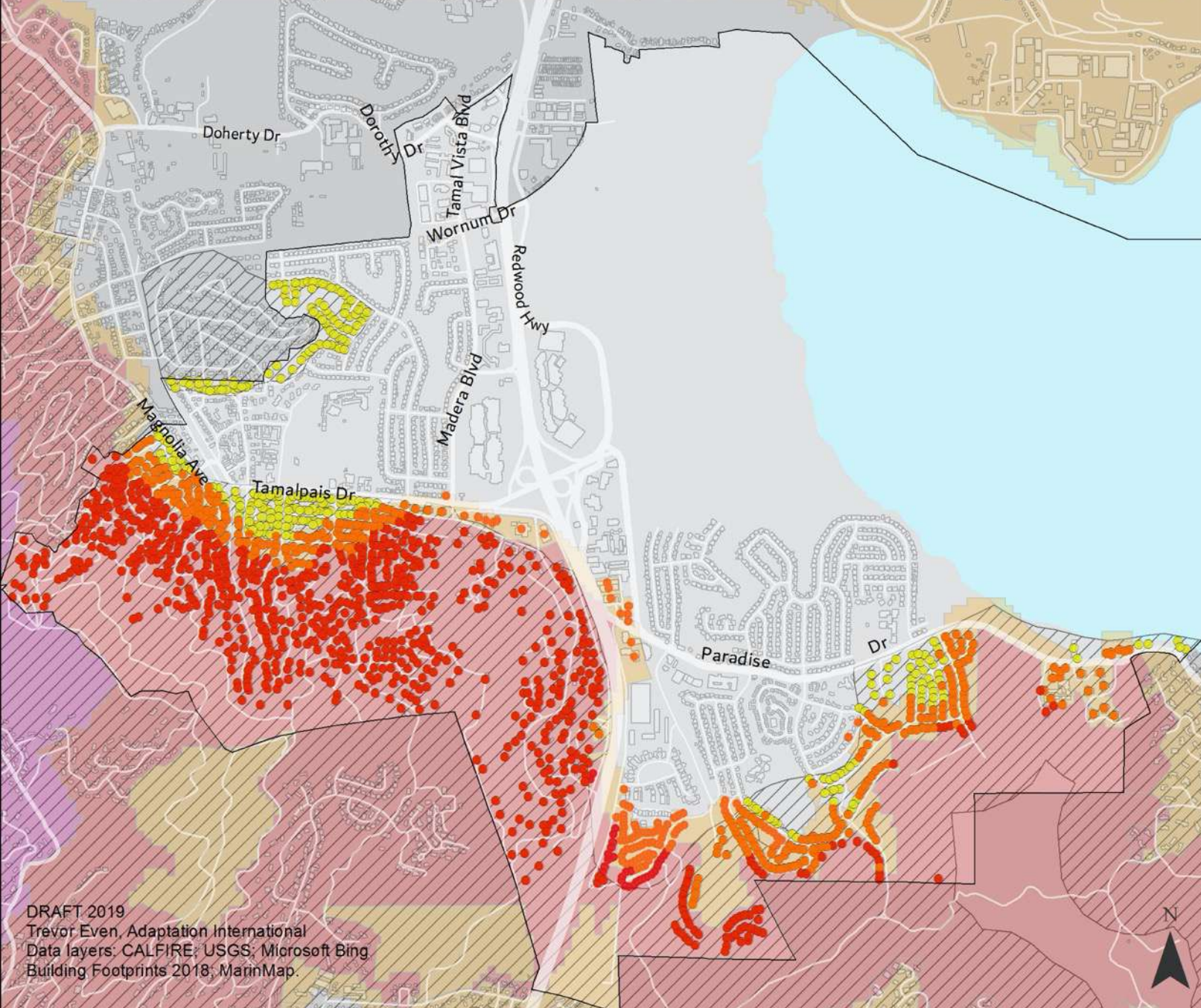
-  Golden Gate Transit
-  Marin Transit
-  Bikeways
-  Fireroads
-  Mixed Use Trails

DRAFT ONLY. NOT FOR CIRCULATION
 Sources: Microsoft Bing Building Footprint Project;
 MarinMap; USGS



Hillside Neighborhoods and Wildfire

Corte Madera Buildings in CALFIRE Fire Hazard Zones and Marin County WUI Zones



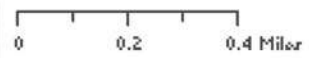
Legend

- Building in CALFIRE High Fire Hazard Zone (846)
- Building in CALFIRE Moderate Fire Hazard Zone (468)
- Building in Marin Co. WUI Ordinance Zone (1,479)

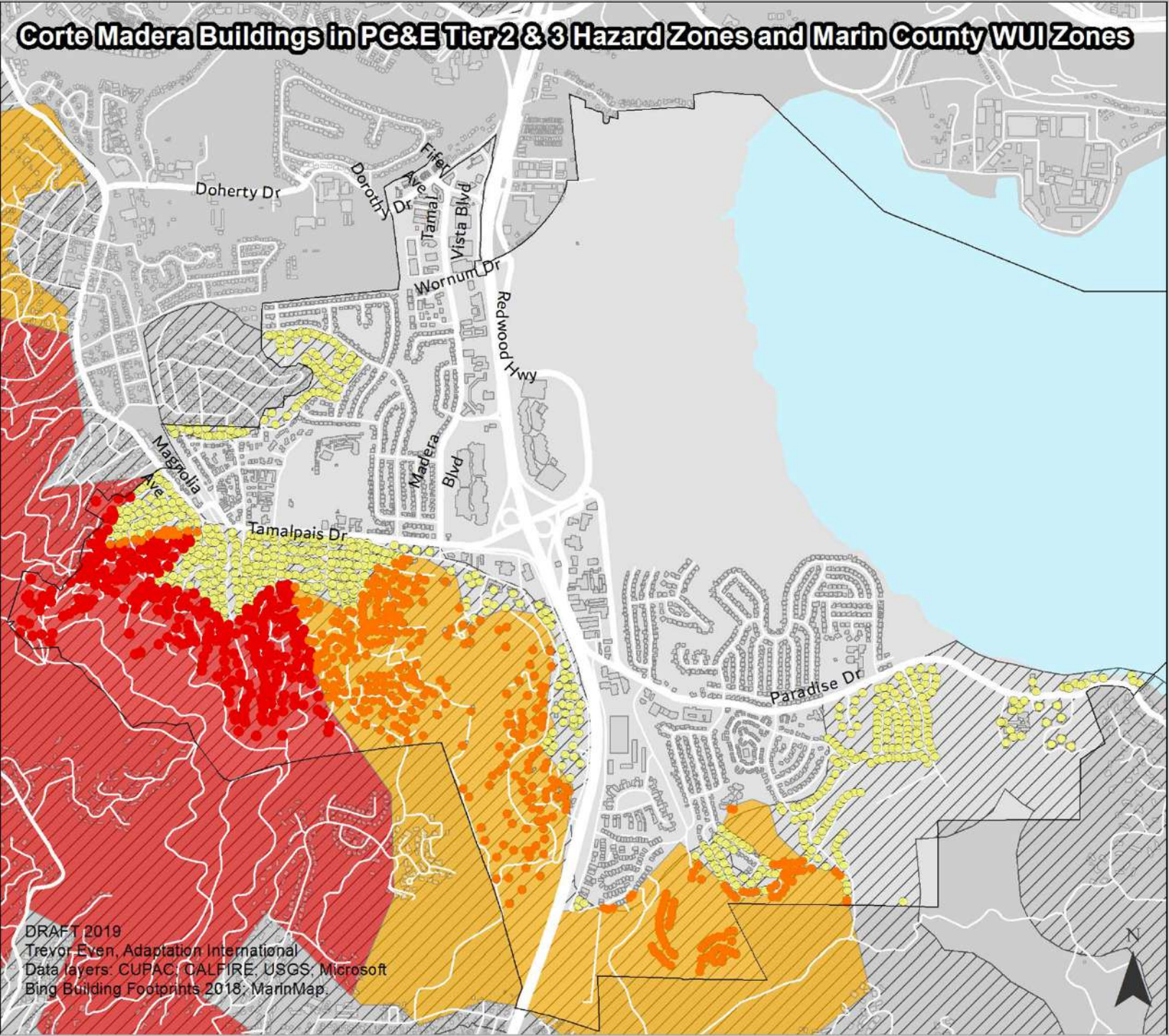
CAL FIRE Hazard Severity Classification Zones

- Moderate
- High
- Very High
- ▨ Marin County WUI Ordinance Zones







DRAFT 2019
 Trevor Even, Adaptation International
 Data layers: CALFIRE; USGS; Microsoft Bing
 Building Footprints 2018; MarinMap.



Corte Madera Buildings in PG&E Tier 2 & 3 Hazard Zones and Marin County WUI Zones

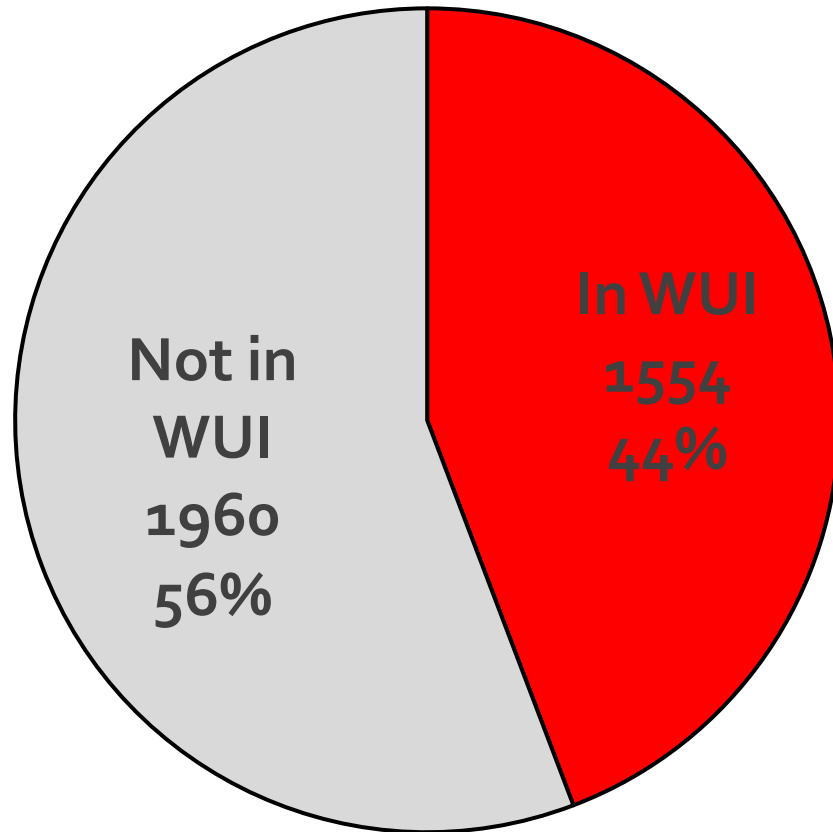


Legend

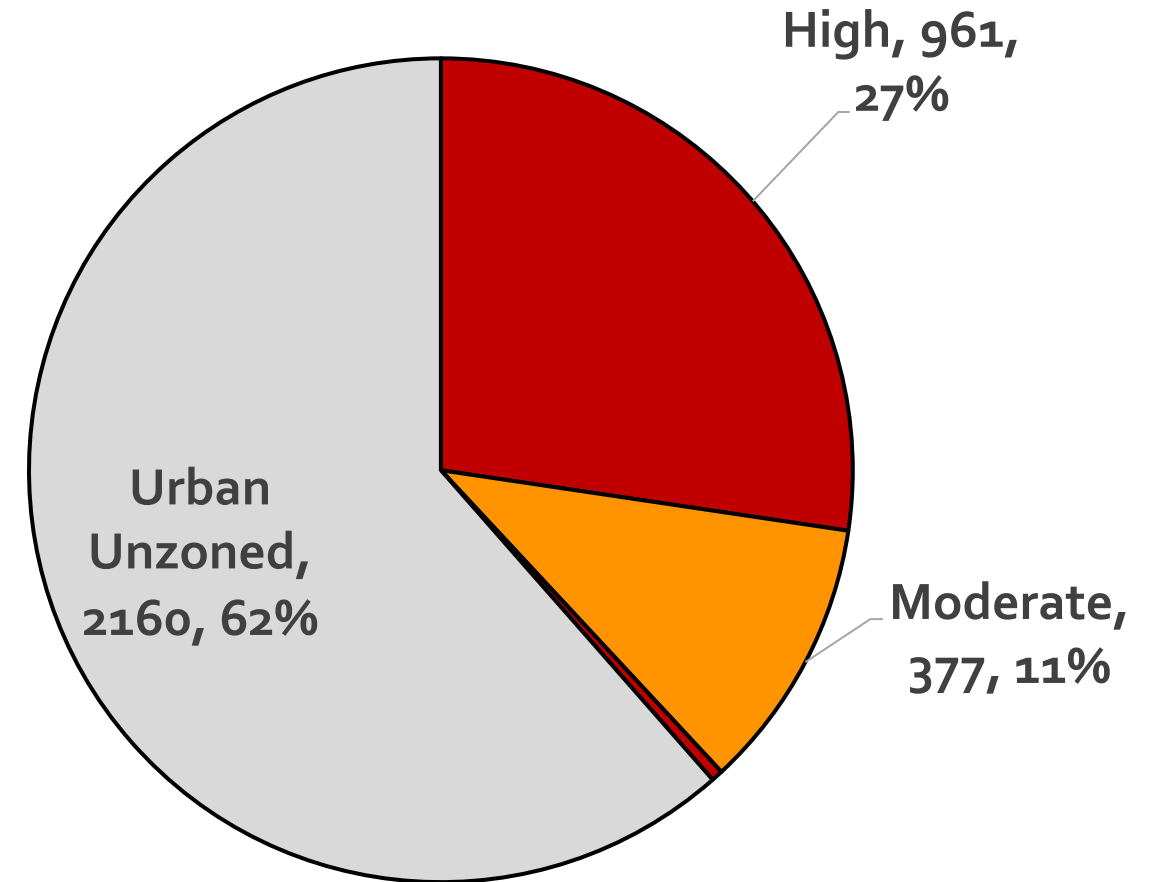
-  Buildings in PG&E Hazard Tier 2 (415)
-  Buildings in PG&E Hazard Tier 3 (296)
-  Building in Marin Co. WUI Ordinance Zone (1,479)
-  PG&E Hazard Zone Tier 2
-  PG&E Hazard Zone Tier 3
-  Marin County WUI Ordinance Zones

DRAFT 2019
 Trevor Even, Adaptation International
 Data layers: CUPAC, CALFIRE, USGS, Microsoft
 Bing Building Footprints 2018, MarinMap.

Parcels in the Marin County Wildland Urban Interface Ordinance Zone



Parcels by CAL FIRE Fire Hazard Classification





Discussion

Breakout Session Discussion

- **When does weather go from a nuisance to a problem in your neighborhood?**
- **What are the biggest climate change concerns for the Town in 20-years?**
- **Has your neighborhood already taken action to be better prepared for the future?**
- **What opportunities do you see to enhance preparedness?**



Ways to Stay Involved

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- Spread the word
- Invite your neighbor/friend/colleague to participate
- Add your input to the community survey
- www.cortemaderaadapts.org



THANK YOU!

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Support slides

Adaptation Planning Effort

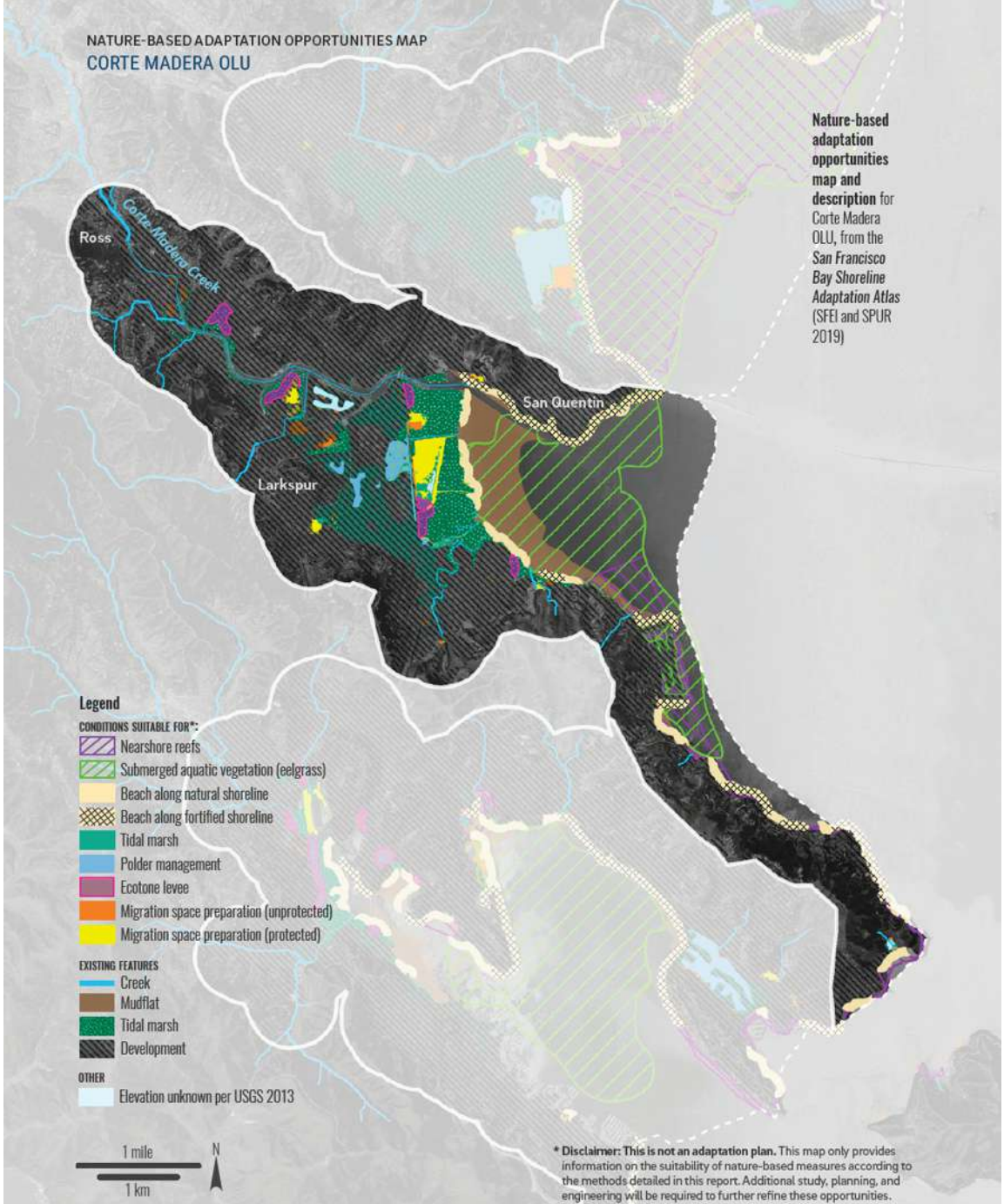
Climate Adaptation Plan

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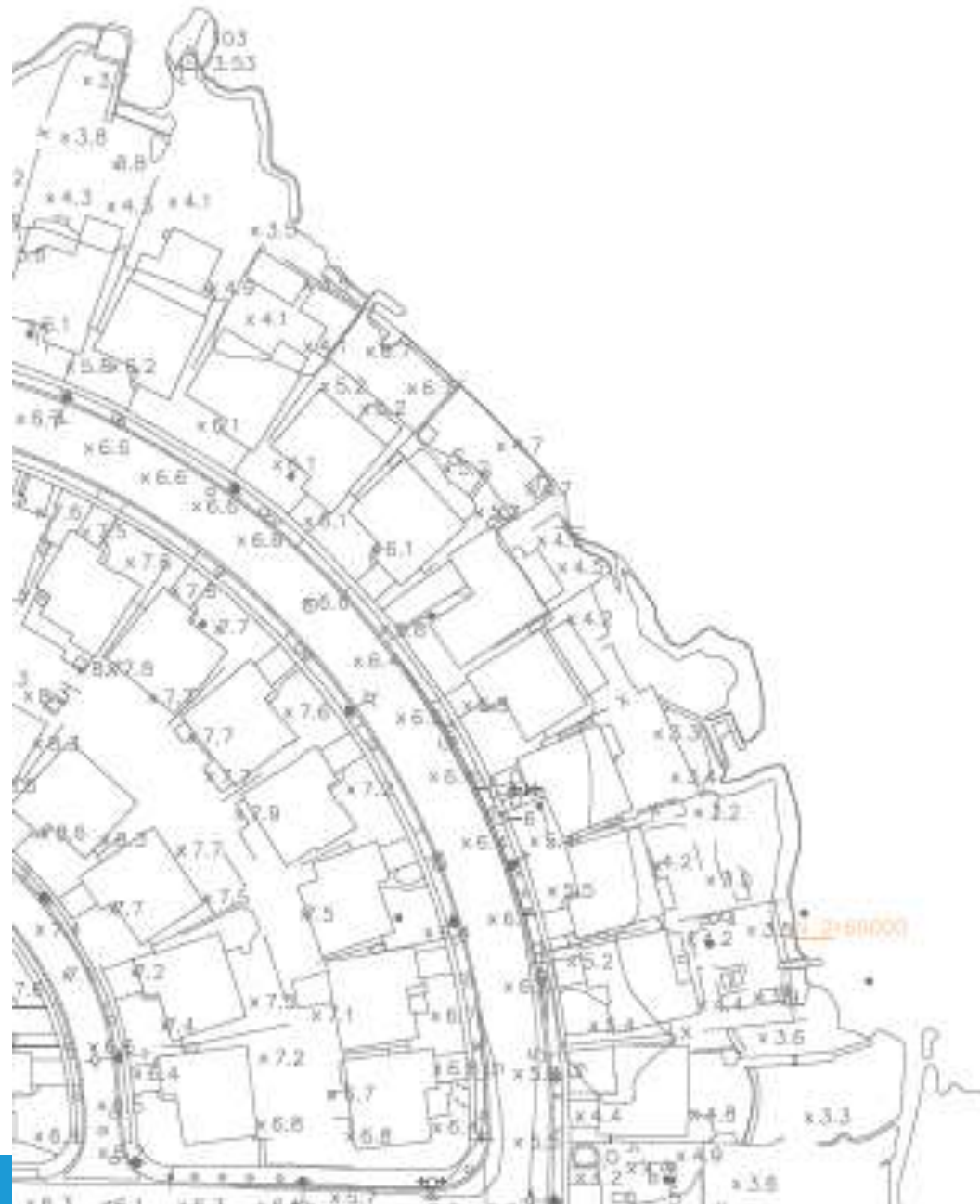


NATURE-BASED ADAPTATION OPPORTUNITIES MAP
CORTE MADERA OLU

Nature-based adaptation opportunities map and description for Corte Madera OLU, from the San Francisco Bay Shoreline Adaptation Atlas (SFEI and SPUR 2019)



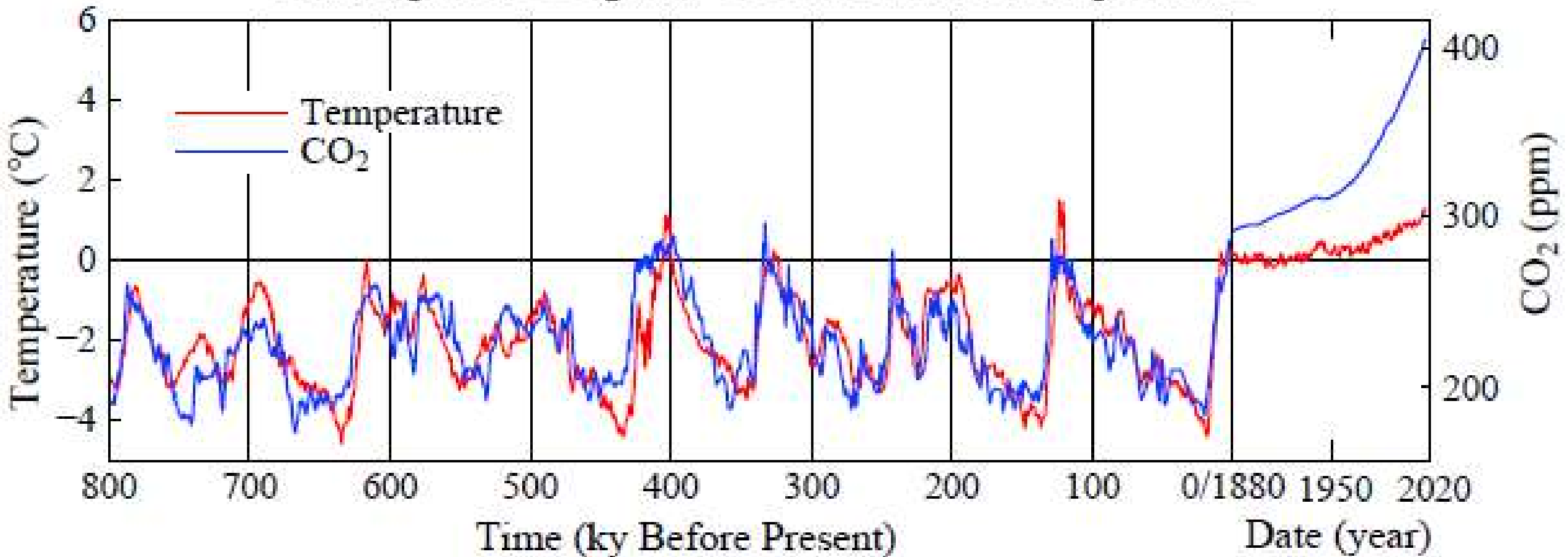




Climate Change Facts

What are the measurements on Greenhouse Gases and Temperatures?

Atmospheric CO₂ and Global Surface Temperature



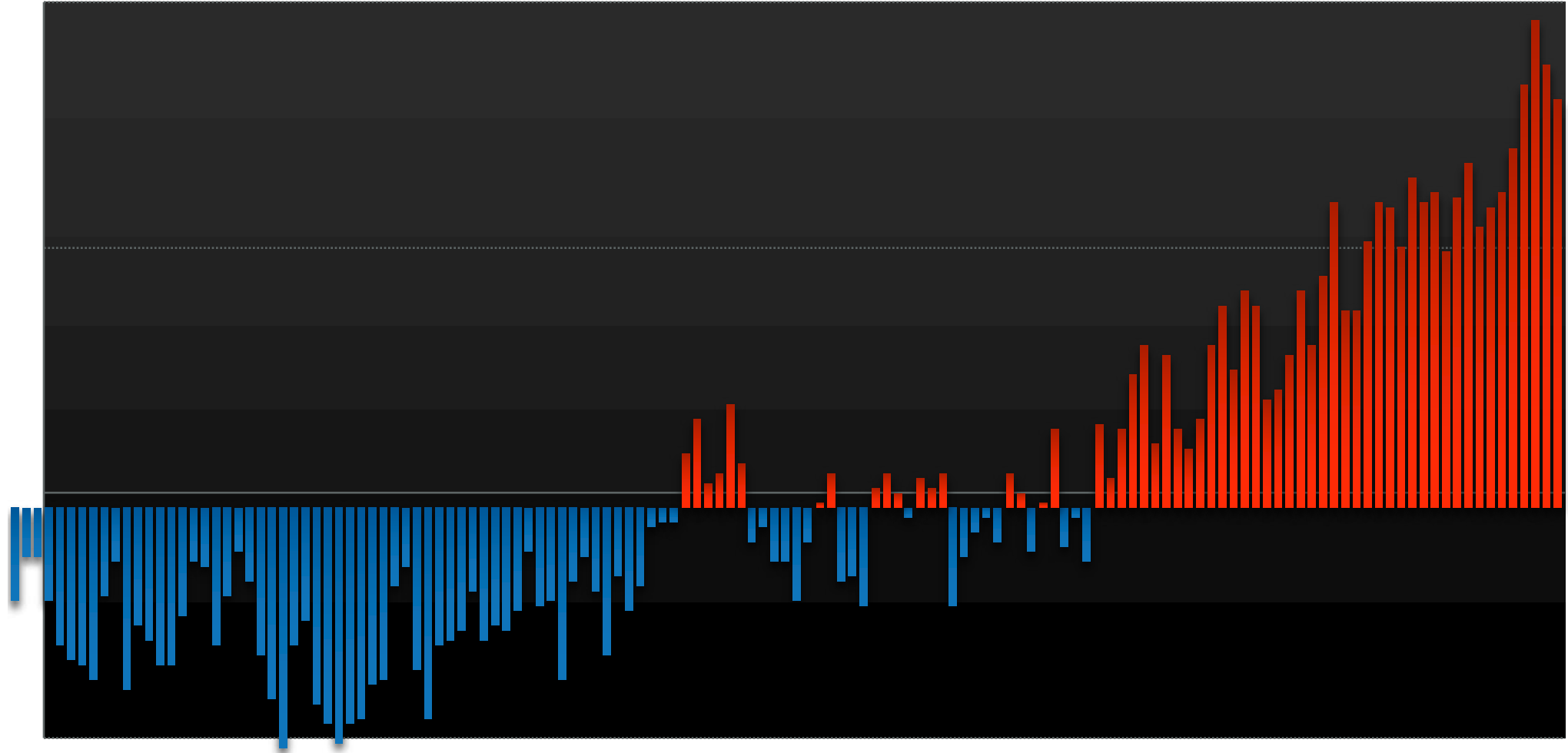
CO² at Highest Level in >800,000 yrs



<https://climate.nasa.gov/evidence/>

Global Surface Temperature – Departure from Average

1880 – 2018



Global Ocean Heat Content

Percent Change Since 1920

- Surface to -700 m
- 700 to -2,000 m
- 2,000 m and deeper

Half of the increase
has occurred since 1997

1920

1940

1960

1980

2000

2016



CLIMATE SUMMIT

WHAT IF IT'S
A BIG HOAX AND
WE CREATE A BETTER
WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- etc. etc.