

# ABUELITOS FOUNDATION







Presenter Notes  
2024-11-22 18:07:13

You may know me from my work as the Landowner Liaison on the Napa River Rutherford Reach Restoration Project, as Lead of the Northern California Black Walnut Conservation Partnership, or as Executive Director of the Napa Communities Firewise Foundation. Today I'm going to guide you through a quick retrospective of successful collaborative efforts to address environmental challenges here in Napa and then have Tod Mostero introduce the work that the Abuelitos Foundation is doing to foster a more holistic approach to nurturing watershed and climate health.



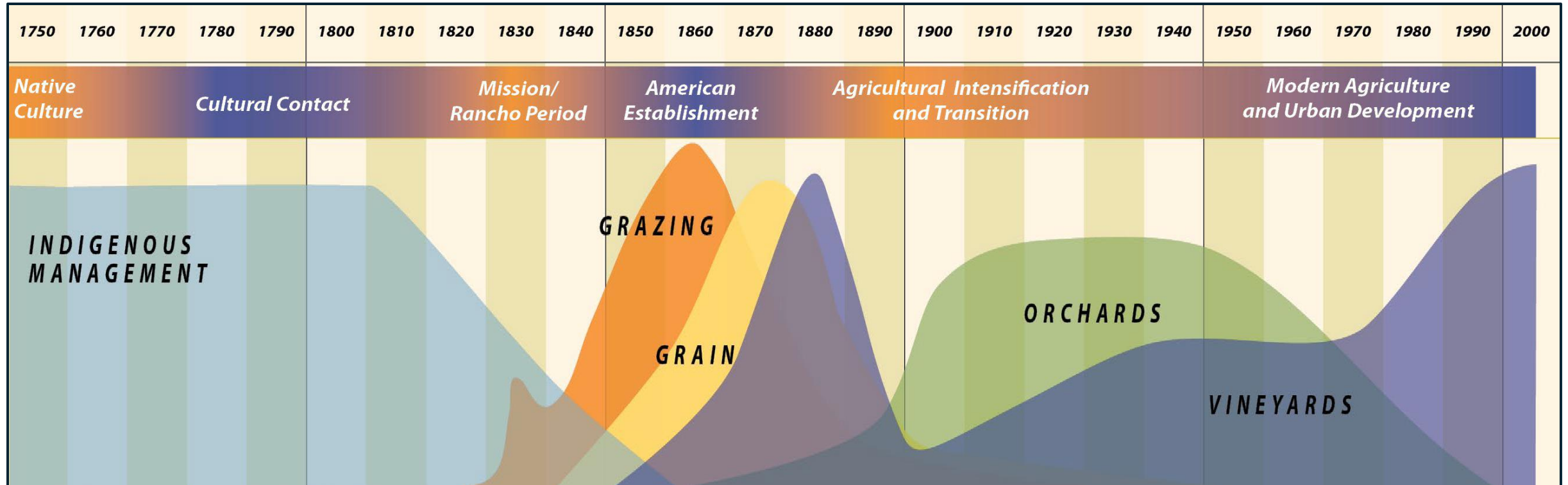
# Millennia of Landuse Management

1944 - PRESENT

NVV

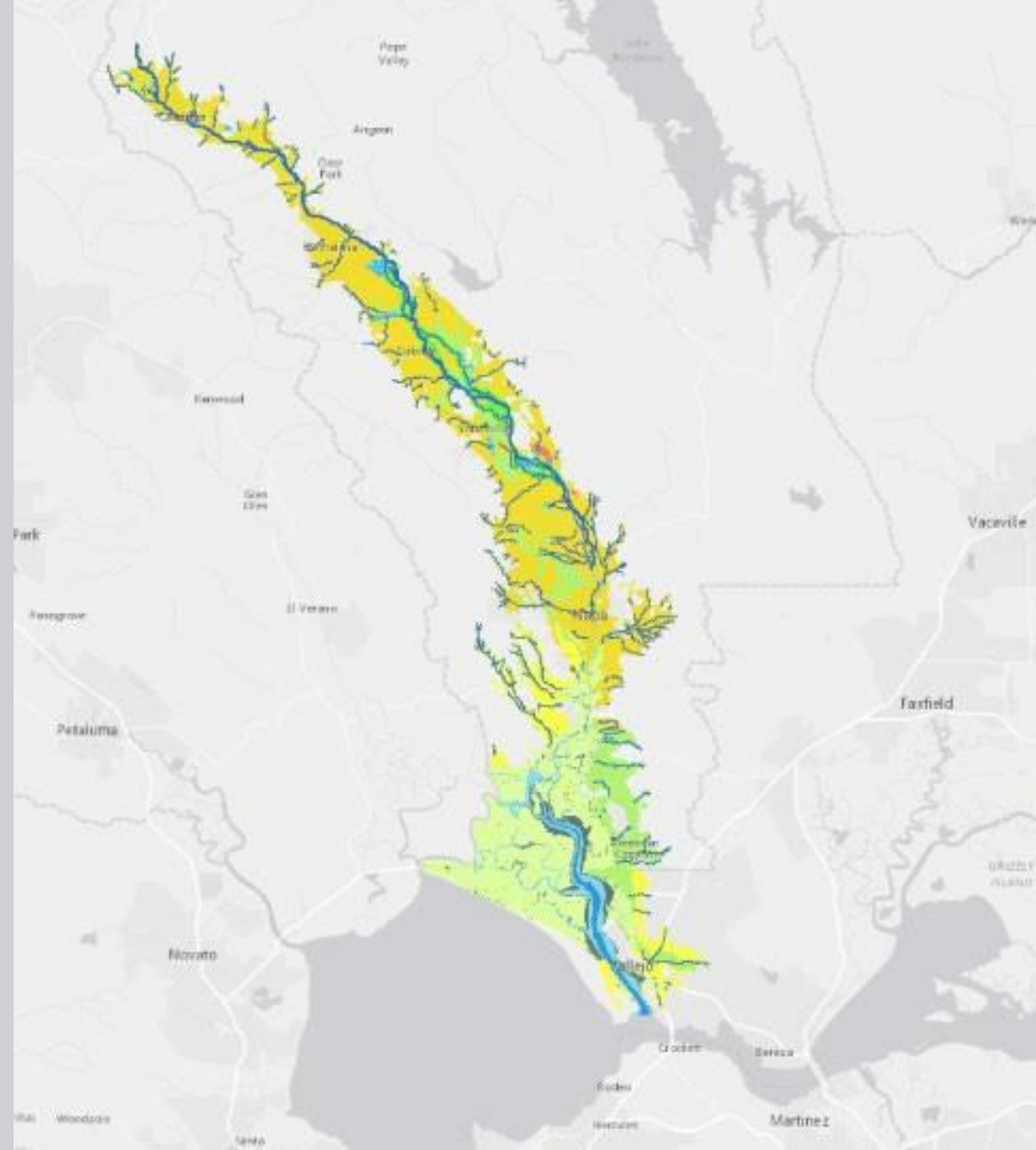
AP

AVAs



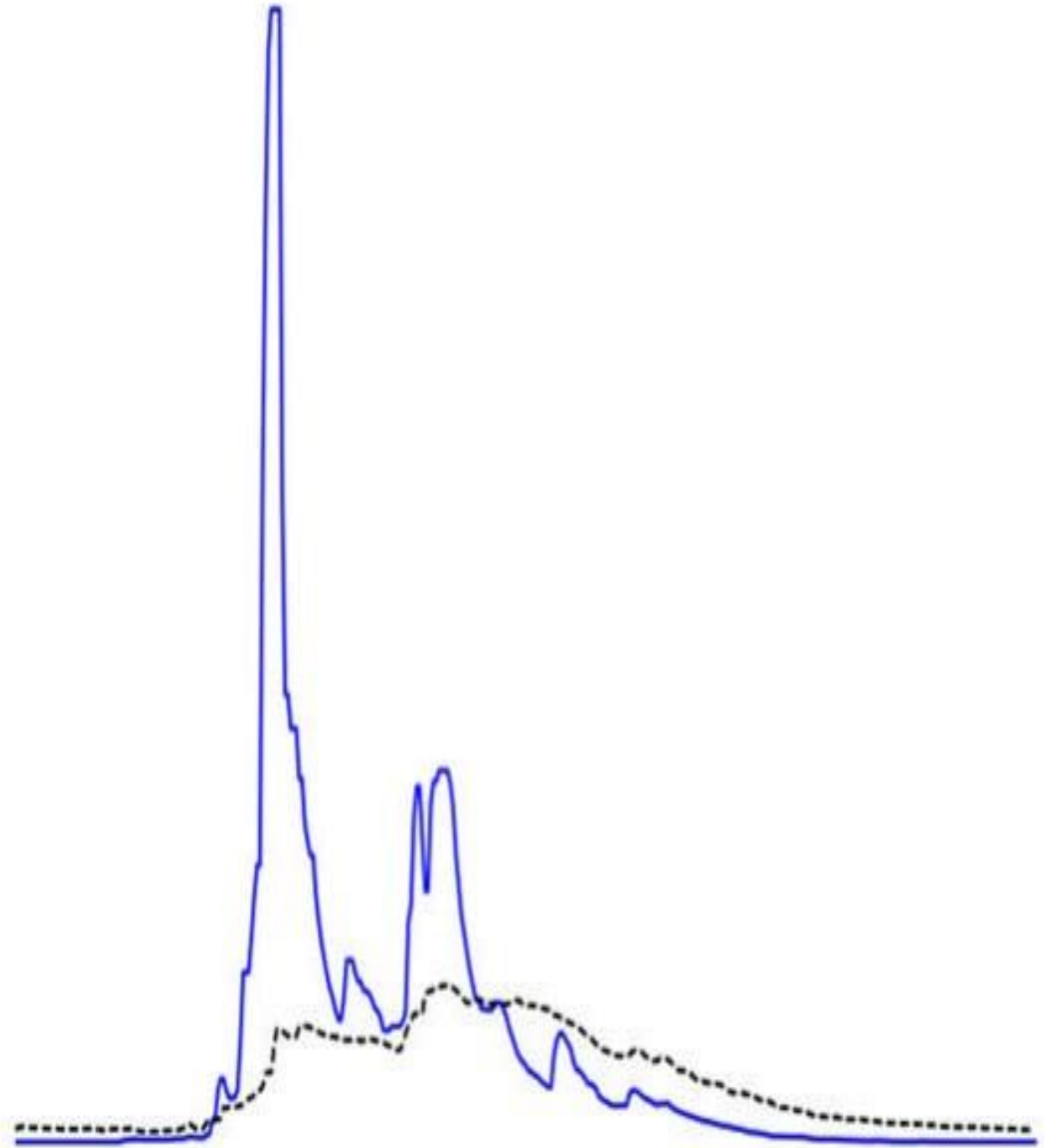
# Historically Complex Stream Drainage Network

San Francisco Estuary Institute 2011





# Historical vs. Modern Stream Flow





# Restore a Living Napa River

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2024-11-22 18:07:16

These challenges led to collective efforts to restore a Living Napa River. By restoring natural meanders, floodplains, and wetlands, we are improving habitat, preserving endangered species, and reducing the flooding that's been exacerbated by rapid land use changes. The Napa Resource Conservation District has also made significant strides removing fish barriers to expand fish habitat throughout the watershed.





# Napa River Restoration Project

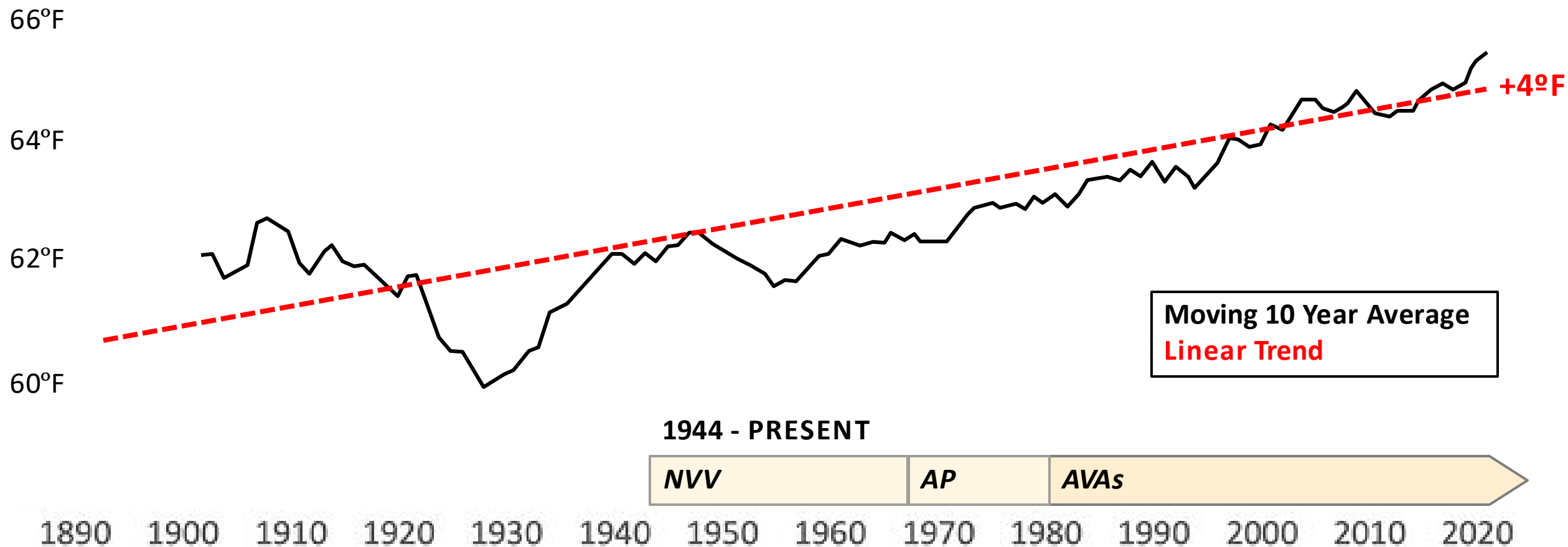
Private – Public Partnerships





# Rising Average Temperatures

March – September Growing Season, Napa 1893-2021







# Supercharging Water Cycle

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**MORE**  
**Intense Rainfall**  
**Flooding**  
**Property Damage**

**+ 4% More  
Atmospheric  
Moisture**

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**Per  
+1°F  
Temperature Rise**



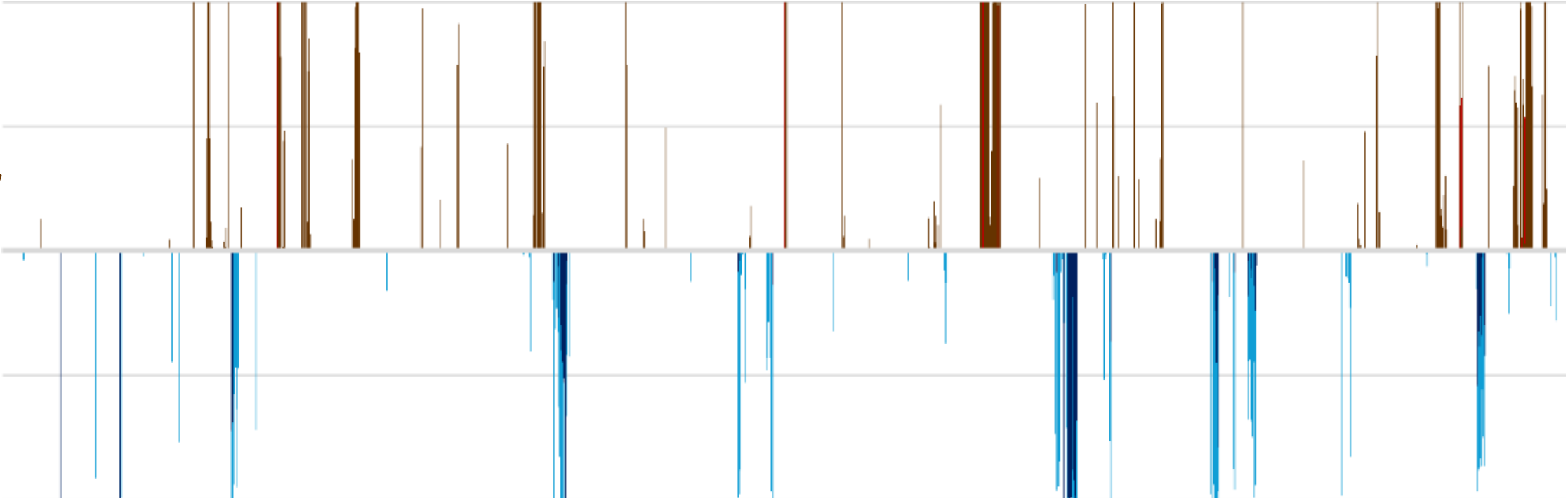


# Extreme Droughts & Deluges

Napa County 1895-2024

Dry

Wet



1944 - PRESENT

NVV

AP

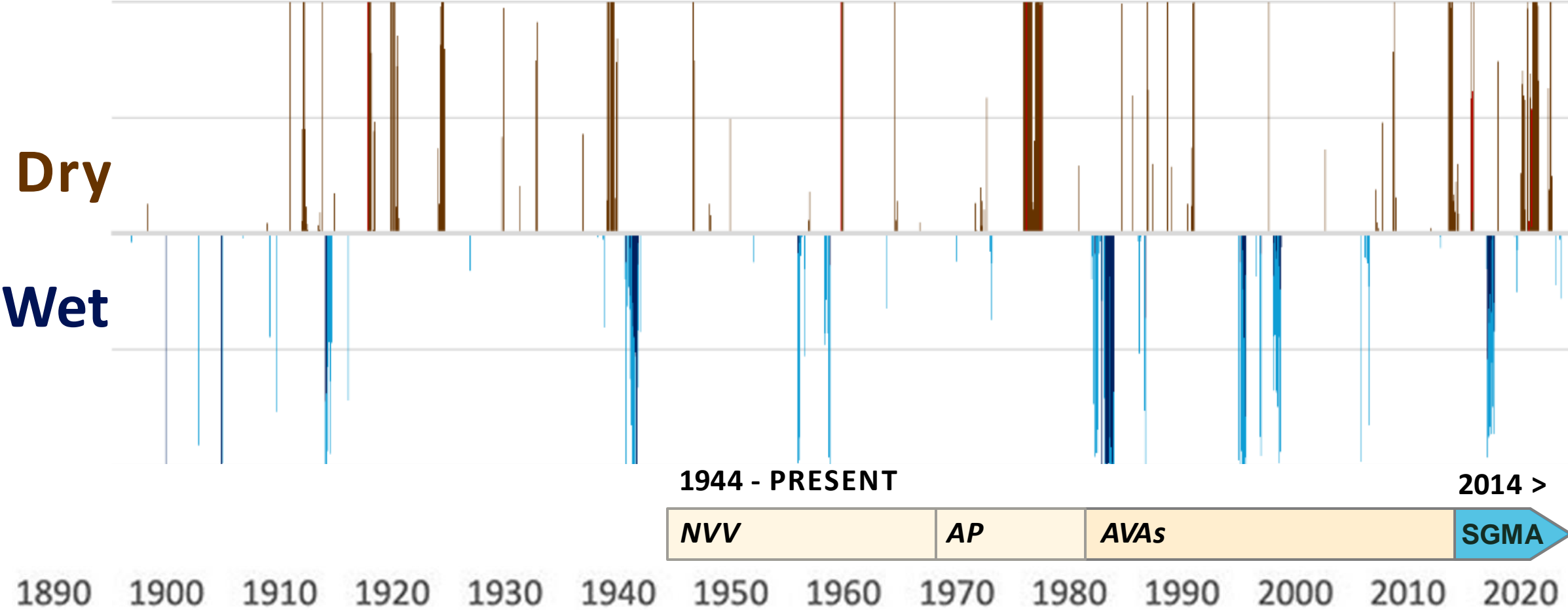
AVAs

1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020



# Sustainable Groundwater Mgmt Act

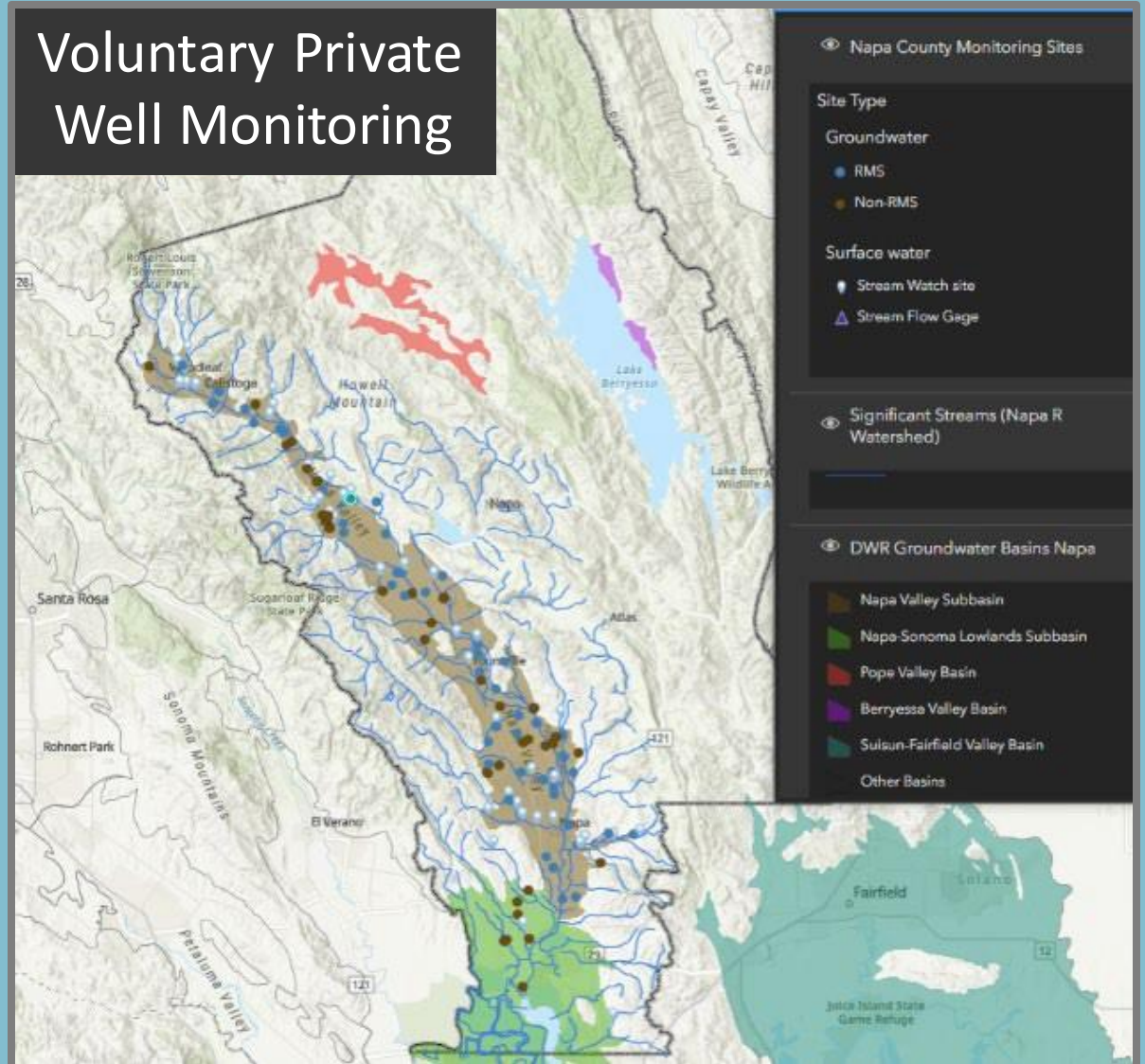
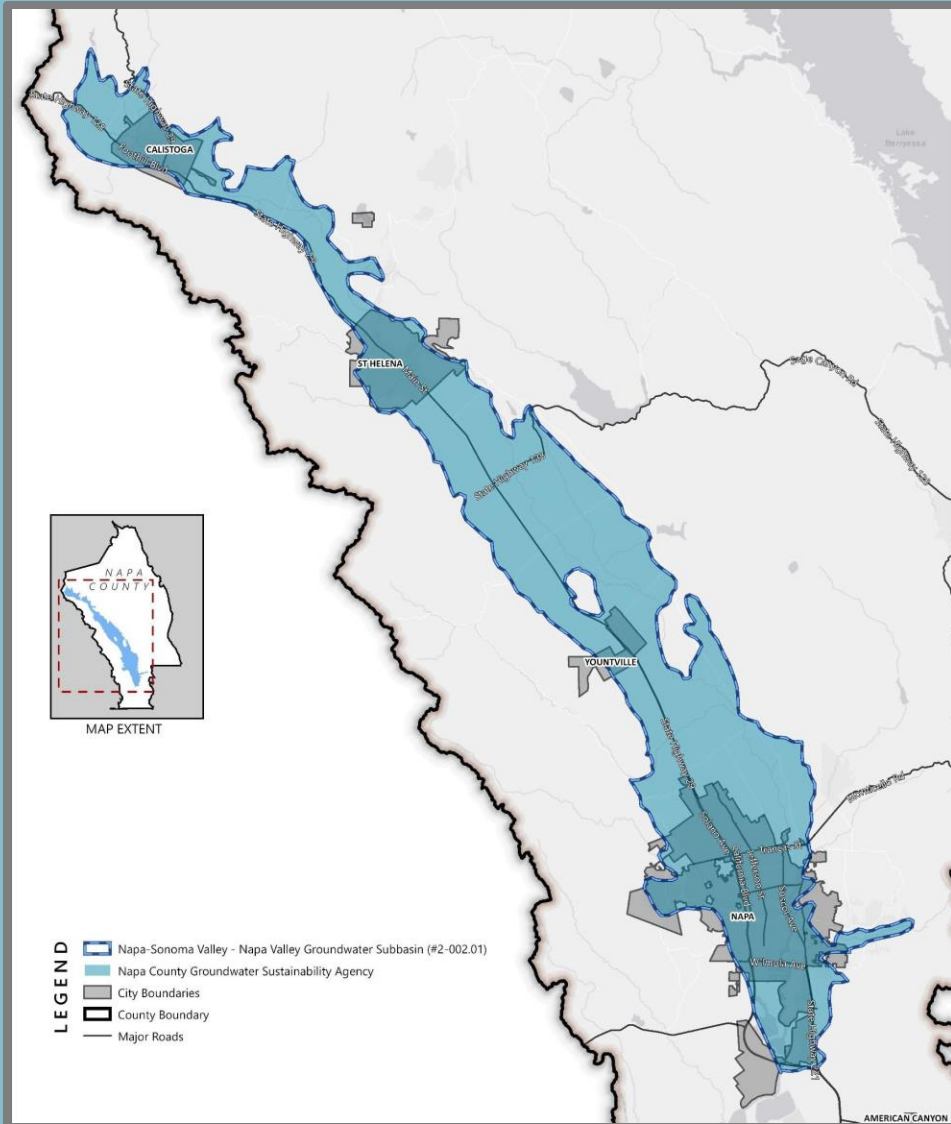
California, 2014





# Napa County Groundwater Sustainability Agency

## 2019

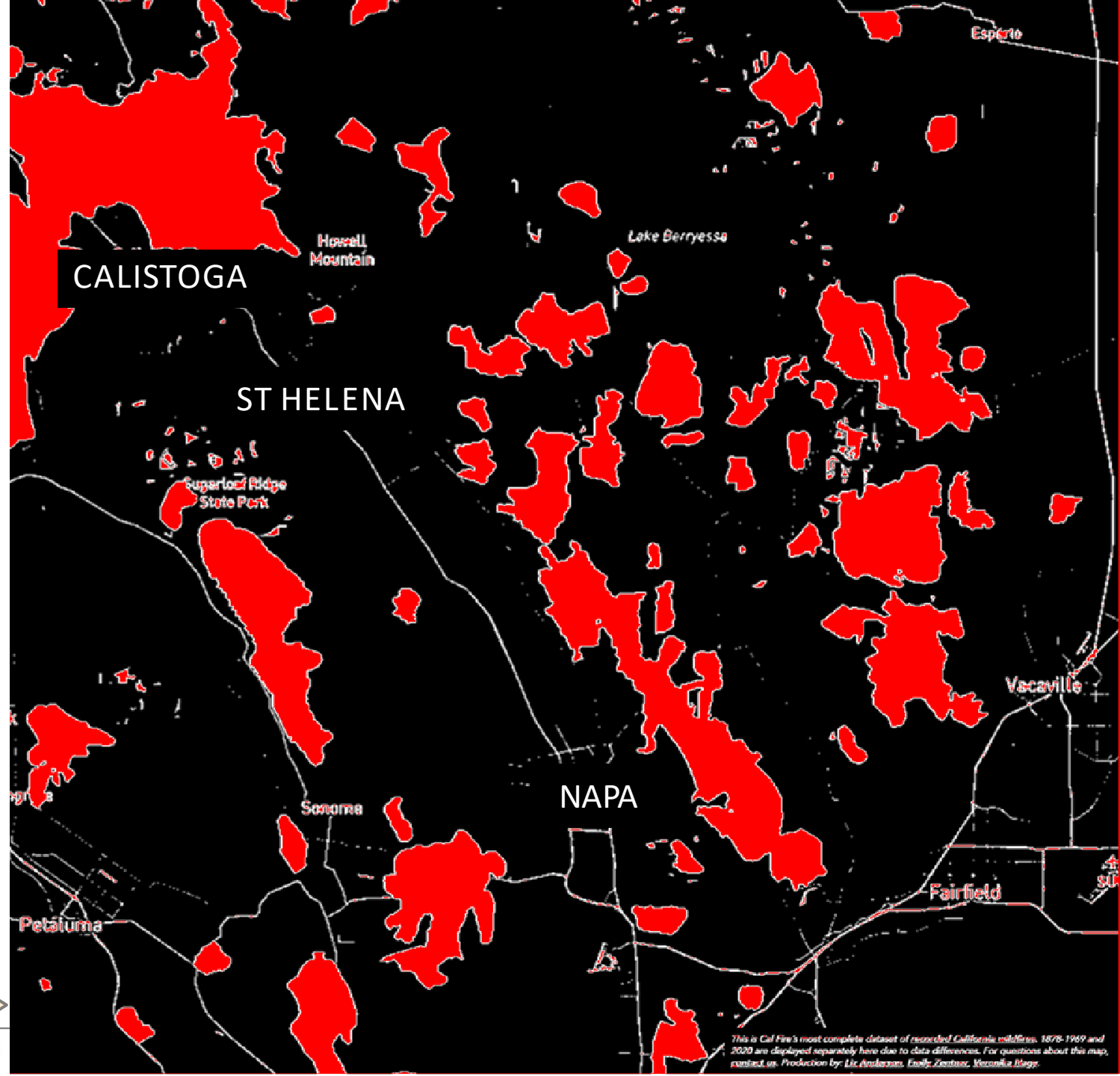
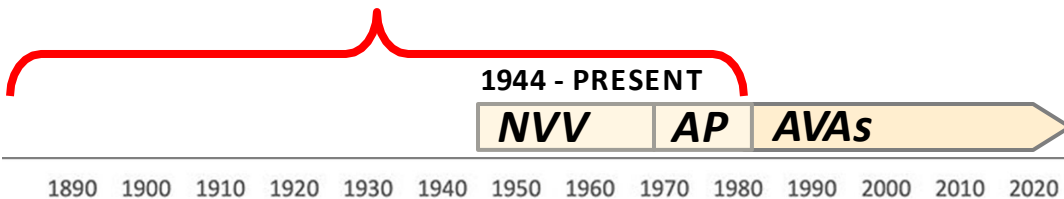




# 100 YEARS

## 1880 – 1979

# Wildfires







# 40 YEARS

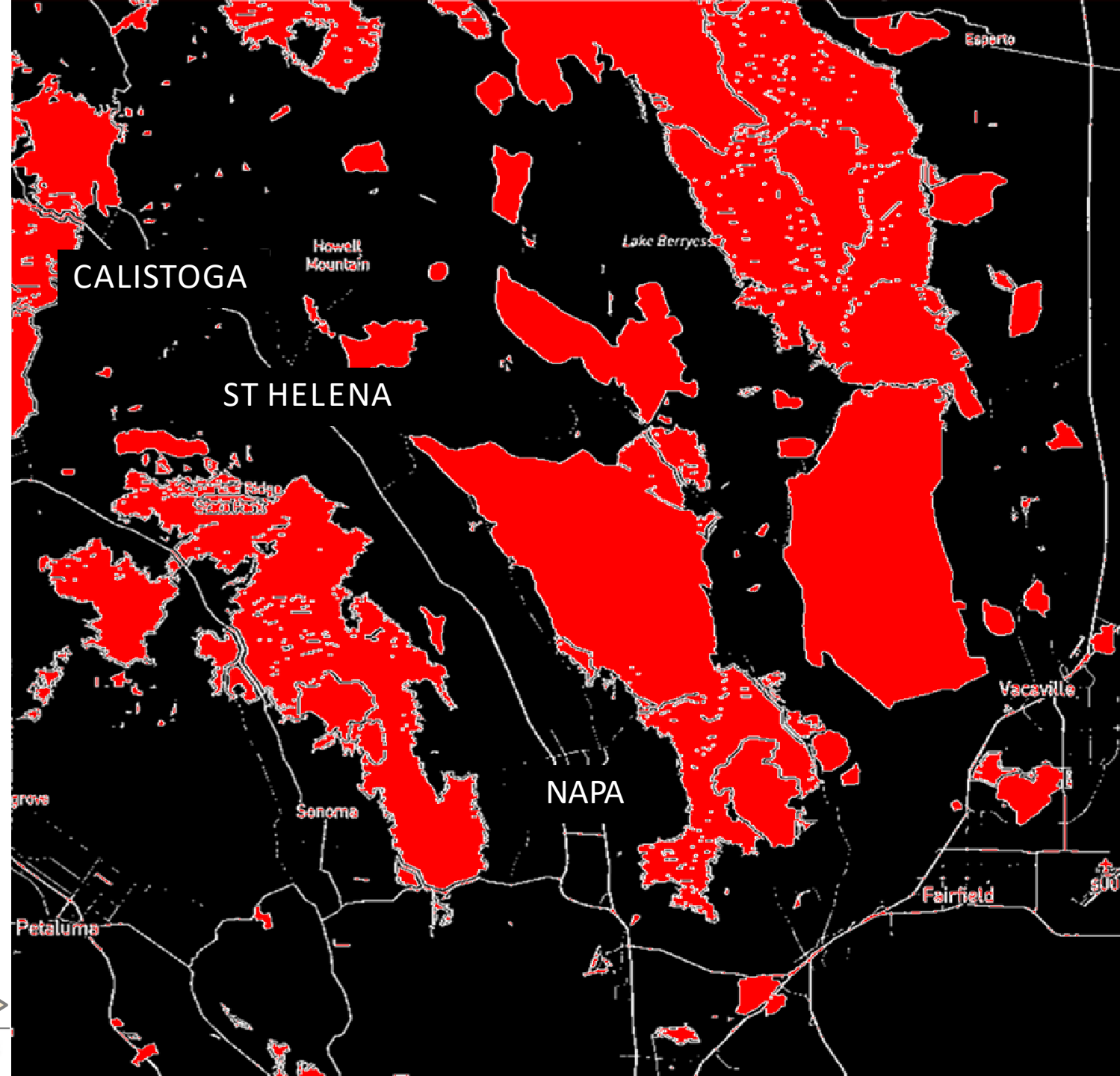
## 1980 – 2019

### Wildfires

1944 - PRESENT



1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020





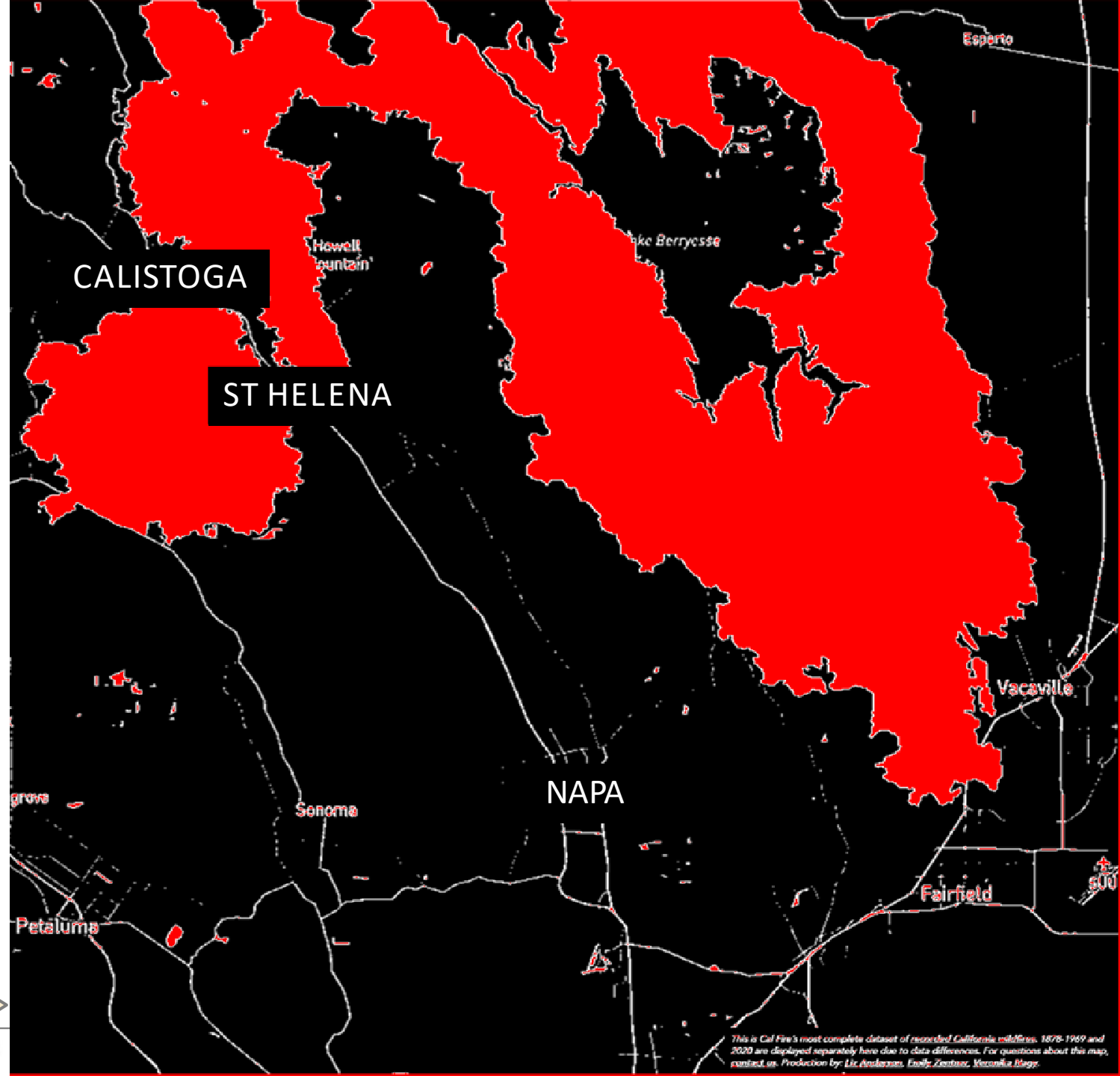


# 1 YEAR 2020 Wildfires

1944 - PRESENT

NVV AP AVAs

1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020







NAPAFIREWISE

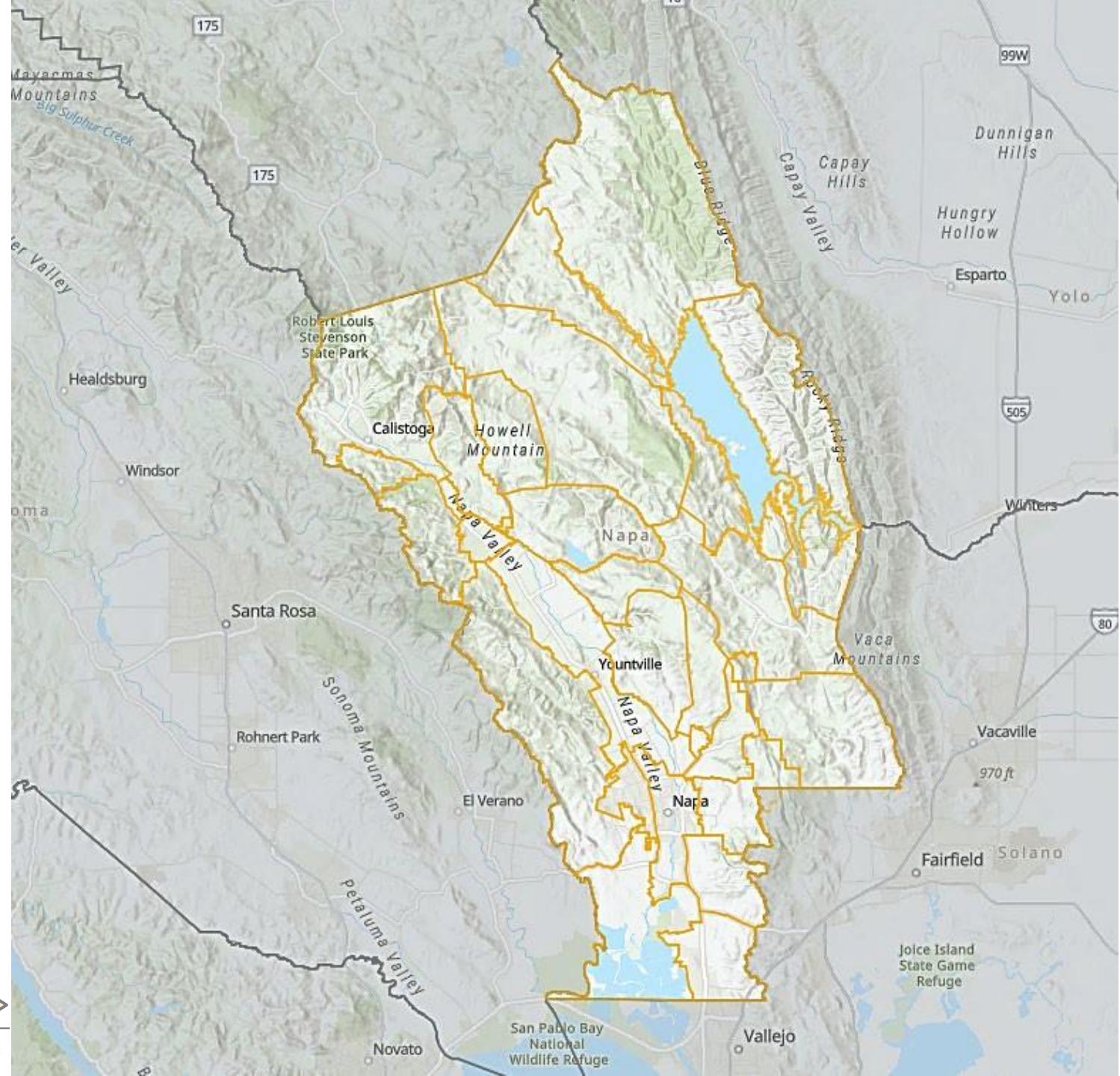
# Volunteer Fire Safe Councils

NVV

AP

AVAs

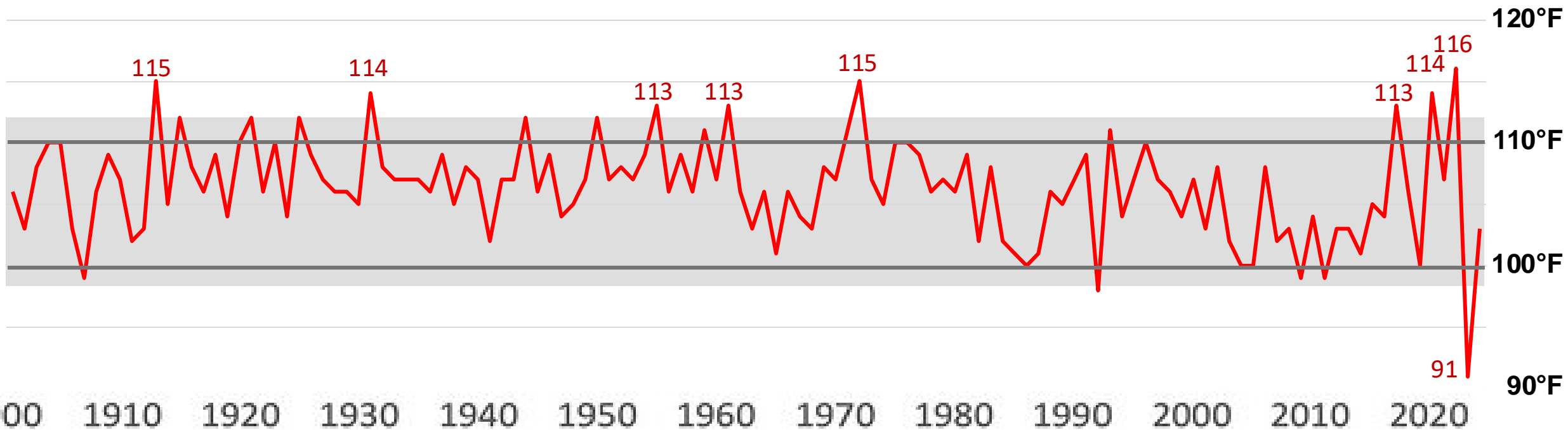
1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020





# Rising Peak Temperatures

Napa Valley, 1893-2021



1944 - PRESENT

*NVV*

*AP*

*AVAs*

<https://www.extremeweatherwatch.com/cities/st-helena-ca>





# RISING CROP LOSSES DUE TO EXTREME HEAT

Dominus Vineyard, Yountville

Record-breaking temperature spikes  
August – September

| YEAR | TEMP  | FRUIT LOSS |
|------|-------|------------|
| 2017 | 112°F | 50%        |
| 2020 | 114°F | 70%        |
| 2022 | 116°F | 100%       |





# Living Watershed Ecosystem Restoration



# **Abuelitos** Foundation

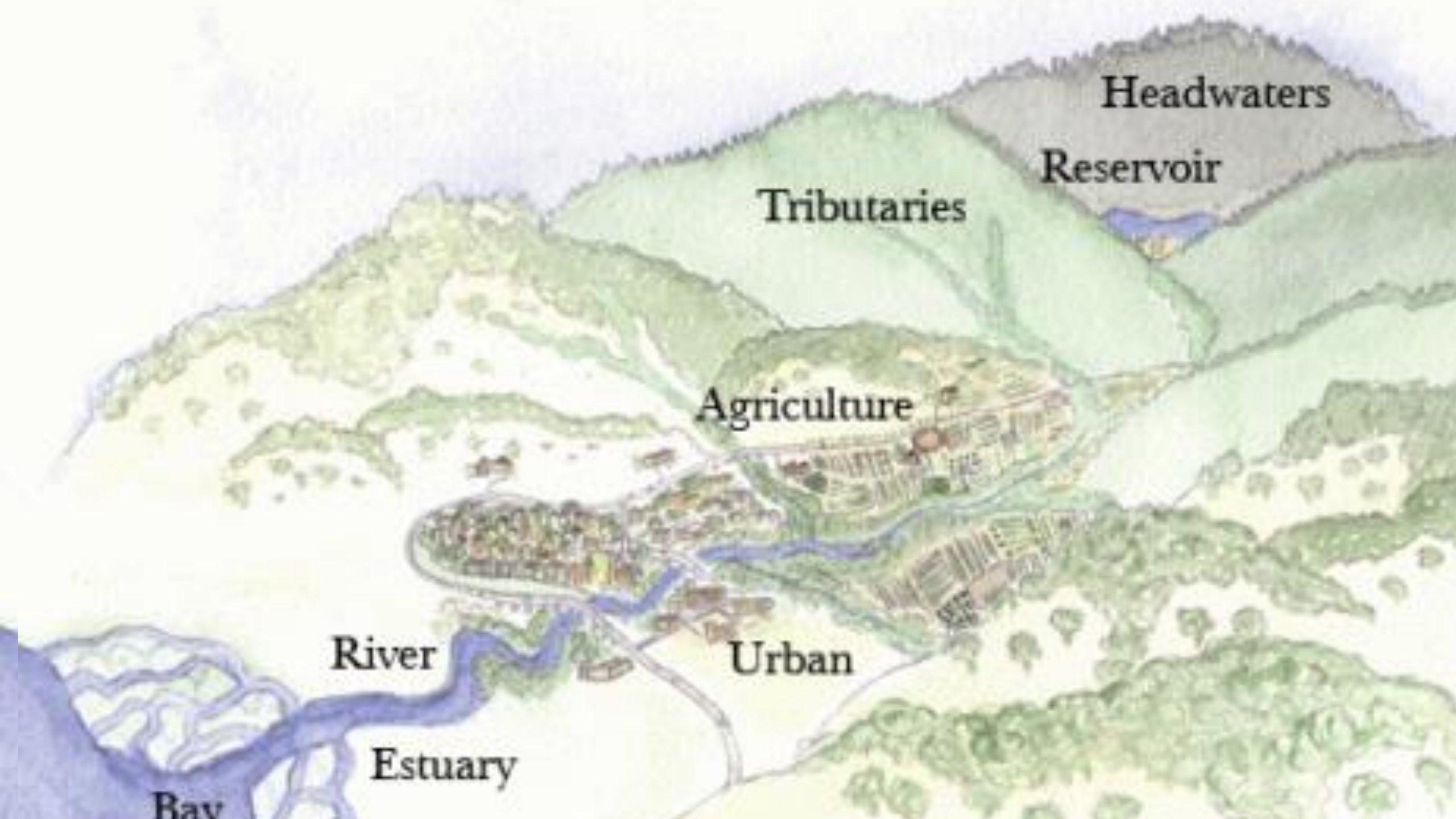












Headwaters

Reservoir

Tributaries

Agriculture

Urban

River

Estuary

Bay



# Abuelitos Foundation

## *Simple Practices, Profound Impacts*

- Rock Detention Structures
- Permanent Groundcover
- Climate-Adapted Crops
- Dry Farming







TILLED



PERMANENT GROUNDCOVER

*November 21, 2024*



Dry  
Farmed  
vs  
Irrigated









# Abuelitos Foundation

## *Resident-Led, Watershed Groups*

- Revitalize Ecosystems
- Stabilize Regional Climate
- Build Thriving Communities







**Abuelitos**  
Foundation