



# Wildfire's Potential to Change Napa County's Wildland

Dave Passovoy CAL FIRE Fire and Resource Assessment Program http://frap.fire.ca.gov





# Napa County's Fire Ecology & Fire Risk

Define "Fire Regime" Vegetation Types Natural Fire Regimes Current Conditions Potential Changes







www.sky-fire.tv/.../fire\_starter.jpg







#### **Factors Affecting Vegetation**

Fire Regime Climate Soils Insects Herbivores Terrain



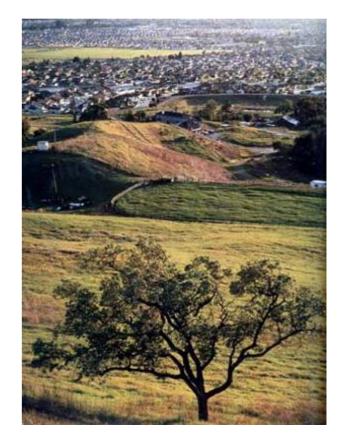








# The cost of fighting wildfires The ability to have clean air How and where we recreate







#### If we can understand the fire regime of where we live, we can begin to understand fire's role as an agent of change and its risk.









#### Natural Fire Regime defined

- Seasonality
- Severity
- Intensity
- Frequency
- Type







#### **Natural Fire Regime**

Season







#### Natural Fire Regime

# Intensity

 Energy released/ fire front







#### Natural Fire Regime

Severity

Impact
that a fire
has on an
ecosystem







#### **Natural Fire Regime**

#### Frequency – How often fires occur







### **Fire Regime**

Туре

- Ground
- Surface
- Canopy/ Stand Replacing







#### Napa's Common Vegetation Types

Oak Woodland Chaparral Grassland Coniferous Forest







#### Napa's Common Vegetation Types & Fire Regimes

## Oak Woodland

Season – summer & /or fall Intensity – Low & Low-Moderate Severity – Low & Low-Moderate Frequency – Short Type - Surface







#### Napa's Common Vegetation Types & Fire Regimes

Chaparral

- Season summer & /or fall
- Intensity -High
- Severity High
- Frequency Medium (10-35yrs) possibly longer Type - Canopy







#### Napa's Common Vegetation Types & Fire Regimes

#### Grasslands

Season – summer and /or fall Intensity - Low-Moderate Severity – High Frequency – Short Type - Canopy







#### Napa's Common Vegetation Types & Fire Regimes

# **Coniferous Forest**

Season – Summer and /or fall Intensity – 80% Low/ 20% Mixed Severity – Low/ Mixed Frequency – Short/Medium Type – Surface/ Mixed







# **Current Conditions**

Oak Woodlands – lack of fire is negatively affecting ecosystem Chaparral - lack of burning Grassland - lack of burning Coniferous Forest - lack of fire is negatively affecting ecosystem





#### **Potential for Change**

## Oak Woodlands







#### **Potential for Change**

# Chaparral







#### **Potential for Change**

## Grassland







#### **Potential for Change**

## **Coniferous Forest**







# Wildfire can or already has affected (via vegetation change):

Biodiversity Clean water Clean air Recreation Personal Safety Homes/ Development





Thanks to : Dave Sapsis Lauren McNees Lisa Hartman Carl Palmer Tiffany Meyers Kelly Larvie