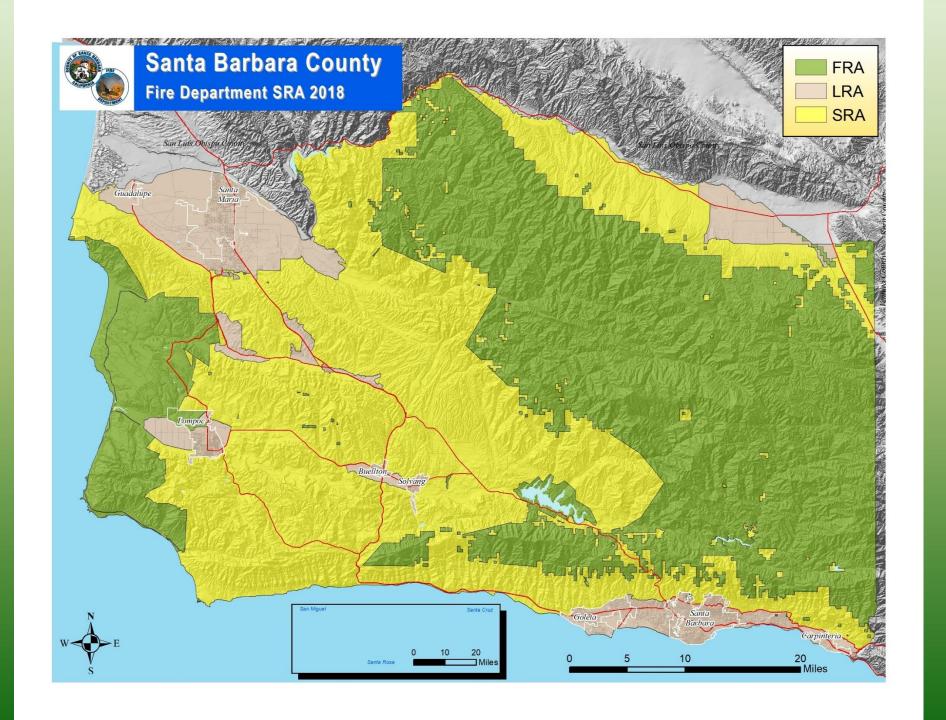


## SANTA BARBARA COUNTY FIRE

# Vegetation Management Program

Fire Chief Eric Peterson
Deputy Chief Rob Heckman
Fire Marshal Steve Oaks
Deputy Fire Marshal Rob Hazard
Captain Fred Tan
Captain Vince LaRocco



## Vegetation Management Program



- 2018 Strategic Fire Plan For California
- Santa Barbara County Unit Strategic Fire Plan
- Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan
- Seismic Safety & Safety Element
- Community Wildfire Protection Plans
- Executive Order B-52-18
- State Legislation
  - > SB 1260 Fire Prevention and Protection: Prescribed Burns
  - > AB 2911 Fire Safety
- Vegetation Treatment Program PEIR

### Vegetation Management Los Padres National Forest

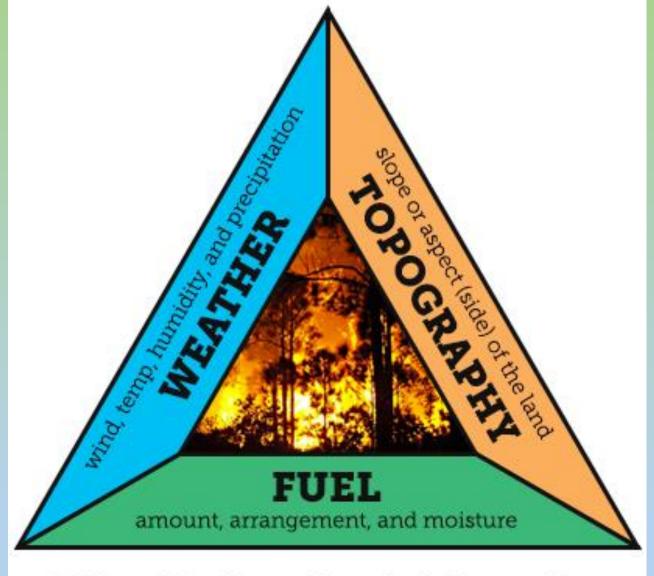


- National Cohesive Strategy
- Los Padres National Forest Land Management Plan
- Strategic Fuel Break Assessment
- Community Wildfire Protection Plans
- National Environmental Policy Act (NEPA)

#### Fire Behavior

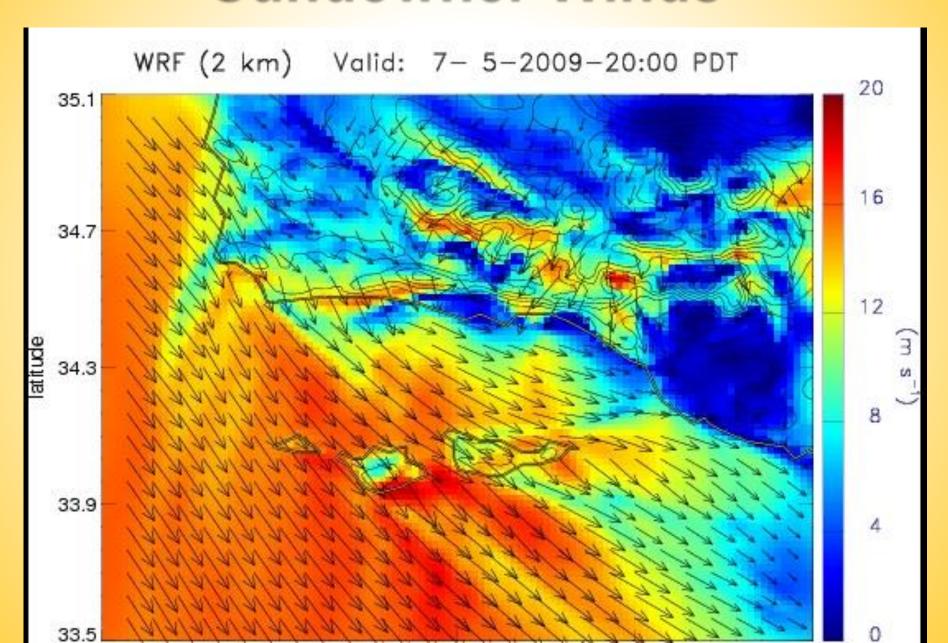
#### How a fire burns:

- Weather
- Topography (Terrain)
- Fuels (Vegetation)

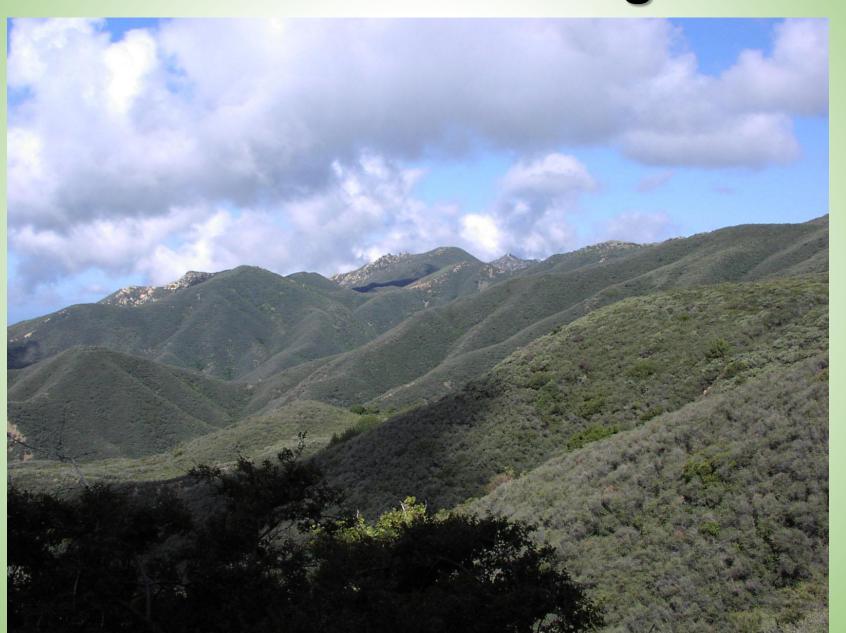


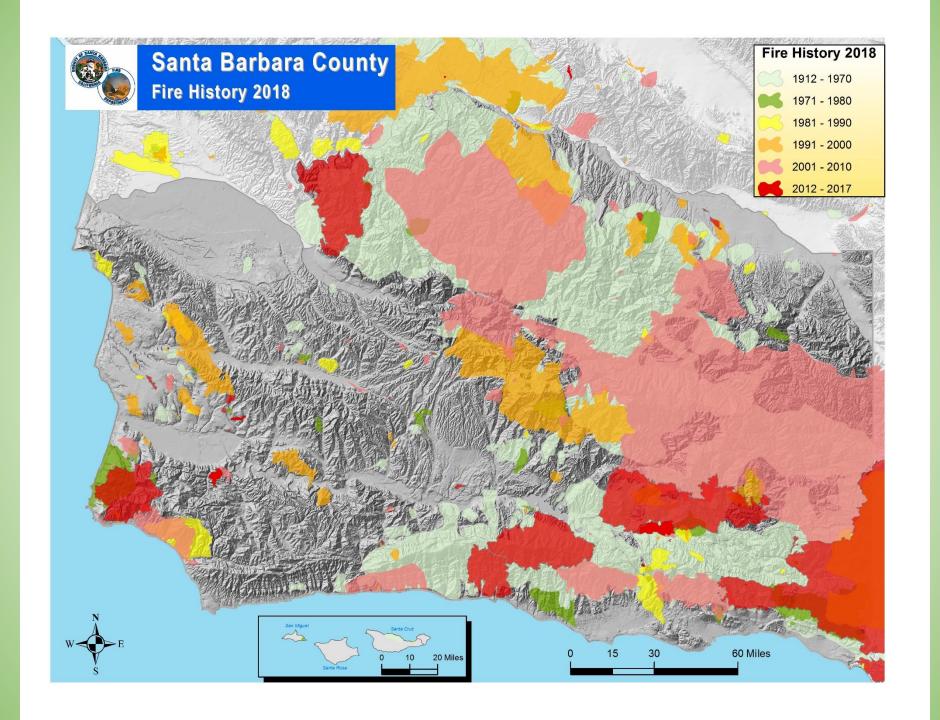
#### Fire Behavior Triangle

### **Sundowner Winds**



## The Fuel Challenge





## Zaca Fire 2007



## Gap Fire 2008



## Tea Fire 2008



## **Jesusita Fire 2009**



## Sherpa, Rey and Canyon Fires 2016



## **Alamo and Whittier Fires 2017**





## **Thomas Fire 2017**







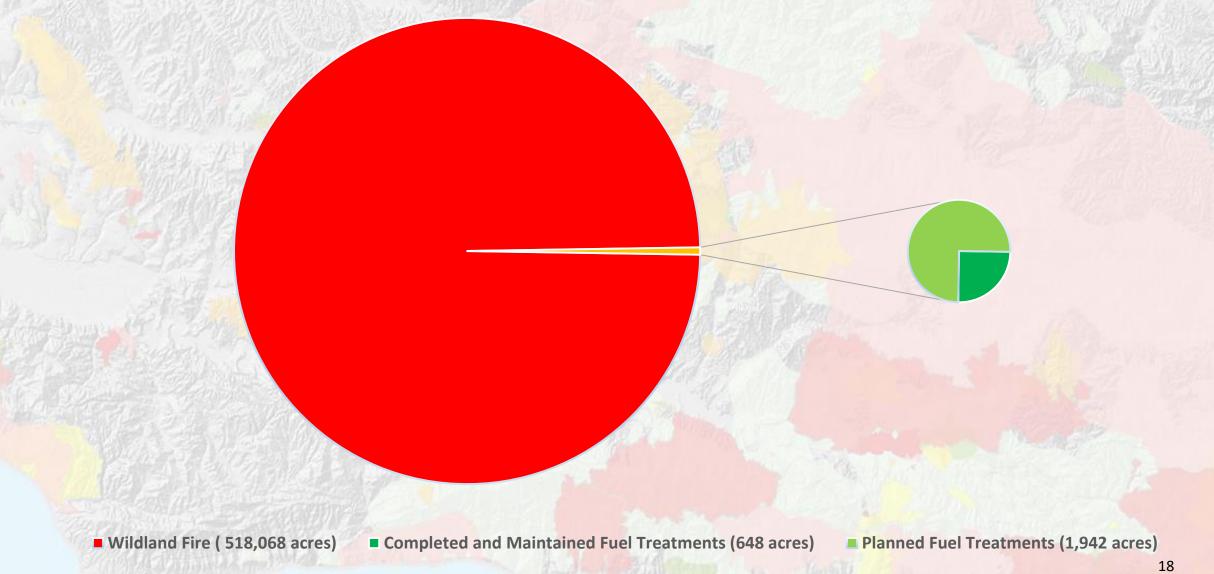
Major Wildfires in Santa Barbara County 1955-2017					
Fire	Date	Cause	Acres Burned	Structures Damaged or Destroyed	Deaths
Thomas	December-2017	Under Investigation	281,893*	1063*	2**
Whittier	July-2017	Vehicle	18,430	53	0
Alamo	July-2017	Under Investigation	28,687	15	0
Canyon	August-2016	Under Investigation	12,518	1	1
Rey	September-2016	Under Investigation	33,606	0	0
Sherpa	June-2016	Miscellaneous	7,474	1	0
White	May-2013	Miscellaneous	1,984	0	0
La Brea	August-2009	Miscellaneous	91,622	1	0
Jesusita	May-2009	Equipment Use	8,733	80	0
Tea	November-2009	Campfire	1,940	210	0
Gap	July-2008	Miscellaneous	9,443	4	0
Zaca	July-2007	Equipment Use	240,207	1	0
Perkins	July-2006	Lightning	14,988	0	0
Gaviota	July-2004	Lightning	7,440	1	0
Marre	September-1993	Smoking	43,822	0	0
Paint	June-1990	Arson	4,270	673	1
Wheeler	July-1985	Miscellaneous	119,361	26 (on border with Ventura County)	0
Sycamore	July-1977	Kite into powerlines	806	234	0
Romero	October-1971	Arson	14,538	n/a	4
Coyote	September-1964	Undetermined	65,338	94	1
Refugio	September-1955	Structure Fire	79,428	20	0

<sup>\*</sup>Started in Ventura County with majority of acres and structure loss in Ventura County

<sup>\*\*20</sup> civilian deaths and 2 missing persons from resulting debris flow







### Vegetation Management Plan



- Community Based
  - > Defensible Space
  - > Community Fuel Treatments
  - > CWPP Planning Process
- Landscape Based
  - > Prescribed Fire
  - > Prescribed Herbivory/ Agriculture
- Strategic Pre-Fire
  - > Ridgeline Strategic Fuel Breaks
  - > Roadside Fuel Treatments

## Defensible Space Program



- Education and enforcement of California Public Resource Code 4291
- Provides a safe area for firefighters to operate in
- Inspections conducted annually
- Over 14,000 structures in SBC SRA
- Homeowner responsibility



# Defensible Space What we are trying to prevent...









# Defensible Space What we want to accomplish...





#### **Community Defensible Space**





## Tunnel Trailhead Community Defensible Space Fuel Treatment

2015 2016





### Community Wildfire Protection Planning:

Essential component of the Strategic Fire Plan for California



#### **Community Wildfire Protection Plans**

- Recognize that community plans and priorities have an important role in shaping management on federal and non-federal lands
- Emphasize cross-boundary action
- Engage all branches of government at the local level

#### **CWPP Minimum Requirements**

- Collaboration
- Prioritized Fuel Reduction
- Treatment of Structural Ignitability

#### **Existing CWPP's**

- Mission Canyon CWPP
- Goleta City CWPP
- Carpinteria-Summerland FPD CWPP
- Montecito CWPP
- Santa Barbara City CWPP
- San Marcos Pass/Eastern Goleta Foothills CWPP
   \*DRAFT

#### Recommended for CWPP Development

- San Roque Foothills
- Goleta Foothills
- Gaviota Coast
- Burton Mesa Communities
- Lompoc City
- Tepusquet

# Prescribed Fire: A Tool For Ecosystem Management



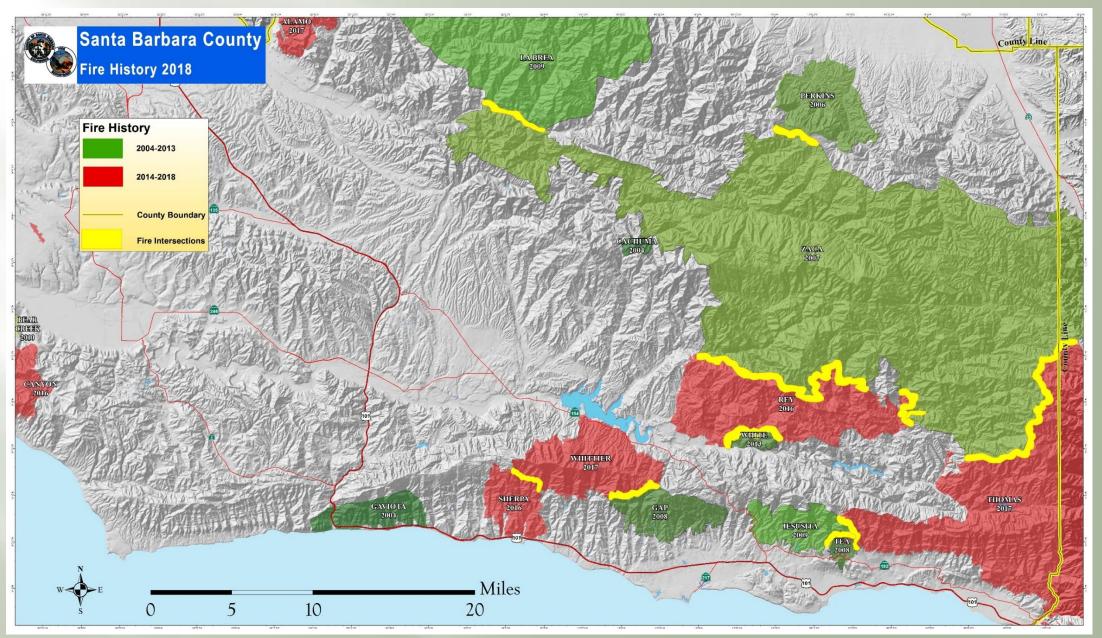
#### Prescribed Fire: Defined

- Application of fire to fuels to accomplish planned resource management objectives
  - > Reduce age class of vegetation
  - > Reduce amount of dead fuel
  - > Restore fire-adapted ecosystems
  - > Cost effective
- Conducted under defined weather and fuel conditions
  - > Reduce adverse fire impacts
  - > Minimize chance of fire escape
- Practical challenges
  - > High risk in Wildland Urban Interface
  - > Smoke management
  - > Decrease in prescription window due to longer high fire season

#### Sage/Aliso Prescribed Burn SBC/USFS

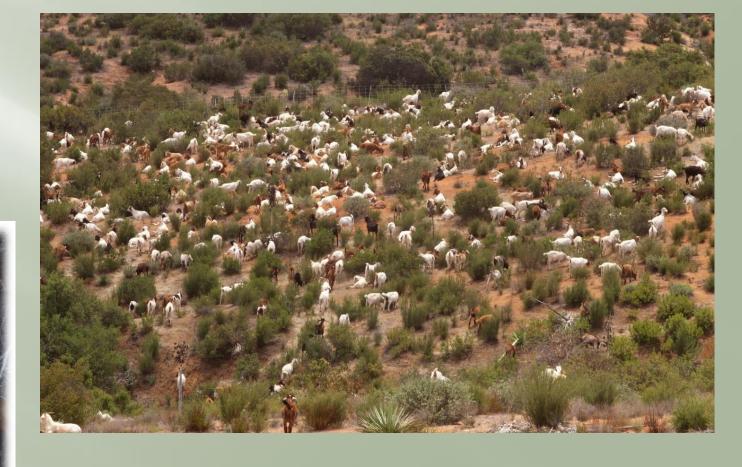


#### **Previous Fire Intersections ~55 Miles**



### Prescribed Herbivory/ Agriculture





### Prescribed Herbivory/ Agriculture







#### Strategic Pre-Fire

Ridgeline Fuel Breaks



# Strategic Pre-Fire Fuel Breaks

- Fuel breaks are designed to facilitate indirect fire attack
- Used in conjunction with backfiring operations
- Create safer and more effective positions for firefighters to operate in
- Increase effectiveness of fire retardant
- Need to be located along favorable topography such as ridgelines or valley bottoms
- NOT designed to stop fire independently

#### Strategic Pre-Fire

Access/egress route and roadside fuel reduction





#### Strategic Pre-Fire Access/Egress Routes

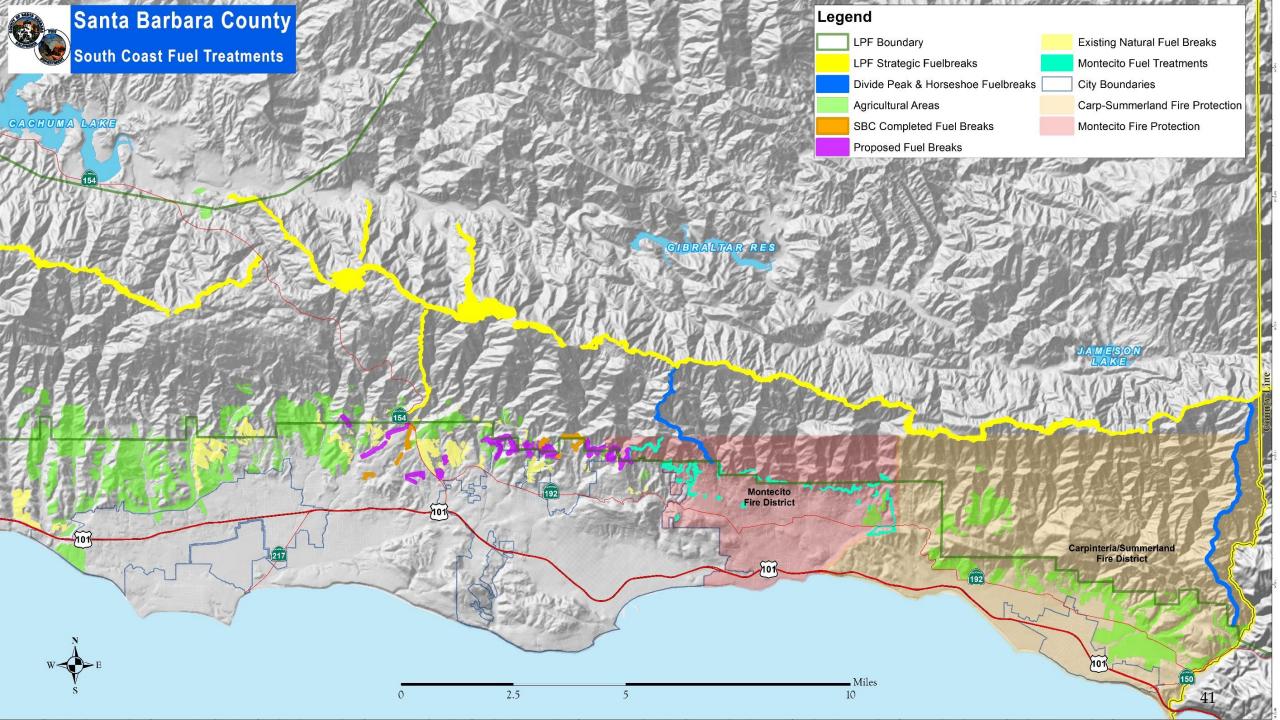
- Reduce fuel along roadside shoulders to reduce potential fire intensity
- Mow annual fuels in late spring to reduce roadside ignitions
- Create safer routes for evacuation
- Enables use of road as a potential fuel break

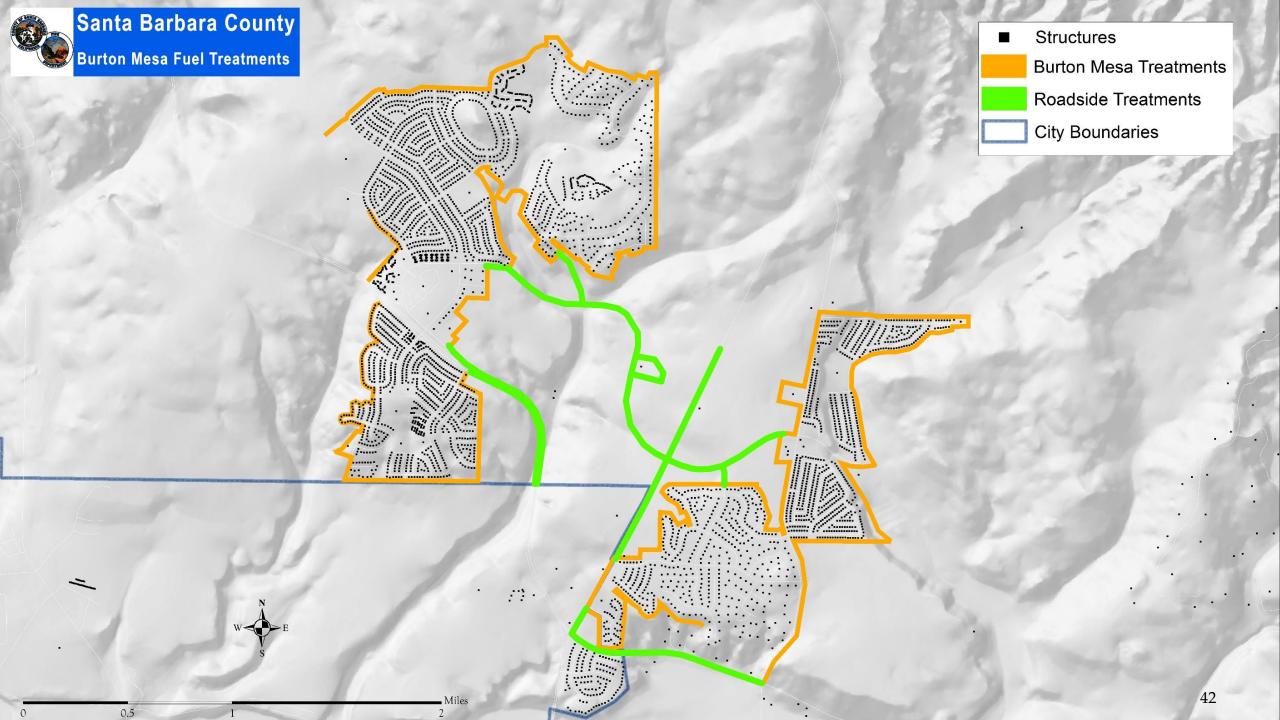
#### Recommendations



#### **COMMUNITY BASED:**

- Update Santa Barbara County defensible space standards to comply with AB 2911
- Collaborate with Planning & Development in updating the Safety Element of the Comprehensive Plan
- Support continued development of Community Wildfire Protection Plans for at-risk communities
- Collaborate with Operational Area partners in the planning and implementation of regional vegetation management projects
- Complete efforts to develop a South Coast Foothill Community
   Defensible Space zone using existing Ag greenbelts, natural areas of light fuels, and targeted fuel treatments where necessary
- Develop a Community Defensible Space zone around the Burton Mesa communities





#### Recommendations



#### LANDSCAPE BASED:

- Increase the use of prescribed fire where practical with the goal of treating 500 to 1,000 acres of SRA lands annually
- Collaborate with the Los Padres National Forest to conduct prescribed fire projects across jurisdictional boundaries
- Research the applicability of prescribed herbivory in suitable areas
- Support land use policies that encourage and perpetuate agricultural greenbelts in the Wildland Urban Interface
- Utilize the Vegetation Treatment Program PEIR once certified

#### Recommendations



#### **STRATEGIC PRE-FIRE:**

- Collaborate with the Los Padres National Forest to continue development and maintenance of critical strategic fuel breaks as identified in the forest-wide Strategic Fuel Break Assessment
- Plan and implement strategic fuel breaks in SRA lands where needed to meet the goals of the State Strategic Fire Plan
- Increase the pace and scope of roadside fuel treatments in high fire hazard areas

#### **Questions?**



Santa Barbara County Fire Department

2018