# CHAPARRAL: THREATENED & MISUNDERSTOOD



# THE VICIOUS CYCLE Fire burns entire area Fuel break expanded

Fire risks Grasses take over

<u>The Bottom Line</u>: Fuel breaks are marginally effective and lead to invasive grassland conversion that displaces native habitat and increases fire risk.

**RECENT MASTICATION** 



**POST FIRE REGROWTH** 



#### **FUEL BREAKS & CLEAR-CUTTING**

Misperceptions of "overgrowth" lead managers towards clearcutting (or mastication) to create <u>fuel breaks</u> - areas converted from one vegetation type to another in the name of fire prevention. Learn more at <u>lpfw.org/fire/science/</u>

Fuel breaks are <u>not fire breaks</u> - strips of land cleared of all vegetation to facilitate active wildfire suppression

### **MIXED EFFICACY & MISMANAGEMENT**

Fuel breaks are only partially effective in stopping fire. Other variables and wind, in particular, can render a fuel break ineffective. Fuel breaks can be <u>more strategically located</u> to provided access for firefighting activities.

2017 Thomas Fire jumped 70 miles of fuel breaks



## **GRASSLAND CONVERSION**

Fire is becoming more frequent in chaparral ecosystems due to climate change, increased human ignition, and habitat conversion. Invasive grasses are the most common species seen in the fuel break which are <u>more ignitable than chaparral.</u>



Share of LPNF fires stopped by fuel breaks



#### **FACILITATING ILLEGAL ACTIVITIES**

Clearing chaparral opens areas to regulated - and sometimes prohibited - activities like off-highway vehicle (OHV) use and target shooting. USFS has linked at least 53 fires that burned 74,000+ acres in LPNF to illegal target shooting.



Share of LPNF wildfires caused by humans



Sources: Brennan and Keely, 2017, Syphard 2011, Syphard 2018