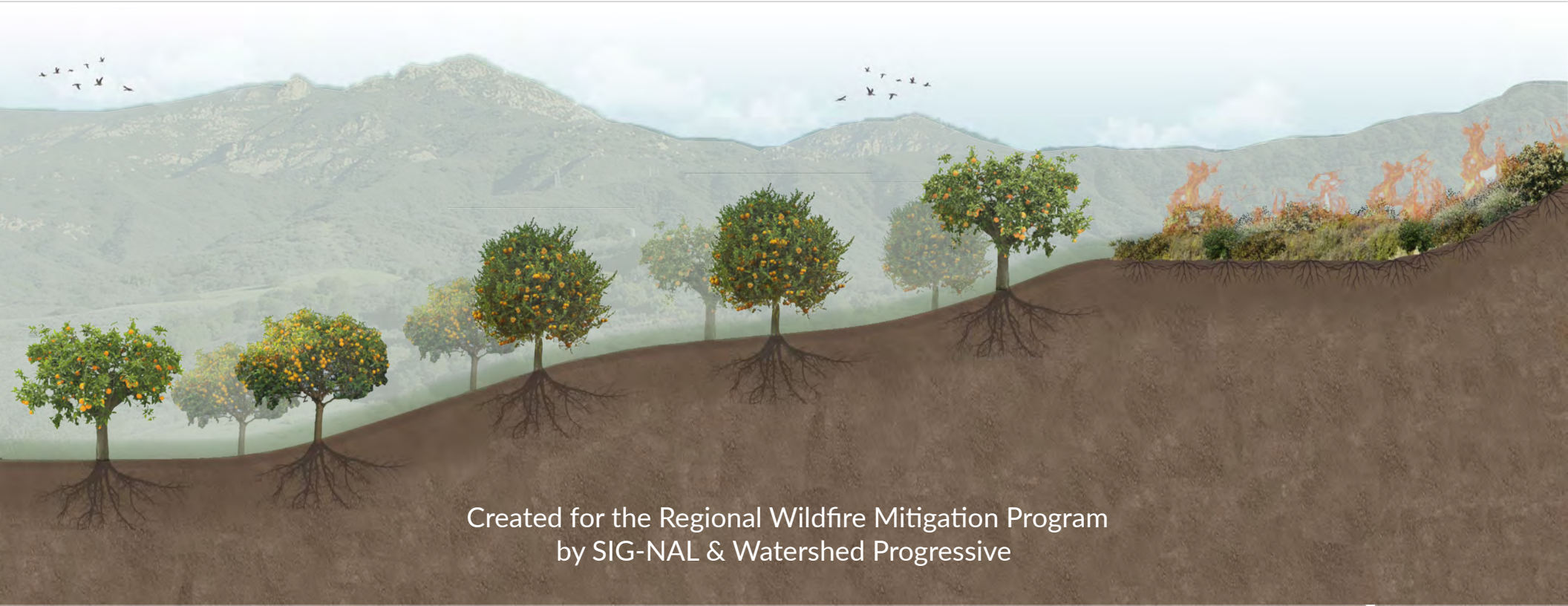




# Design Templates for Wildfire Mitigation & Landscape Resilience

## Vegetation Management Strategies for the Wildland Urban Interface in Coastal Central & Southern California

### Back Burnable Buffer Zones



Created for the Regional Wildfire Mitigation Program  
by SIG-NAL & Watershed Progressive

# A

# Back Burnable Buffer Zones

## How to create a back burnable buffer zone to reduce wildfire risk

### Using Backfire to Counter Approaching Wildfire

A backfire is a controlled fire set deliberately to counter approaching wildfire. Backburning consumes combustible material before the wildfire, and creates a fire belt that slows wildfire (1). Unlike prescribed burning, which is planned fire set under predetermined weather conditions, backburns are conducted as a response to wildfire, and are higher risk. Escaped backburns can add to the wildfire (2). Backburn fires tend to be set at night when fire danger is low.

Backburning is most often a last-resort measure, and therefore requires working directly with fire personnel in the case of approaching fire. Planning for and creating a backburn zone on your property ahead of time will give firefighters an additional wildfire mitigation strategy to use if necessary, and a space from which to safely fight fire.

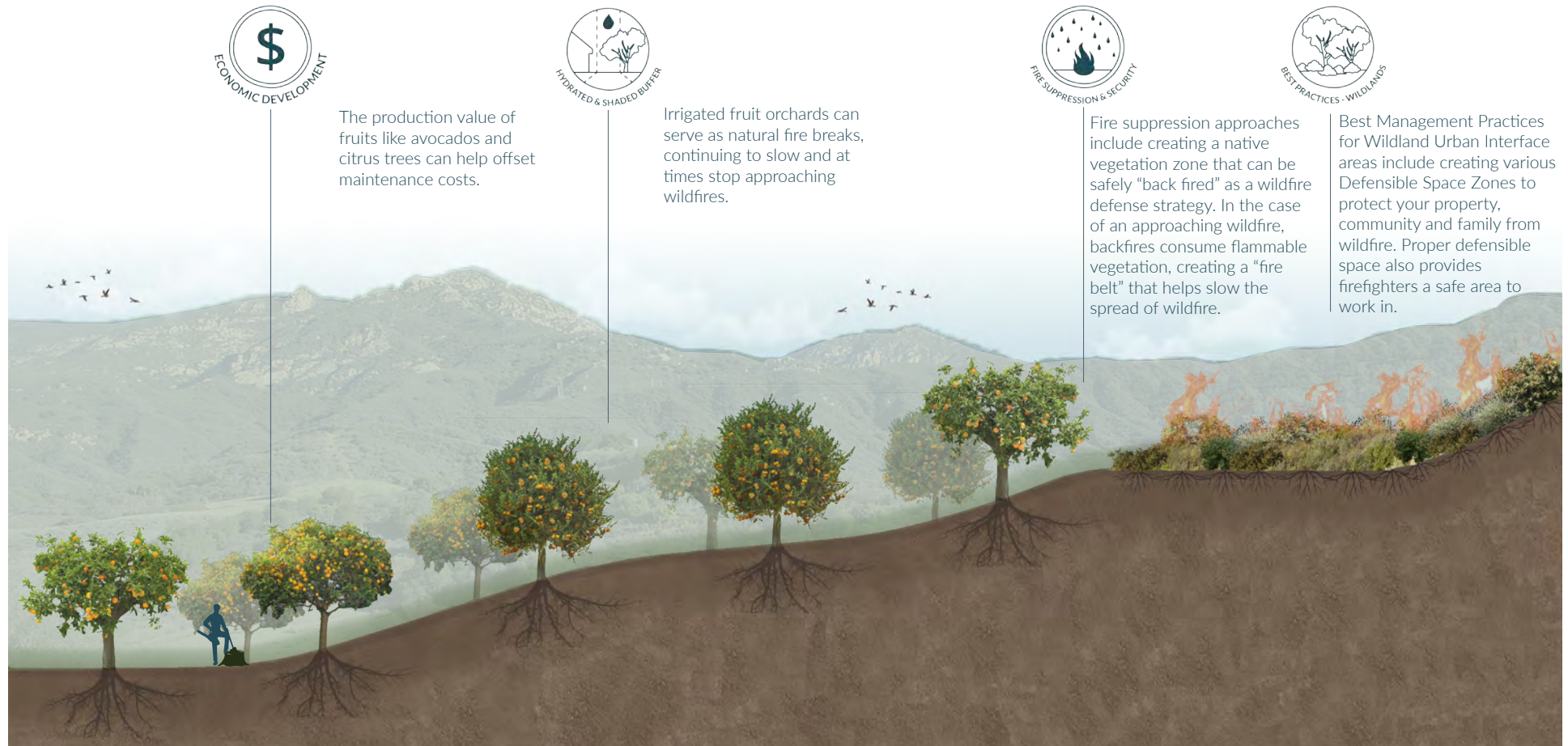


ILLUSTRATION: Basic Guidelines for Backburn Zone Placement on an Agricultural Property



# Back Burnable Buffer Zones

## Prototypical plans, sections and details for implementation

### Grasses and Shrubs in the Backburn Zone

Planting backburn zones with native grasses and low shrubs creates an area that can be maintained by mowing when needed. Including plants that are drought tolerant and not highly flammable reduces the risk of a backburn escaping.

Backburn zones can be created by planting appropriate plants (see Plant Palette) on the uphill side of agricultural fields. In areas that are already dense with chaparral and other plants, selectively clearing away larger shrubs and high maintenance plants will help create an area that can be used for controlled fire.

Backburn zones set adjacent to crop fields can protect homes and other infrastructure, ideally slowing or stopping fire before it reaches the orchards, which serve as an additional buffer between wildfire and homes and communities.

- ✓ DO coordinate with local fire personnel to determine best placement for a backburn zone and a line of communication in the case of approaching wildfire.
- ✓ DO thin out thick shrubs and trees to create separation between them.
- ✓ DO consider working with design ecologists who can help plan the footprint of your backburn zone while protecting wildlife habitat or areas recovering from previous wildfires (3).
- ✗ DO NOT remove or treat threatened and endangered plant and animal species, such as elderberry and other sensitive species.

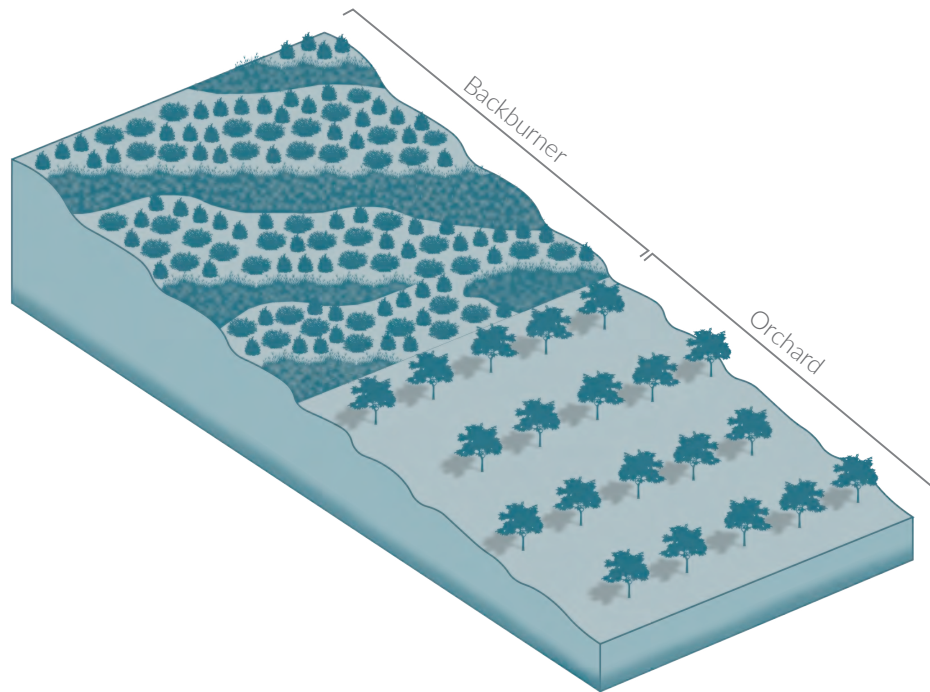
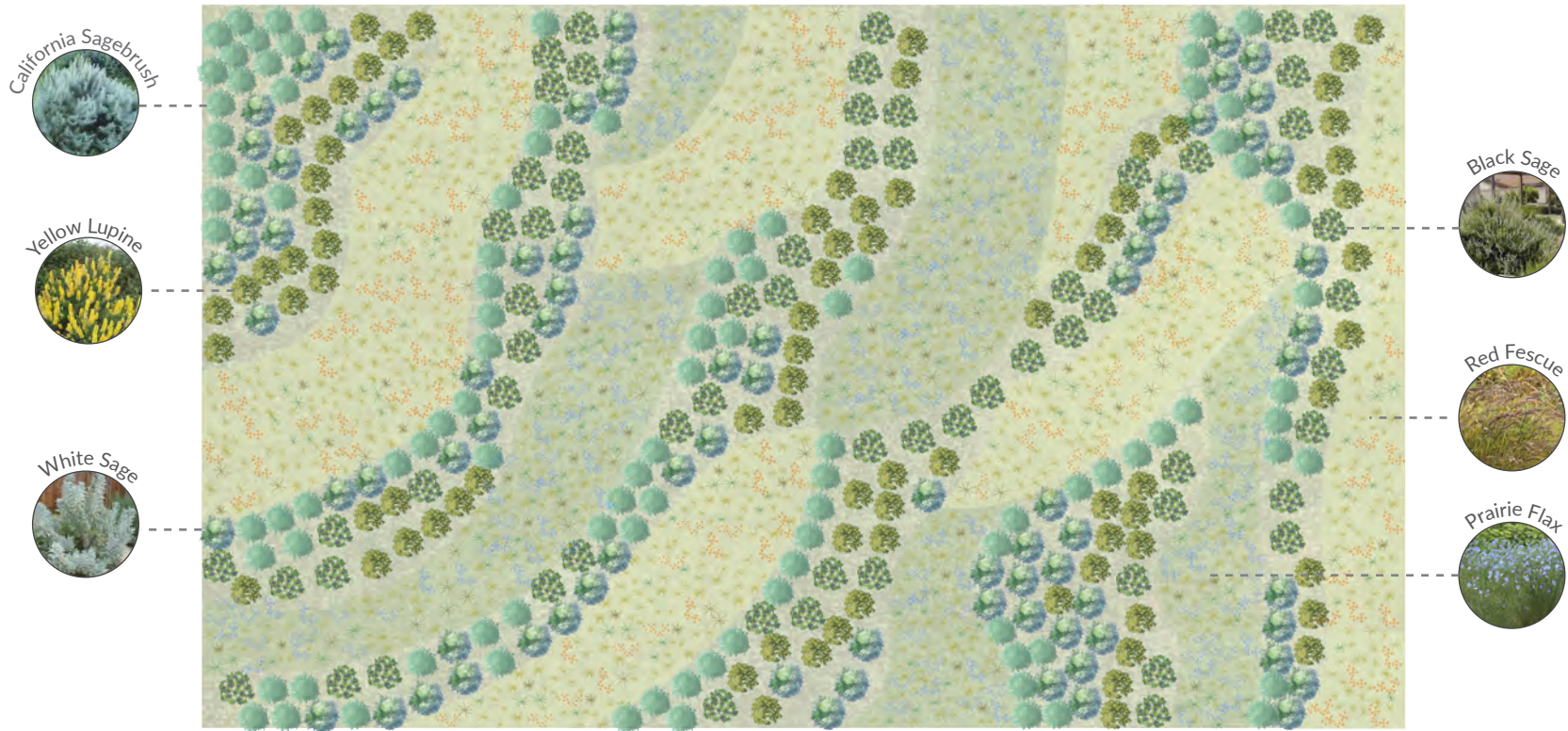


DIAGRAM: Backburn Zone  
Backburn zones should be placed uphill of agricultural fields.

# Back Burnable Buffer Zones

Prototypical plans, sections and details for implementation



Not to Scale



# Back Burnable Buffer Zones

Prototypical plans, sections and details for implementation

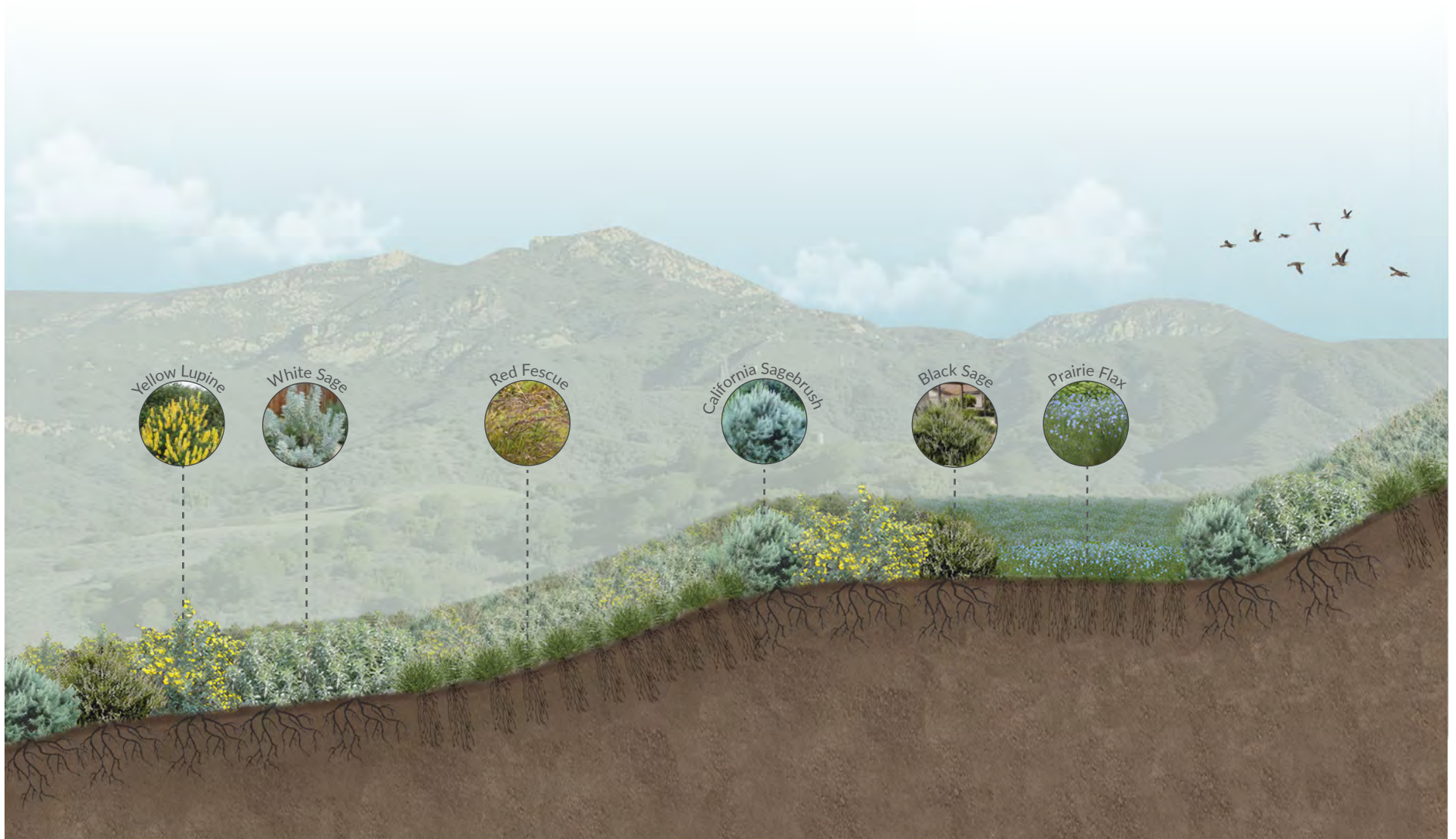


ILLUSTRATION: Backburn Zone Planting Palette on a slope.



# Back Burnable Buffer Zones

## Plant Palette

### SHRUBS

*Eriogonum fasciculatum*  
California Buckwheat

### SHRUBS

*Artemisia californica*  
California Sagebrush

### SHRUBS/PERENNIALS

*Acmispon glaber*  
Deerweed

### SHRUBS

*Bacharris pilularis* spp. *Pilularis*  
Coyote Brush

### GRASSES

*Festuca rubra*  
Red Fescue

*Salvia apiana*  
White Sage

*Dendromecon rigida*  
Bush Poppy

*Eriophyllum confertiflorum*  
Golden Yarrow

*Salvia mellifera*  
Black Sage

*Linum lewisii*  
Prairie Flax

*Encelia californica*  
California Encelia

#### SOIL DRAINAGE

- slow
- adaptable
- fast

#### SUN/SHADE

- full sun
- partial sun / shade
- full shade

#### WATER USAGE

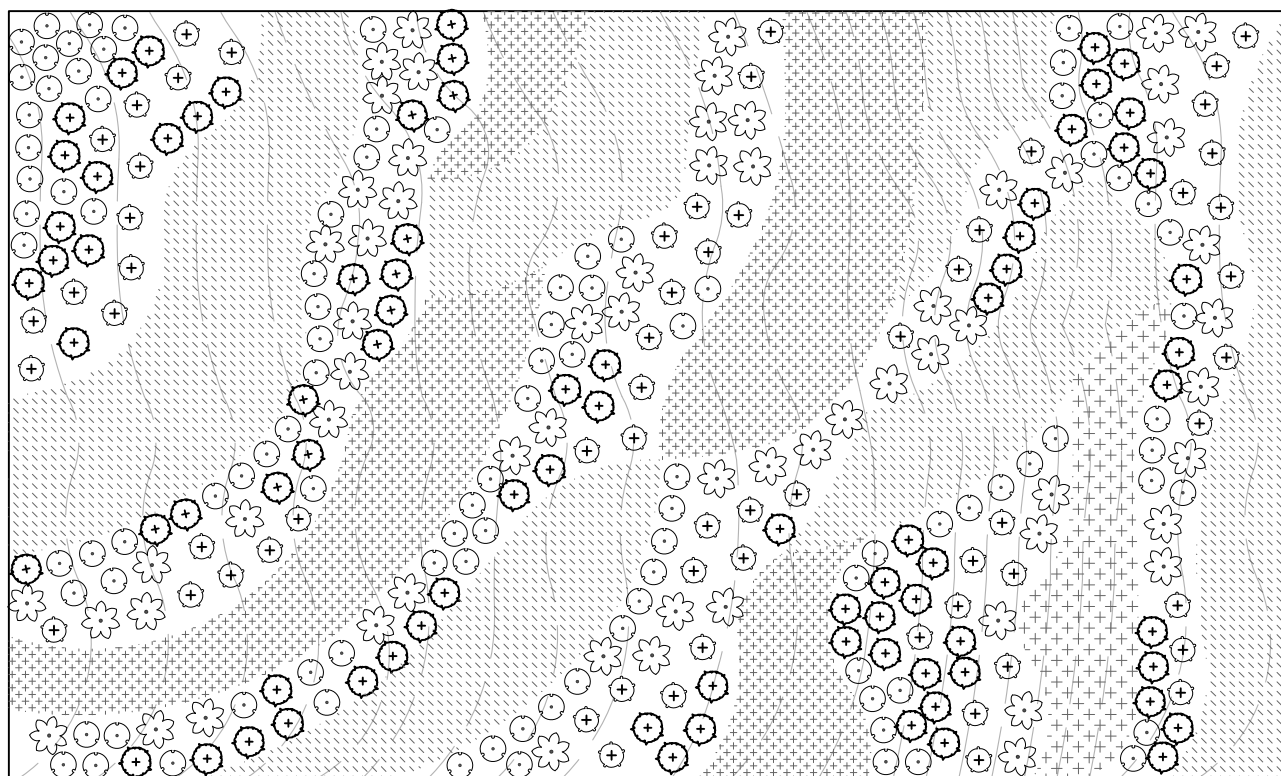
- low
- moderate
- high

#### OTHER CONSIDERATIONS

- erosion control
- pollinator
- fire resistant with maintenance

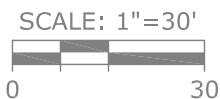
# Back Burnable Buffer Zones

## Construction Details and Additional Resources



### PLANT SCHEDULE

SHRUBS	COMMON / BOTANICAL NAME
	California Sagebrush <i>Artemisia californica</i>
	Bush Poppy <i>Dendromecon rigida</i>
	White Sage <i>Salvia apiana</i>
	Black Sage <i>Salvia mellifera</i>
GROUND COVERS	COMMON / BOTANICAL NAME
	Red Fescue <i>Festuca rubra</i>
	Lewis Flax <i>Linum lewisii</i>



## 1 BACK-BURNER PLANTING PLAN





# Back Burnable Buffer Zones

## Construction Details and Additional Resources



### Works Cited - Back Burnable Buffer Zones

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3. Bowman, D. (2014, August 7). Explainer: Back burning and fuel reduction. The Conversation. <http://theconversation.com/explainer-back-burning-and-fuel-reduction-20605>