

# Success in forest improvement projects

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Brown Bag Special  
Forest Working Group

# What are your goals?

- Safe area
- Fire control: fuelbreak
- Fire control: vegetation management
- Stand growth
- Species selection
- Site management – Sunlight, Shade, View, Shelterbelts
- Site management – Slash control, burn prep, burn
  
- Aesthetics, Watershed Management, Working in context

# Every Goal has its own metric of success

- Separation of canopy
- Trees per acre
- Resprouts per cut stem
- Canopy cover
- BTU's per square meter
- Tree growth
- Species suppression
- Fuel ladder
- Forest stocking
- Hardwood competition
- humidity, shade, soil protection
- Fire hazard
- Forest production
- Invasive removal

Commercial forestry can separate the canopy & create breaks in the horizontal structure



Thinning for  
fuelbreaks means less  
in the air, less on the  
ground





The trees are spaced to maximize sun, water and nutrients for best growth and resilience.

The ground in the fuelbreak is clean.

Interlaced  
canopies,  
loss of vigor,  
insect attack  
makes  
standing  
fuel.





Restarting the stand is measured in acres of re-discovered 'crop trees', the reflection of the landowners' goal.









Slash is usually left to decompose, but better to be burned, chipped or in contact with the soil.

Less BTU's on the ground



Slash can  
also be  
mulched  
into the  
ground



Cut hardwood  
trees tend to  
sprout –

See if you can limit  
with shade in the  
fuel break

High stumps and  
single stems to  
minimize fuel  
ladders



Resprouts from  
a cut madrone  
crown

High stumps  
and single stems  
tend to  
minimize fuel  
ladders



Resprouts can  
have little vigor,  
with shade or  
pests (here, SOD)



SOD is also thinning the canopy, and your stands must be checked regularly,

The loss of the tanoak is thinning the redwoods, fir, oaks and madrones, creating volunteer fuelbreaks.



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In many cases,  
you will be  
planting, growing  
and protecting  
trees



Getting some trees to work with the deer requires protection.

These trees are Douglas-fir, planted for watershed protection

Species desirability changes over time!

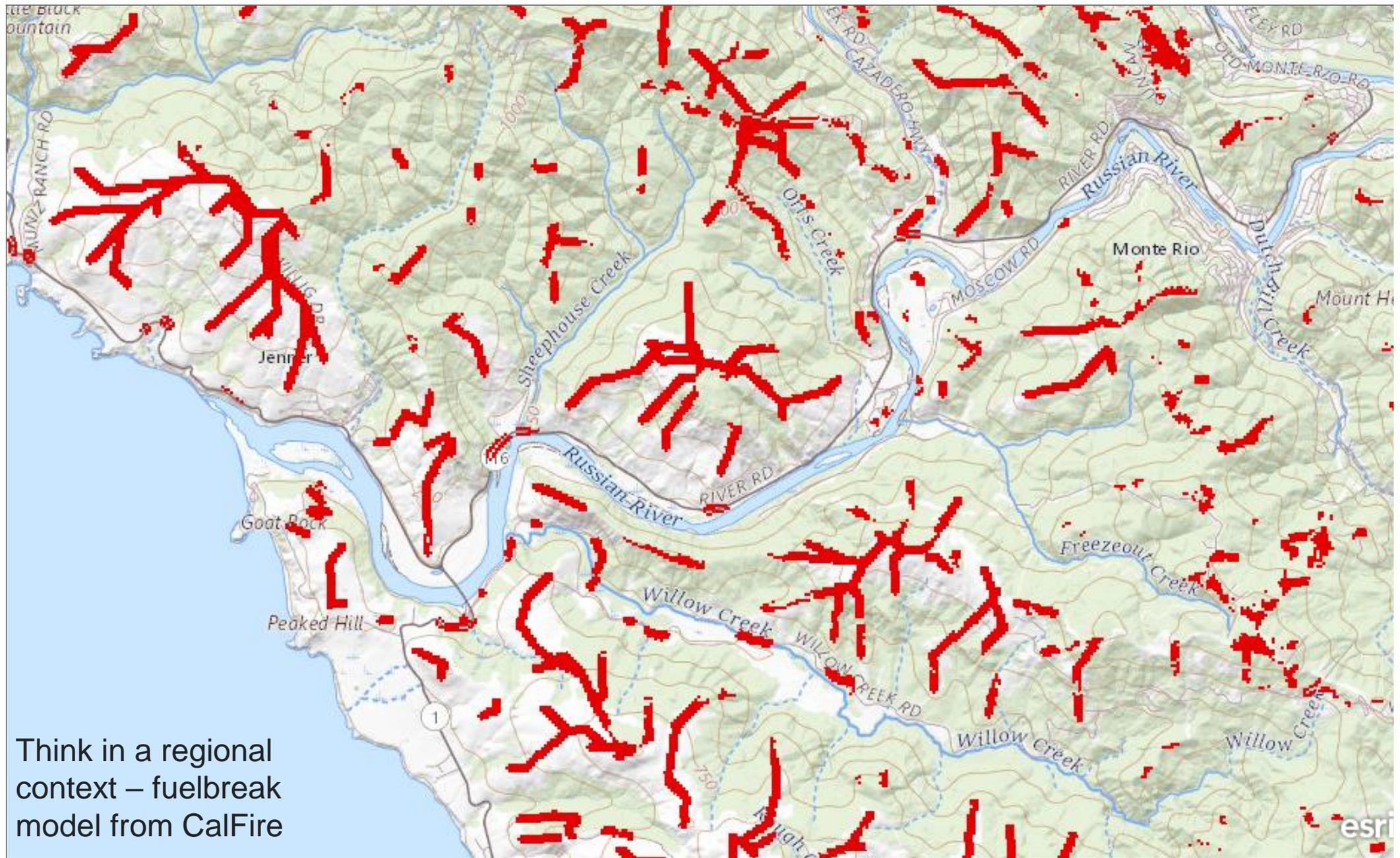


Aesthetics is often just opening up the 'crop' trees of size and interest.

(They don't even need to be alive.)



# bear flat



Think in a regional context – fuelbreak model from CalFire



And at a landscape scale, aesthetics may be designed from or for a point of reference.