

Cuddy Valley Forest Health/Fuels Reduction Project

The Cuddy Valley Forest Health/Fuels Reduction Project consists of approximately 1,200 acres of natural stands that we identified as overstocked and at risk of loss to insect and disease. The purpose of the project is to mitigate the mortality caused by the Ips bark beetles in the project area to improve forest health and improve resilience to insects, disease, and wildfire while protecting adjacent communities and reducing the risk of catastrophic wildland fire.

The project area was identified in the National Insect and Disease Forest Risk Assessment of 2012 as being at high risk for pests that could destroy over 25% of basal area due to current forest conditions. Within the project area, average mixed conifer stands are five times the historic level of stand density. High stocking levels, overlapping crown canopies, and a dense understory contribute to resource competition, leaving trees in the project area susceptible to more insect attack and associated tree mortality. This mortality combined with stand structure and drought is increasing the risk of a severe stand replacing wildfire. Thus, in addition to treating these stands to reduce the risk of insect and disease infestation, some of the treatment areas were also identified as strategic for future wildfire and prescribed fire management.

Treatment areas are strategically placed around the community of Pinon Pines Estates, CA within the wildland urban interface, and in areas that connect to past and future treatment areas on both public and private lands. Past fire suppression activities have led to an unstable condition in the mixed conifer and pinyon-juniper stands in the project area by allowing the widespread accumulation of fuels in the form of litter accumulations, coarse woody debris and understory growth of shrubs and conifer regeneration. These conditions could lead to wide spread severe wildland fire affecting communities and natural resources, such as wildlife habitat within and adjacent to the treatment area. Although high-quality habitat for the California Spotted owl (CSO) is currently limited within the project area, it exists nearby. Removing hazardous fuels in this area could protect the adjacent high-quality spotted owl habitat against severe stand replacing fires. Other project outcomes include: stands that are more resilient to disturbance, such as from insect, disease, and drought; reduced stocking levels and vegetation composition that more closely resemble historic levels; and reduced surface and ladder fuels resulting in reduce fire intensities and threat to nearby communities.

Environmental review in compliance with NEPA has been completed for the project, and details concerning the precise location, techniques and conditions under which the project will be implemented are outlined in the [Decision Memo](#). The following table displays the distribution of the treatments by stand type; refer to the Decision Memo for specific details regarding the treatment.

Stand Type	Treatment	Acres
Mixed Conifer	Hand Cut/Hand Pile	182
	Mechanical Treatment	532
Pinyon Juniper	Hand Cut/Hand Pile	8
	Mechanical Treatment	69
Sagebrush-scrub	Hand Cut/Hand Pile	34
	Mechanical Treatment	375

Timbered Stands:

- Thinned to a range of 60-100 basal area per acre – target of 80 basal area per acre
- Removal of trees throughout all diameter classes and include commercial trees
- Residual trees selected for vigor
 - Jeffrey pine will be retained as per Forest Plan direction unless they are a hazard tree or infected with dwarf mistletoe
 - All black oak will be left unless deemed a hazard tree
 - Early seral species will be biased for when selecting residual trees
- Slopes > 35% slope would be hand thinned
- Slopes < 35% slope would be:
 - Mechanically harvested when stands have viable amounts of accessible commercial sized timber
 - Masticated when stands do not have viable amounts of accessible commercial sized timber
 - Masticated when stands consist primarily of an over-abundance of smaller trees and shrubs
- Activity fuels will be lopped and either scattered or hand piled depending on conditions. Hand piled would be burned
- Removal of hazard trees (live and dead) of all sizes would occur along utility line, roads, trails, and landings for safety, except where restrictions for removal apply
- Stand retreatments may need to occur every 3 to 7 years depending on re-growth

Sagebrush-Scrub

- Treatment focused within 300 feet of the Forest Service property lines, and 100 feet from the timber line – up to 85 to 95% would be treated
- Slopes > 35% would be hand treated, piled, and burned.
- Slopes < 35% would be masticated
- Retreatment is anticipated with higher frequency than timber stands.

Slash, Small Trees, Shrubs

- Tractor piled or masticated with a track-mounted masticator
- Mastication or tractor piling would occur shortly after thinning is complete
- Post-harvest machine piling and burning would occur as necessary to reduce surface fuels to < 10% tons per acre
- Mastication may be substituted for tractor piling where more effective or where increasing soil cover is a higher priority.

Cuddy Valley Vicinity Map



Cuddy Valley Vicinity Map



Los Padres National Forest
Santa Barbara Ranger District

-  Cuddy Valley
-  Administrative Forest Boundary
-  National Forest System Lands

0 0.5 1 2 3 4 5 Miles

02/2018

Tecuya Ridge Shaded Fuelbreak Project

The Tecuya Ridge Shaded Fuelbreak Project consists of approximately 1,626 acres of natural timbered stands and brush fields that were identified by the Mt. Pinos Community Wildfire Protection Plan and the Los Padres National Forest Strategic Fuelbreak Assessment as priority treatment areas (see [vicinity map](#)). The identified forested stands within the project area currently exhibit stand structures that are conducive to stand-replacing wildfire events. Past fire suppression activities have led to unstable conditions in the mixed conifer and pinyon-juniper stands by allowing widespread accumulation of fuels in the form of litter accumulations, coarse woody debris, and understory growth of shrubs and conifer regeneration. The existing understory, dense crowns, understory fuels ladders, existing fuel loads, and continued periods of drought place the stands at risk from wildfire. Since 1998, there have been 15 wildfires within the Tecuya treatment areas with a majority of fire starts occurring in August and September. Approximately 67% of the fire starts were caused by human-related activities. While all these starts were fully suppressed at less than 10 acres, there have been four large fires over 1,000 acres within or adjacent to the project area. The existing “at-risk” condition of the timbered stands in the project area is not in line with the goals and desired conditions derived from the 2005 Los Padres Land Management Plan (LMP), specifically - Forest Plan Goal 1.1: Community Protection, with Forest Plan desired conditions for FH 2: Restoration of Forest Health and FH 4: Insect and Disease Management, Forest Plan Goal 1.2: Restoration of Forest Health, and National Strategic Plan Goal 1 – Reduce the risk from catastrophic wildland fire.

The Mount Pinos Ranger District has been working with local individuals and groups via efforts such as the Mt. Pinos Communities Wildfire Protection Plan (CWPP) to establish priorities, cooperate on activities, and increase public awareness of and participation in site-specific projects such as the Tecuya Ridge Shaded Fuelbreak Project to meet desired conditions. The purpose of the project is to provide safe and effective locations from which to perform fire suppression operations, to slow the spread of a wildland fire at these strategic fuelbreak locations, and to reduce the potential for the loss of life, property, and natural resources. In addition to the fuelbreaks, this project would undertake timber stand improvement activities such as thinning to help reduce existing stand densities and increase forest resilience to future disturbances (i.e. drought, disease, wildfire, etc.).

Although high-quality habitat for the California Spotted owl (CSO) is currently limited within the project area, it exists nearby. Removing hazardous fuels in this area could protect the adjacent high-quality spotted owl habitat against severe stand replacing fires.

Environmental review in compliance with NEPA has been completed for the project, and details concerning the precise location, techniques and conditions under which the project will be implemented are outlined in the [Decision Memo](#). The following table displays the distribution of the treatments by stand type; refer to the Decision Memo for specific details regarding the treatment.

Stand Type	Treatment	Acres
Mixed Conifer	Hand Cut/Hand Pile	467
	Mechanical Treatment	828
Pinyon Juniper	Hand Cut/Hand Pile	54
	Mechanical Treatment	192
Sagebrush-scrub	Mechanical Treatment	85

Treatments would include a combination of mechanical thinning, mastication of brush/smaller trees, and hand treatments such as hand thinning, brush cutting, pruning, and piling of material. Pile burning and jackpot burning will be used to reduce fuel loads after thinning or mastication activities.

Mixed Conifer/Pinyon-Juniper

- Thinned to a range of 40 – 80 sqft basal area per acre.
- Removal of trees throughout all diameter classes and include commercial trees
- Residual trees selected for vigor
 - Jeffrey pine will be retained as per Forest Plan direction unless they are a hazard tree or infected with dwarf mistletoe
 - All black oak will be left unless deemed a hazard tree
 - Early seral species will be biased for when selecting residual trees
- Slopes > 35% slope would be hand thinned
- Slopes < 35% slope would be:
 - Mechanically harvested when stands have viable amounts of accessible commercial sized timber
 - Masticated when stands do not have viable amounts of accessible commercial sized timber
 - Masticated when stands consist primarily of an over-abundance of smaller trees and shrubs.
- Activity fuels will be lopped and either scattered or hand piled depending on conditions. Hand piles would be burned
- Removal of hazard trees (live and dead) of all sizes would occur along utility line, roads, trails, and landings for safety, except where restrictions for removal apply.
- Within the Antimony Inventoried Roadless Area (IRA):
 - Only smaller trees (21 inch DBA or less) would be cut or removed
 - Larger trees may be cut or removed for safety and operability.
 - No new road construction or reconstruction is proposed

Sagebrush-Scrub

- Up to 85 to 95% would be treated
- Slopes > 35% would be hand treated, piled, and burned.
- Slopes < 35% would be masticated

Slash, Small Trees, Shrubs

- Tractor piled or masticated with a track-mounted masticator
- Mastication or tractor piling would occur shortly after thinning is complete
- Post-harvest machine piling and burning would occur as necessary to reduce surface fuels to < 10% tons per acre
- Mastication may be substituted for tractor piling where more effective or where increasing soil cover is a higher priority.

Tecuya Ridge Shaded Fuelbreak Project Vicinity Map



Frazier Mountain Project

The existing conditions on Frazier Mountain has changed in the last 100 years due factors related to Euroamerican settlement and modern fire suppression. Substantially less forested area has burned on Frazier Peak along with several areas within the Los Padres National Forest. Conifer stands show much higher and homogenous tree stocking than seen historically in the project area. This shift from the historic fire regime has contributed to an increase in stand densities, fire-tolerant trees, and a shift in stand structure. The Frazier Mountain Project is located adjacent to the Frazier Park community in the Mt. Pinos Ranger District, Los Padres National Forest and consist of 2,850-acres dominated by conifer forest, woodlands, and shrublands (see [vicinity map](#)). This project would involve noncommercial thinning and fuels treatment in natural forest, high value recreation areas, and a tree plantation on approximately 2,386 acres of the 2,850-acre project area in order to:

- Restore forest health to encourage the return to historic conditions including trees per acre, stand density index, stand structure, and stand diversity;
- Provide fire hazard reduction, reduce wildland fire risk, and maintain the health of mature conifer stands, and existing conifer plantations;
- Treat vegetation around existing facilities to reduce high risk wildfire including: High value recreation areas, campgrounds, trail heads, special-use dwellings and the Mount Pinos Ranger District building and warehouse complex.

In addition to benefits to forest health and surrounding communities, the Frazier Mountain Project would benefit the California Spotted Owl (CSO) populations in adjacent communities. Suitable spotted owl habitat is located within the project area, and the Frazier Mountain east spotted owl protected activity center (PAC) has been confirmed as being occupied as recently as 2013. The greatest threat to the CSO is the loss of habitat and subsequent population loss due to large stand-replacing wildfires and beetle-related mortality. The project actions are intended to reduce fuels in proximity of the PAC and could protect it from stand-replacing wildfires. In areas where broadcast burning would occur, there is potential for enhanced quality of potential foraging habitats for the CSO. Included in this project is an improved fuelbreak treatment on an existing fireline created during the Day Fire in 2008. This fuel break would serve as a point of control in the event of wildfire and to be used as an anchor point for prescribed under burning operations to protect natural resources including habitat and adjacent communities.

The Frazier Mountain project is divided into four treatment types: timber stand treatments, tree plantation treatments, fuelbreak and prescribed fire treatments, and Chuchupate Campground, special use residence and Mr. Pinos District Ranger Office fuel reduction treatments. The treatments included in this project have undergone NEPA compliance review: The [Environmental Assessment](#) and [Decision Notice and Finding of No Significant Impact](#) provide complete details concerning the precise locations, techniques, conditions, and considerations for project implementation.

Key summary and details concerning each treatment are as follows:

Table 1. Summary of Treatment

Treatment Activities	Alternative 3 Acres/Miles/ #
Project Area acres (managed by USDA-FS)	2,850
Private Ownership acres (if intermingled)	0.0
Total Project Area acres	2,850
Forested Stand Treatments (on FS acres only)	
• Commercial Thin (CT) <i>(includes NCT and activity fuels treatments on same acres.)</i>	0.0
• NonCommercial Thin only (NCT) <i>(includes activity fuels treatments on same acres)</i>	1,281
*Total CT/NCT and NCT only acres	1,281
Commercial Harvest Landings / Transportation Activities	
• Temporary road construction miles	0.8
• Timber landings # <i>(estimated)</i>	10
Fuels Treatments (on FS acres only)	
• Prescribed Fire Treatments (upper Frazier Mt), also includes Frazier Mt Fuelbreak Treatments	823
• Fuel Reduction Treatments <i>(mastication, thin, handpile, burn, – lower project area including Chuchupate Campground, trailheads, special use residences and FS facilities)</i>	282
*Total Fuels Only acres	1,105
Total Project Treated Acres (Fuels-CT-NCT Treatments)	2,386

Frazier Mountain Timber Stand Treatments:

- Non-commercial thinning of understory trees up to 10” diameter (1,040 acres)
- Removal of >10” diameter trees only if they pose a safety hazard
- Removal of ladder fuels, tops, limbs, and excess large fuels using:
 - machine piling, mastication, chipping, hand piling, loping-and-scattering of activity fuels
 - pile and burn on-site
 - hand removal using chainsaws, piled then burned on three stands (47 acres)

Frazier Mountain Timber Stand Treatments

- Non-commercial thinning (241 acres) using hand or machine piled and burning or jackpot burning

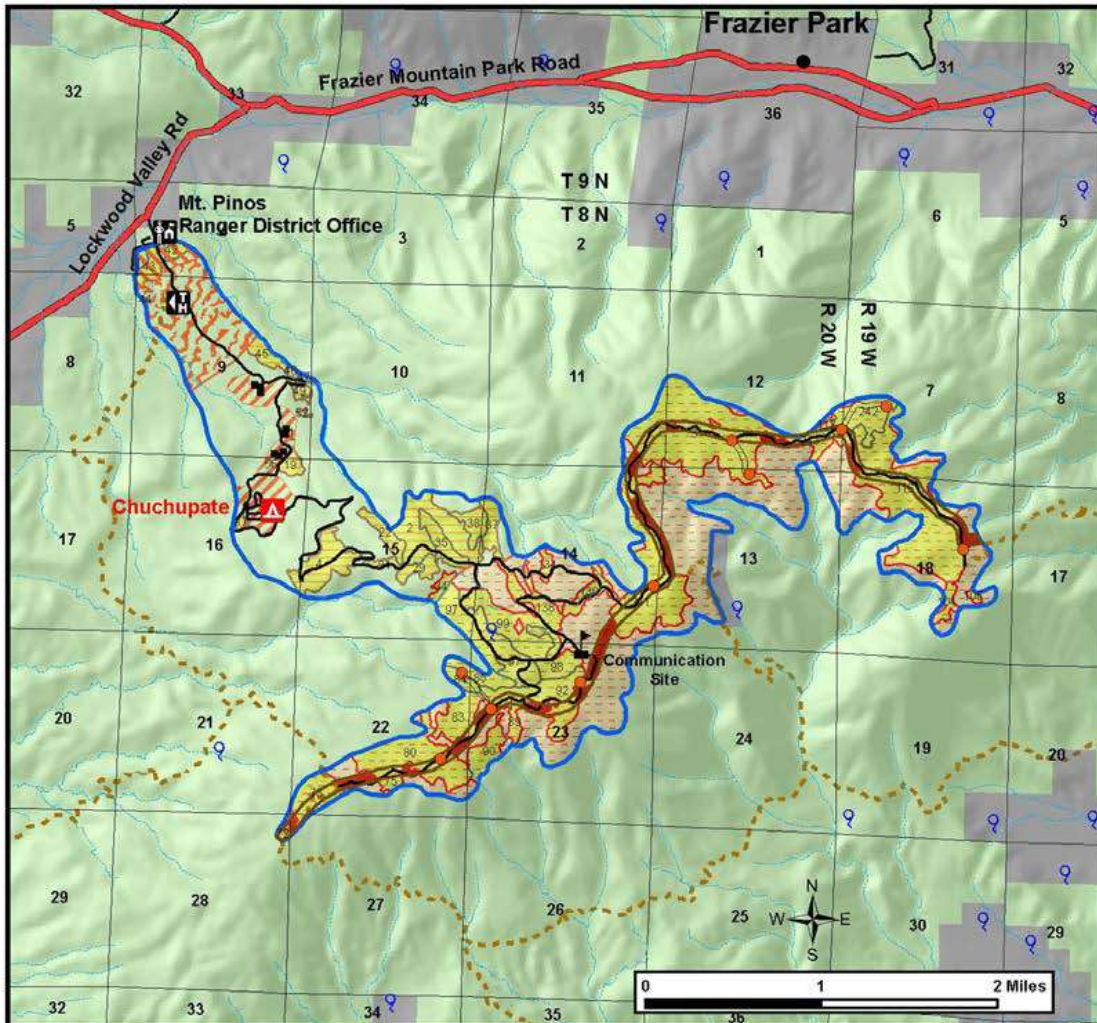
Frazier Mountain Fuelbreak

- Improvement of the 2008 Day Fire fireline to 7.5 miles long and up to 300 feet wide (approximately 220 acres)
- Treated using a combination of non-commercial thinning, mastication of shrubfields, pile burning, jackpot burning, and prescribed fire

Chuchupate Campground, Special Use Residences, and Mt. Pinos RD Office Fuels Reduction Treatments

- Treatments include a combination of mastication or burn (173 acres), handpile/burn (14 acres), and noncommercial thin/handpile/burn (95 acres)

Vicinity Map and Treatment Areas for the Frazier Mountain Project



Frazier Mountain Alternative 3

Los Padres National Forest
Mt. Pinos Ranger District

Legend

- Chuchupate CG
- Project Boundary
- Spring/Seep
- Private Lands
- OHV Trailhead
- District Office
- Sections
- Major_Roads
- USFS Roads
- USFS Trails
- Streams

- landings (10)
- temporary roads (0.8 mi.)
- Fuel Break Zone
- Silviculture Treatments**
- NCT
- Fuel Treatments**
- handpile and burn
- masticate or burn
- thin, handpile and burn
- machine and/or handpile and burn
- machine and/or handpile and burn, underburn
- thin, machine and/or handpile and burn, underburn
- underburn



Prepared by
TEAMS Ecosystem Unit
November 23, 2011
B. Davidson



Monterey Strategic Community Fuelbreak Improvement Project

Conditions for rapid fire growth can exist during any season on the Los Padres National Forest. Response time for suppression actions plays a critical role in successful fire control and the National Forests' ability to keep a wildfire out of nearby communities. Since 2008, 118 homes have been lost to wildfire near the perimeter of the Monterey District (See [vicinity map](#)). The purpose of this project is to re-establish and maintain historic fuelbreaks at strategic locations in proximity to communities at-risk from wildfire on the periphery of the Monterey District. These fuelbreaks would facilitate wildfire suppression actions and reinforce defensible locations by providing areas of lower fire intensities, improve firefighter access, enhance fireline production rates, and reduce the adverse fire suppression impacts on the wilderness landscape.

This project is an example of the investment the Los Padres National Forest is making in wildfire preparedness and is a result of collaboration between the Forest Service, local stakeholders, and government and non-government organizations through Firescape Monterey. Since 2011, the Forest Service has been actively engaged in Firescape Monterey, a collaborative approach to identify and develop management strategies for local ecological values. The threat of wildland fire to human communities prompted Firescape Monterey to focus on helping communities become fire adapted. Through collaborative learning, the Forest Service has been able to utilize input from local stakeholders as we focus on planning for future wildfire events. With this project, the Forest Service is helping to transform local communities into safe and resilient places to live. The 16 fuelbreaks included in this project have undergone NEPA review: The [Final Environmental Impact Statement](#) and [Record of Decision](#) provide complete details concerning the precise location, techniques, conditions, and consideration that the scope of the work must take place.

One of the greatest threats to the California spotted owl populations is habitat loss from wildfire. Abundant habitat is present across the project area. The Big Sur watershed and tributaries contain high quality nesting and roosting habitat and have had several sightings recorded within forest databases. The area east of Mount Manuel to Big Sur Wild River segment also contains large areas of suitable nesting habitat within the Ventana wilderness and is likely occupied. Fuelbreaks may increase the availability and access of prey by creating foraging opportunities and creating openings. These fuelbreaks also offer protection to habitat by improving protection from high intensity wildfires and assisting wildfire suppression actions around the resource.

The Strategic Community Fuelbreak Improvement Project will re-establish and maintain approximately 24 miles (approximately 542 acres) of historically used fuelbreaks – all of which originated as firelines – within the wildland urban interface threat zones on National Forest System lands. Establishment and maintenance of fuelbreaks will include removal of medium (light brush and small trees) and heavy (dense brush) fuels, leaving a vegetative ground cover of grass, forbs and small shrubs, with the existing overstory intact.

In Wilderness:

- Re-establish and maintain approximately 10.4 miles (approximately 169.4 acres) of historically used fuelbreaks in the Ventana Wilderness (Table 1).

- Wilderness fuelbreak maintenance will occur every 3-5 years through a combination of manual treatments utilizing traditional tools and handheld motorized tools for cutting vegetation, piling and pile burning.
- To determine the minimal tool in wilderness, a Situational Report will be prepared for each wilderness fuelbreak segment following adaptive management criteria.

Table 1. Wilderness Fuelbreaks

Wilderness Fuelbreaks		
Fuelbreak Segment	Length in Miles	Maximum Feet Width
Skinner Ridge – Devils Peak	1	150
Skinner Ridge	2.2	150
Post Summit – Little Sur River	1.8	150
Mount Manuel – Big Sur Wild River Boundary	0.9	150
Hennicksons Ridge – Tassajara Road	4.5	150

In Non-Wilderness:

- Re-establish and maintain approximately 13.6 miles (approximately 371.3 acres) of historically used fuelbreaks on non-wilderness lands (Table 2).
- Non-wilderness fuelbreak maintenance will occur every 3-6 years through a combination of manual thinning with handheld motorized tools and chippers, mastication with excavators, and herbicide. Material not masticated or chipped, will be piled for burning manually or with excavators.
- The herbicide Tricolpyr butoxyethyl ester (BEE) [Garlon® 4 Ultra or an equivalent] mixed with modified seed oil at a 50:50 ratio is authorized on non-wilderness lands only and applied to freshly-cut stumps and stubs as soon as possible, preferably within 1 hour after cutting. Application will be restricted to low-volume hand-held spray equipment with direct spray, wick or brush applicator.
- Prescribed fire is authorized to treat approximately 64.7 non-wilderness acres between the Chews Ridge Lookout Tower and the Monterey Institute for Research and Astronomy (MIRA).

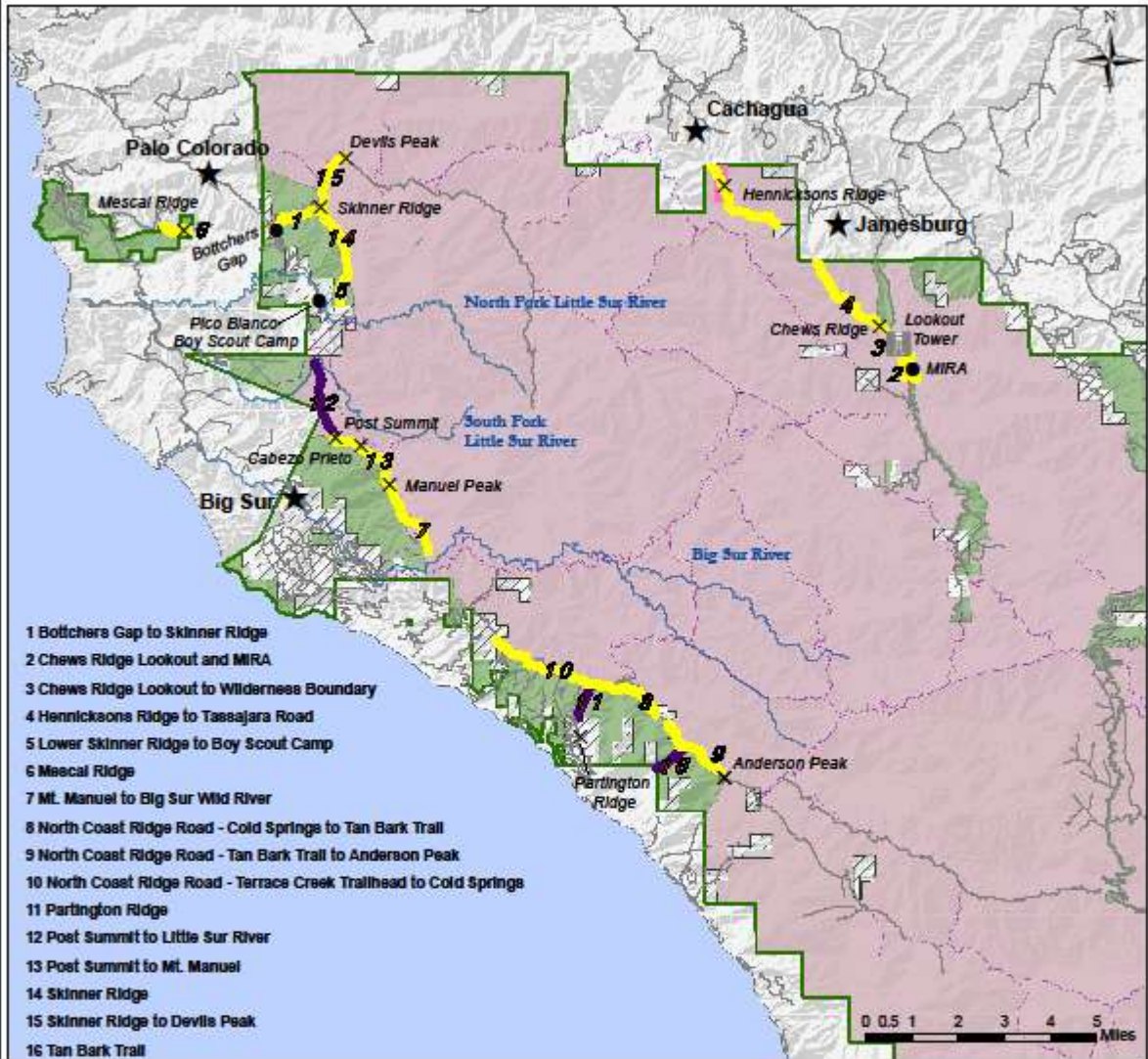
Table 2. Non-wilderness Fuelbreaks

Non-wilderness Fuelbreaks			
Fuelbreak Segment	Vicinity	Length in Miles	Maximum Feet Width
Botchers Gap – Skinner Ridge	Palo Colorado	1.3	150
Lower Skinner – Pico Blanco Boy Scout Camp	Palo Colorado	0.6	150
Mescal Ridge	Palo Colorado	0.6	300
Post Summit – Manuel Peak	Palo Colorado- Big Sur	2.7	150
(NCR) Terrace Creek Trailhead – Cold Springs	Big Sur	3.5	150
(NCR) Cold Springs – Tan Bark Trail	Big Sur	1.5	300
(NCR) Tan Bark Trail – Anderson Peak	Big Sur	1.1	150

Partington Ridge	Big Sur	0.8	150
Tan Bark Trail	Big Sur	0.8	From NCRR west: first 600 feet in length will be 300 feet wide; remaining length will be 150 feet wide
Chews Ridge Lookout – Wilderness Boundary	Cachagua Jamesburg	0.7	150

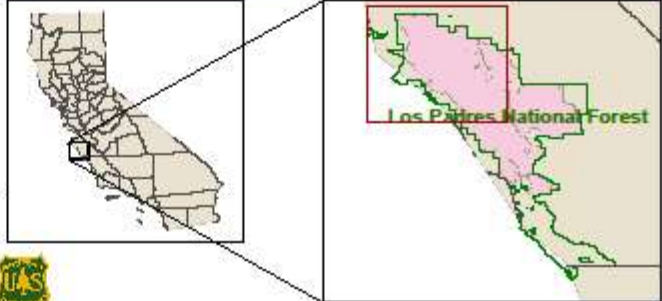
NCRR: North Coast Ridge Road

**Los Padres National Forest
Strategic Community Fuelbreak Improvement Project:
Vicinity Map**



- 1 Botchers Gap to Skinner Ridge
- 2 Chews Ridge Lookout and MIRA
- 3 Chews Ridge Lookout to Wilderness Boundary
- 4 Hennickaons Ridge to Tassajara Road
- 5 Lower Skinner Ridge to Boy Scout Camp
- 6 Mescal Ridge
- 7 Mt. Manuel to Big Sur Wild River
- 8 North Coast Ridge Road - Cold Springs to Tan Bark Trail
- 9 North Coast Ridge Road - Tan Bark Trail to Anderson Peak
- 10 North Coast Ridge Road - Terrace Creek Trailhead to Cold Springs
- 11 Partington Ridge
- 12 Post Summit to Little Sur River
- 13 Post Summit to Mt. Manuel
- 14 Skinner Ridge
- 15 Skinner Ridge to Devils Peak
- 16 Tan Bark Trail

Los Padres National Forest	Ventana Wilderness
Non Forest Service Ownership	LPNF Trails
New Wilderness Addition	Roads
Proposed Treatment Units	Peaks or Ridgetops
Not Opened for Soberanes Fire	
Opened for Soberanes Fire	



NAD83; UTM Zone 10N
 Data from LPNF SDE, GI, or Image Server.
 All data are approximate, intended for illustrative purposes.
 Map date: 08/2015; Map created for LPNF by VMS Enterprise Unit.

