

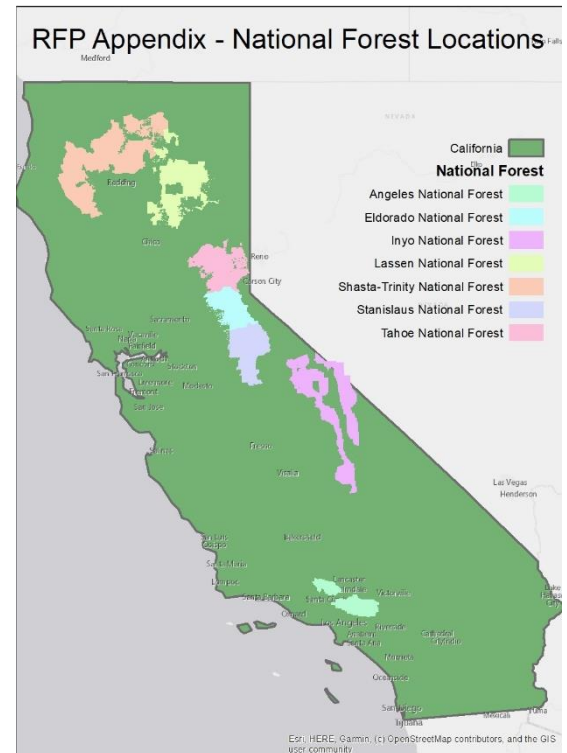
Pacific Southwest Fuels Management Strategic Investments Partnership

2020 RFP APPENDIX

OVERVIEW

Listed below are several potential projects that have been identified by National Forests throughout Region 5 as ‘High Priority’ for the 2020 RFP funding cycle. The descriptions below, organized by Forest, include a brief summary of the intent and need, along with additional supporting information as available to help detail or define aspects of the project. The information presented here varies by project, but at minimum provides preliminary information for interested applicants to begin to develop their proposal. All listed projects have either had all NEPA completed and are “shovel-ready” or will be so by the time awards are announced in late 2020.

The list of projects below is neither exhaustive nor does it represent the only projects eligible to receive funding through this opportunity. Applicants are encouraged to submit proposals that align with the goals of this program, whether they explicitly address the needs listed here or not. However, this list does provide known needs and priorities for the Forests, and as such, well developed proposals that address these needs will be highly competitive.



Questions about any of the projects below should be directed to NFWF Program Manager, Jim Bond.

ELDORADO NATIONAL FOREST

General Sherman Forest Health and Wildlife Resilience Project

The General Sherman Project is located within an approximately 12,340 acre area in the vicinity of the Silver Fork of the American River and portions of Alder Ridge, of which approximately 8,710 acres are National Forest System (NFS) lands. The project is bounded by Silver Fork Road on the east and Iron Mountain Road on the south. The area extends from approximately 4600 to 7100 feet in elevation in Sierra Nevada mixed conifer forest, for which much of the Natural Range of Variation (NRV) information has been summarized (Safford and Stevens, 2017), with some red fir forest at higher elevations (Meyers and North, In Press; Meyers 2013).

The project area currently does not meet desired conditions due to risk of loss of important landscape elements over large areas. High risk of loss of these forested areas to insect and disease related mortality and stand replacing wildfire jeopardizes management objectives to provide for resilient forests, wildlife habitat, recreation opportunities, clean water, productive soils, and other ecosystem services, and restricts the ability for managers to use fire for resource benefit during a wide range of conditions.

The project area has 10 Spotted Owl Project Activity Centers. Activities would result in little to no habitat alteration. Effects associated with this project are not expected to reduce the number of spotted owls that can be supported in the analysis area and are likely to increase long-term sustainability of owl habitat through increased resilience.

Based on current trends in habitat and climate, without treatment, habitat is at great risk to wildfire. To the degree that this project increases fire resiliency and protects PACs, HRCAs, and suitable habitat from future wildfires, the activities may increase the amount of habitat that remains available to spotted owls in the long-term.

Hand thinning using chainsaws and hand piling of cut material and surface fuels less than 12 inches diameter would occur on approximately 195 acres of 40 year old plantations where mechanical thinning was not feasible due to road access restrictions, 395 acres within 50 feet of roads open to public motorized vehicle use, and 10 acres within identified fuel breaks.

Outside of California spotted owl and northern goshawk PACs, hand thinning would target removal of select conifers trees less than 12 inches dbh.

Within California spotted owl PACs and northern goshawk PACs hand thinning would target select conifer trees less than 6 inches as needed to implement prescribed fire.

In areas within 50 feet of roads open to public motorized vehicle use, hand thinning would be conducted so as to facilitate collection of firewood by the public where feasible.

Mastication of approximately 260 acres of fuel break is proposed to remove shrubs and small trees (up to 11" dbh) through grinding or chipping with a masticating machine.

The NEPA decision was signed March 05, 2019. Additional information: [Decision Memo](#) and [Map and Proposed Action](#)

John Don't Fuels Reduction and Forest Health Project

The project area is located on National Forest System (NFS) lands within the Crystal Basin area of the Pacific Ranger District. The project area spans the vicinity of Wrights Lake, Ice House Reservoir, Union Valley Reservoir, Bassi Creek, Silver Creek, Gerle Creek, Francis Cow Camp, and Deer Creek. The proposed treatment areas are primarily in the mixed conifer forest and red fir forest types. All treatment areas are between elevations of approximately 5000 and 7000 feet.

There is a need to enhance and protect wildlife habitat and connectivity by protecting existing old forest habitat and identified Protected Activity Centers (PACs) for California Spotted Owl and northern goshawk by reducing the vulnerability of these areas to adverse effects from uncharacteristically severe wildfire. Suitable habitat has been mapped for spotted owl on the forest, based on vegetation meeting the suitable habitat as described in the Sierra Nevada Forest Plan Amendment (USDA 2001). Habitat is represented by California Wildlife Habitat Relations (CWHR) types 4M, 4D, 5M, 5D and 6). There are approximately 7,883 acres of habitat which meets these criteria within project area, and approximately 1,092 acres of habitat within proposed treatment units. This project has 9 Protected Activity Centers for California Spotted Owl.

Hand thinning and hand piling is proposed on sites where equipment limitations due to site sensitivity (from the presence of riparian areas or other values at risk) preclude operation of mechanical equipment, and in areas where hand thinning has been identified to be an efficient and effective treatment. Approximately 200 roadside acres and 23 acres of hand thin units. Within all units, hand thinning would target conifers trees less than 20 inches dbh. Along roads outside of commercial units, hand thinning of

trees up to 12” dbh, or up to 6” dbh in PACs outside of WUI, may be conducted within 50 feet from the edge of roads open to public use (Maintenance Level 2-5 roads). The objective of roadside hand thinning is to improve visibility and reduce fuels along roads within the project area. Where reasonable, this work would be done in a way that would provide the public an opportunity to gather fuelwood.

Approximately 142 acres of 30 year old or younger plantations, and including 38 acres of shrub fields, have been identified for treatment with a masticator to grind trees and shrubs in place to reduce competing vegetation, increase soil cover, and modify fire behavior through fuel rearrangement.

The NEPA decision was signed April 10, 2018. Additional information: [Preliminary EA, Specialist Reports, and Final EA and Draft DN/FONSI](#)

SHASTA-TRINITY NATIONAL FOREST

Elk Late Successional Reserve (LSR) Enhancement Project

The Elk Late Successional Reserve (LSR) Enhancement Project was developed to preserve and enhance LSR characteristics. The purpose and need for action included:

1. Reduce Risk – Reduce risk in early, mid and late-successional habitat and increase stand resilience to disturbance in the Elk Flat Late-Successional Reserve.

Natural disturbance is an important process within late-successional forest ecosystems, but both human and natural processes have altered the disturbance regime in the Elk Flat LSR such that without action, the existing and future late-successional habitat, including approximately 718 acres of designated critical habitat for the northern spotted owl, will remain at risk to loss from high tree densities, drought, disease, insects, and the potential for uncharacteristic high-severity wildfire.

The desired condition for forest stands is represented by tree densities that foster resilience to large-scale insect and disease disturbances, notably in ponderosa pine-dominated stands. The desired condition for fuels and fire behavior is stand conditions where natural, or prescribed, fire can play an integral role at protecting and enhancing late-successional habitat by maintaining health and diversity components, rather than reducing or eliminating late-successional habitat elements such as large decadent trees, snags and large down logs.

Secondarily, actions are needed to:

2. Accelerate Habitat Development – Accelerate development of late-successional and old growth forest characteristics and promote late-successional habitat connectivity.

The existing conditions will delay or prevent existing stands to develop into late-successional forest on approximately 1,500 acres of early and mid-successional forested stands. The desired condition within LSR includes structurally diverse mature and old-growth age classes with natural ecosystem processes present. Increasing individual tree growth and resilience of contiguous early and mid-successional pine and mixed-conifer stands within the LSR and adjacent Matrix lands to foster connectivity and develop late-successional habitat is important, along with maintaining and restoring the connectivity provided by Riparian Reserves.

3. Restore Meadow Habitat – Restore meadow habitat at Elk Flat (which is partially in the LSR).

Conifer encroachment is diminishing dry meadow areas at Elk Flat to less than 50 percent of its extent in 1944. The lack of frequent, low- to moderate-intensity fire has contributed to this encroachment.

The desired condition is early seral habitat in the meadow at Elk Flat, restored to its historic size as evidenced in the 1944 photographs that show scattered large conifers were present.

A large portion of the project treatments have been implemented. The timber sale is complete. A large portion of machine piling is complete along with half of the underburning. There is still some important work that needs to be accomplished:

- Elk Flat, 676 acres – The timber sale contract only removed trees down to 4” in diameter. Some of the small trees were killed during the underburn, but many remain. To complete the meadow restoration treatment, there is a need to masticate the remaining trees, less than 4” in diameter. This treatment will enhance the meadow conditions, by removing the conifers and encouraging additional grass growth.
- Machine Piling, 254 acres – Due to excessive mortality, there is an over-abundance of large down material. This material needs to be piled and burned prior to underburning to preserve the overstory. The Forest Service will complete the burning. The request is for piling. Bucking of material to make compact piles will be necessary. Piles need to be free of dirt. The Forest Service will provide plastic material for covering of piles.

Implementation of this activities will move the project area toward the desired condition. The treatments in suitable Northern Spotted Owl (NSO) habitat will maintain the current habitat function while increasing habitat resilience and creating fine-scale heterogeneity and complexity between and within stands. Completion of the meadow restoration treatment will promote early seral habitat, including perennial and annual grasses and forbs. These proposed treatments result in both a short and long term beneficial effect to NSO habitat and critical habitat, including prey.

Chalk Mountain Plantation Thin

The Chalk Mountain Plantation Thin Project sits within a Late-Successional Reserve (LSR) on the easternmost portion of the Shasta-Trinity National Forest within the Shasta Lake Ranger District. The project area is perfectly suited for Northern California Owls, Pacific Fisher, Cascade Frog, and other species dependent on mature forests. The project aims to increase forest health and resiliency on approximately 2,834 acres within a landscape of roughly 7,350 acres. These landscapes are a mixture of plantations as well as non-plantation stands which have proven to be highly susceptible to severe wildfire, root disease and bark beetle-caused tree mortality. The NEPA and ESA consultation have been completed and the project is ready to be implemented. The Chalk Mountain Project was developed specifically to mitigate the severity and improve resistance from future events.

There is little doubt our forested ecosystems are vulnerable to a new and unprecedented regime of natural disturbances. From native insects like the western pine beetle to tragic and catastrophic events like the 2018 Wildfires in northern California (Carr, Camp, Mendocino, etc.), there is one common theme, arguably, driving these detrimental conditions, too much fuel on the landscape. When wildfires ignite in remote locations like these, effects are often devastating because of the existing condition. The project area is surrounded by large wildfire footprints and lightning is a common form of ignition according to fire history data. By conducting fuels reduction activities, harvesting some plantation trees and applying prescribed fire, we aim to restore a balance on the landscape and improve the existing and future conditions.

Activities for the roughly 1,350 acres of plantation stands within the project area is to commercially harvest merchantable timber under 3 entries over the next thirty years. A portion of these plantations, the most mature and planted stands (≥ 10 ” dbh, PP) were sold under a recent traditional timber sale contract. But logging sawtimber to reduce density in a plantation only solves part of the problem, and only restores

part of a forest's function; its structure. Fire, as a process, also needs to be restored for a healthy and resilient ecosystem. The activities proposed here are specifically intended for the reintroduction of fire on a late-successional and mixed-conifer landscape. Approximately 340 acres of biomass thinning, along with 18 miles of line construction, would result in 2,365 acres of prescribed fire within LSR critical habitat.

Activities included in this proposal are intended to achieve goals of the project by preparing landscapes to receive beneficial effects of prescribed fire or to lessen the damaging effects of wildfire. We developed three burn landscapes or phases for implementation. Pre-burning activities would consist of three major activities: thinning smaller diameter fuels, performing roadside brushing and creation of handline fuel breaks. The thinning of small diameter fuels would either consist of removing off-site, in the form of biomass, or by creating small hand piles for burning. Roadways are targeted for roughly a 50-foot brushing activity and handline construction would create the fireline fuel break so that units are prepared for understory burning. Handline construction should consist of a 10-foot brush cut (lop and scatter) accompanied by a 2-foot scrape with hand tools down to bare mineral soil.

Here are the details of treatment quantity for the specific phases:

- Phase I – the Snow Burn Block (preparation of a 965-acre landscape)
 - Biomass thinning of roughly 10 acres
 - Roadside brushing of 2.8 miles
 - Handline construction of 2.8 miles
- Phase II – the Summit Burn Block (preparation of a 850-acre landscape)
 - Biomass thinning of roughly 149 acres
 - Roadside brushing of 3.5 miles
 - Handline construction of 3.0 miles
- Phase III – the Nelson Burn Block (preparation of a 550-acre landscape)
 - Biomass thinning of roughly 343 acres
 - Roadside brushing of 3.7 miles
 - Handline construction of 1.8 miles

Biomass thinning could be manual or mechanical (depending on fuel size), and line construction is dependent on presence of natural barriers (roads). Though fuels treatments typically remove/modify smaller diameter material (<4" dbh) to reduce fire behavior, treatment of the 4"-10" dbh class will increase tree growth of residuals, increases species composition, and increase resilience to natural disturbances for a longer duration. Treatment of both size classes are being proposed. Material of larger size class (4"-10" dbh) is intended to be removed from the site to decrease fuel loading. The location of the project is about 30 miles northwest of Burney, California and in that town, there is an operation of a power generation facility which feeds on green material. The smaller diameter trees and shrubs could also be used for this purpose; however hand piling of this material is anticipated for fuels work.

Benefits

The project area is known to be occupied by Pacific fisher and contains designated critical habitat for the northern Spotted Owl and historic spotted owl nest sites. Northern spotted owls are currently present a couple miles north of the project area. The proposal would improve and protect habitat for these species by reducing the risk of stand replacing wildfires, insects and disease and expediting the growth of large trees favored by these species for foraging, and reproduction. The project is also occupied by the Cascades Frog, a Forest Service Sensitive species that has experienced dramatic declines in California in the past decades. The project would improve habitat by reducing fuel loading in adjacent stands and protecting riparian areas.

The project would create landscape continuity as it is adjacent to a thinned project on Lassen National Forest. The project was developed in collaboration with the Pit River Tribe and is located within their ancestral territory. Private property within the project area would be essentially surrounded by project fuels reduction (and the lands are currently designated as High Hazard Tier II). Protection of watersheds flowing into the Pit River Hydroelectric system (which provides 15% of CA hydropower) would also occur following project treatments. Finally, there would be conditions on the landscape which pose a much lower risk to firefighters in the future during times of wildfire suppression.

McBride Plantation Project

In July, 2018 the McBride Plantations project was approved on the Shasta-Trinity National Forest. The project falls within the legal framework authorized by the Healthy Forest Restoration Act. The project is located adjacent to Mt. Shasta City, within the Wildland-Urban Interface.

In 2020, half of the project area was thinned by a timber sale. The other half of the project has an awarded timber sale. After the timber sale activities, stands are still crowded with brush. Mastication treatments are needed to prepare the area for prescribed underburning. If the mastication treatments are not completed, impacts to the overstory trees could result in undesirable effects during burning operations.

Approximately 2650 acres of mastication is needed. The treatment will not remove all of the brush, only brush around the tree canopies to limit the heat impacts to the crowns.

The project falls within the range of, but outside suitable habitat for the northern spotted owl and gray wolf. The project is not likely to have adverse effects or result in a trend toward federal listing or loss of viability at the Forest-level scale for the fringed myotis, western bumble bee, pallid bat or Townsend's big-eared bat.

The Mt. Shasta Watershed Assessment describes the benefits of this project to deer. Concern exists for resident and seasonal deer populations, including the loss of early seral habitat, the loss of herbaceous and young shrub layer in the understory, and the loss of mast (e.g. acorns) producing hardwoods causing a reduction in an important food source for deer. The exclusion of fire has caused the habitat to shift from a mosaic of early seral habitat, to mostly mid seral habitat. This shift encroaches upon herbaceous openings as well as limits the amount of palatable browse. Fire exclusion has also allowed the understory of forested conifer and oak habitats in the eastern and southern portions of the watershed and shrubs in the northern portion of the watershed to mature, to be shaded out and to be replaced by shade tolerant species. Late summer forage important for resident deer is reduced with this change in vegetation.

The mastication of brush, and prescribed burning will promote grass and forb growth. Mastication rejuvenates mature brush by creating new twig growth and increasing the age diversity of brush benefiting browse for deer. Similarly, sprouting of manzanita can provide young plant growth. Plants will begin to flower and fruit in 8-10 years. The flowers attract insects and pollinators and the berries are eaten by bears and other wildlife. Openings created by mastication and prescribed burning create early seral habitat which is good for deer, rabbits, rodents, birds, insects and pollinators.

Slate Creek Fuels Management Project

The Delta Fire started on September 5, 2018 and burned 63,311 acres of National Forest System lands on the Shasta-Trinity NF before being contained. The Delta was the third of three fires (Carr, Hirz, and Delta) that burned up ground in the Slate/Trinity region and by the time it was contained, had nearly merged with the perimeter of the Carr Fire. Prior to the fire, the Forest Service had completed substantial road reconstruction and resurfacing of the main Slate Creek road. Following the fire, Federal Highways (FHWA) reconstructed the bridge over Slate Creek to maintain access into the region. The area also includes a small hydroelectric facility with diversions on Slate Creek and South Fork Slate Creek supplying water to a penstock buried in the main access road and to a hydroelectric power plant located on private land downstream. Pacific Power has treated all hazard trees near their lines that cross the eastern edge of the project, and along the spur to the hydroelectric site.

The Delta fire burned through suitable habitat for northern goshawk, pallid bat, Townsend's big-eared bat, fringed myotis, Pacific martin and fisher. The fire also burned through Inventoried Roadless Area (IRA), Late Successional Reserve (LSR) and Northern Spotted Owl habitat including a NSO home range. The NSO/LSR habitat in the Slate Creek region provides a key corridor link between the LSR habitat in the Trinity River drainage to the west and the McCloud River drainage east of Interstate 5.

During the Delta Fire, roughly 54 % of the area burned at high severity, resulting in greater than 75% tree mortality. Beginning in the fall of 2018, the Shasta-Trinity began evaluating the recovery and restoration needs of the burned area. The Carr/Delta Fire Road Maintenance and Safety Project Decision Memo was signed in June of 2019 and resulted in three fire salvage timber sales.

The Lower Slate timber sale portion was prepared and offered for sale in order to remove hazard trees along Level 2 & 3 Forest System roads, and Level 1 Cost Share roads. There were no bids on the first timber sale. The sale was quickly re-packaged and offered again but again received no bids. The commercial value of the timber has expired and no viable timber sale remains.

As we progress toward 2 years post-fire, the safety hazards of trees falling across roads is increasing. The Shasta-Trinity is proposing to complete hazard tree mitigation along approved roads:

- All dead trees 300' uphill and 150' downhill would be felled.
- Material may be treated on-site or removed for chips (co-generation).
- A combination of piling/burning, chipping, lop/scatter, and retaining some down logs on site may be utilized.
- Trees will need to be skidded to areas where piles can be made.
- All applicable RPM's will be followed.

Approximately 3745 acres of treatment are needed, along ~72 miles of road. Treatments are:

- Falling all dead trees 300' uphill and 150' down hill
- Moving the trees to a location where a pile can be made
- Piling tops, limbs, boles for burning by the Forest Service
- Where there is too much material for piles, or the material must be moved a long distance to a pile location, chipping can be done. Chips need to be scattered across the ground. No chips will be put in drainages.
- Roads need to remain open (with temporary delays acceptable) during the operations. No piles can be created within the road prism.

Approximately 2374 acres of treatment is needed on slopes 0-20%. 1200 acres of treatment is needed on slopes 21-35%. 172 acres of treatment is needed on slopes greater than 35%. The project will ensure continued safe access into the region for emergency fire response and safe operation of the hydroelectric facility as well as benefit and/or maintain NSO critical habitat.

TAHOE NATIONAL FOREST

Sunny South/Shirrtail Creek Fuels Management (American River Ranger District)

The Sunny South Project has a combination of 1,600 acres of mastication treatments on upland sites and 327 acres of hand thinning and tracked chipping treatments within the Shirrtail Creek area. The project area is heavily used by the public and is within the Wildland Urban Interface defense zone of the Sugar Pine Recreation Area. The threat of wildfire in this area is high to both aquatic and upland habitats as well as recreation users, including ingress/egress through this area by the community of Foresthill, CA to Colfax, CA. Both of these treatments would greatly increase protection for California spotted owls. The

treatments in this proposal are scalable. Proposing 150 acres of stream zone treatments and 150 acres of mastication.

Trapper Proposal (Yuba River Ranger District)

The Trapper Project has 450 acres of fuels treatments, including hand thinning and tracked chipping along existing roads in order to improve ingress and egress for residents and emergency responders in the case of a wildfire. The proposed treatment areas are within Wildland Urban Interface Defense Zone and are all within or directly adjacent to California spotted owl Protected Activity Centers (PAC). NEPA is expected to be completed by summer/fall of 2020. The treatments in this proposal are scalable. Proposing all 450 acres of hand thin/track chipping.

LAKE TAHOE BASIN MANAGEMENT UNIT

Big Meadow Creek Watershed Fire Regime Restoration

The ecological health and function of meadows, aspen groves, riparian corridors, and upland conifer forests in the Big Meadow Creek Watershed have been degraded from past logging, livestock grazing, and fire suppression. This Watershed, with its diversity of ecosystem types, provides important habitat for an immense variety of native wildlife including rare and imperiled species like the federally-listed (threatened) species Lahontan Cutthroat trout and Forest Service Sensitive species northern goshawk, California spotted owl, and willow flycatcher. Meadows, aspen, and other riparian communities are being encroached upon by unnaturally high densities of conifers that intensify competition for sunlight, nutrients, and water. Upland conifer forests are growing denser and more uniform in structure. Without natural disturbance or management intervention, the unabated increasing density of conifers will likely reduce the ecological functions of meadows, aspen groves, and riparian corridors. Unabated, it will also likely lead to stress-induced forest die-offs and stand-replacing fires.

The Big Meadow Creek Watershed Fire Regime Restoration Project is intended to reduce conifer encroachment and re-introduce fire to montane meadows, riparian corridors, and aspen groves, all of which were historically fire-adapted ecosystems prior to fire suppression activities in the basin. The project will also reduce the risk of large, high severity wildfires and improve forest structure in upland conifer forests. Fire in these systems will stimulate the growth of native vegetation that support plant and animal communities, reduce conifer encroachment, and reduce fuels loadings to minimize the potential for high severity wildfire. Putting fire back on the landscape would prepare these ecosystems for future fires and maximize the ecological benefits of wildfire, creating a mechanism for the recovery of the Big Meadow Creek watershed to a more desirable condition.

The project area overlaps a northern goshawk Protected Activity Center (PAC) and is surrounded by another northern goshawk PAC and three California spotted owl PACs. The health of the habitat in and around the project area is important to support nesting and foraging for these species. The management activities associated with this project would specifically benefit forest health and habitat condition for these species.

The project is located within the Big Meadow Creek Watershed of the Lake Tahoe Basin Management Unit (LTBMU), approximately ten miles south of Lake Tahoe in El Dorado and Alpine Counties, California (see map). The project area is within designated Inventoried Roadless Area and is accessible by a trail system. The 640 – acre project is supported by a Categorical Exclusion (Decision Memo can be found here at this link:

https://www.fs.usda.gov/detail/ltbmu/landmanagement/projects/?cid=fsm9_046800) that was completed in 2009. Since 2010, the LTBMU has hand thinned conifers in approximately 300 acres of the planned

project area, including approximately 110 acres of aspen, 165 acres of upland conifer forest, and 25 acres of wet meadow. Hand thinning and piling was necessary to reduce fuel loadings before using fire as a management tool. Approximately 260 of these 300 acres had conifer slash piles created and 130 of these acres have been burned.

The LTBMU is seeking support to burn piles in 130 acres of the project area and burn Big Meadow (approximately 60 acres). The LTBMU is also seeking support to conduct necessary pre-burn surveys for cultural and natural resources such as federally-listed species like Lahontan Cutthroat trout and Sierra Nevada yellow-legged frog, and Forest Service Sensitive species including (but not limited to) California spotted owl, northern goshawk, and willow flycatcher. The LTBMU would also seek support to treat invasive plant species where they occur in areas planned for burning. The LTBMU has obtained permits under the 2014 Timber Waiver (Lahontan Water Board Order R6T-2014-0030) to burn all acres containing conifer slash piles. The LTBMU intends to apply for a Timber Waiver permit to burn Big Meadow. The LTBMU has developed a burn plan for pile burning in the project area and will use that to craft a specific burn plan for the burning of Big Meadow.

The resource protection measures and Best Management Practices that the project will implement are described in the project's [Decision Memo](#). Trails would be utilized for control lines as available. If needed, control lines would be constructed with hand tools. All constructed control lines will be completely rehabilitated as soon as possible after they serve their intended purpose and not later than the end of each burning season. Rehabilitation activities will include having crews use hand tools to rake in berms created from control lines, install water bars, and scatter downed wood where appropriate. Wet lines would be used in Big Meadow.

LASSEN NATIONAL FOREST

Plum Restoration Project

The Plum Restoration Project is a landscape-level restoration project within the Burney-Hat Creek Basins Collaborative Forest Landscape Restoration Project area (CFLRP) and the Hat Creek Ranger District of the Lassen National Forest. As part of the CFLRP, Forest Service resource specialists evaluated the Plum project area for opportunities to implement forest health and hazardous fuels reduction activities as well as improve watershed condition which would increase landscape level resilience to disturbances; including fire, insects, disease, and drought.

The project area is located directly north of Highway 44, approximately 1.5 miles east of the unincorporated community of Old Station, California. The legal location of the project area encompasses all or portions of the following areas:

Township (T) 32 North (N), Range (R) 6 East (E), Sections 5 and 6, Mount Diablo Base and Meridian (MDB&M);

T 33 N, R 5 E, Sections 1 – 3, 11 – 15, 22 – 25, and 36, MDB&M;

T 33 N, R 6 E, Sections 5 – 9, 16 – 21, and 28 – 33, MDB&M;

T 34 N, R 5 E, Sections 30 – 32, MDB&M.

The purpose of the Plum Restoration Project is to retain, improve, and restore ecological resilience of National Forest System lands within the project area. In regards to fuels reduction, the project is intended to:

- Increase the heterogeneity and reduce the density of forested stands to modify wildland fire behavior and reduce insect mortality.

- Increase stand and landscape level resistance and resilience to the above described disturbance events.
- Reduce fuel loading

We have identified objectives for forest vegetation, non-forest vegetation communities, and fire and fuels based on the desired condition, existing condition and need.

The proposed action included thinning, masticating, machine piling, prescribed fire, throughout the project area on approximately 17,180 acres.

The DN/FONSI for the Plum Restoration Project was signed in November of 2018.

The Hat Creek Ranger District would like to submit for this proposal the machine and hand piling activities which would occur on 1,849 acres. Approximately 492 acres of that would be ready to implement in the fall of 2020.

Additional information: [Environmental Assessment](#) and [project area maps](#)

STANISLAUS NATIONAL FOREST

Stanislaus National Forest: Prather-Medusa Forest Resilience Project

The Stanislaus National Forest is nearing completion of the NEPA planning process for the Prather-Medusa Forest Resilience Project. The Prather-Medusa Project is located on the Calaveras Ranger District in Tuolumne County, California, northeast of Arnold and on the south side of the North Fork Stanislaus River. Elevations in the 7,136-acre project area range between approximately 5,000-7,600 feet. Two of the key objectives of the project are to reduce future fire intensity and severity, and to maintain and enhance important wildlife habitat. This project has previously received NFWF funding for NEPA planning.

A history of fire exclusion policies has led to high-density, high-fuel load forest conditions within the project area, making it vulnerable to catastrophic wildfire. At the same time, preferential harvesting of larger diameter trees has resulted in overall smaller tree sizes. Combined, these policies have led to a lack of diversity in age, diameter, density, species composition, and vertical structure of the forest, resulting in an overabundance of smaller, younger, shade-tolerant and less fire-resistant trees, especially white fir. The current forest composition is vulnerable to increased patterns of insect and pathogen outbreaks at landscape and ecosystem scales. These outbreaks reinforce the shift in vegetative species composition and stand structure, while further increasing hazardous surface fuel loads. Drought has also been a factor influencing forest conditions within the project area, with below average precipitation in the Sierra climate region in 12 of the last 19 years preceding 2019 (2000 through 2018) (WRCC 2020). Drought, like fire exclusion and preferential harvesting practices, has been a factor contributing to physiological stress on individual trees, reducing their resilience to pathogens, pests, and wildfire. Fir mortality is high under drought conditions; therefore, as temperatures rise and drought continues to become more prevalent with climate change, stressors are expected to increase. The current forest conditions make the project area susceptible to high intensity stand-replacing wildfire. Such a fire would degrade important habitat for old growth forest species, including California spotted owl and northern goshawk.

The Prather-Medusa Forest Resilience Project is currently in the NEPA planning stages; as such, the scope and scale of the project may be subject to change as a result of the anticipated Finding of No Significant Impact, which is currently scheduled to be signed in October 2020. The project proposes forest resilience treatments across the 7,136-acre project area. The purpose and need for the Prather-Medusa Forest Resilience Project is to manage forest vegetation in a manner that transitions the project area toward desired conditions as identified in the Forest Plan (USDA Forest Service 2017).

The objectives of the Prather-Medusa Forest Resilience Project are to:

- Increase tree, stand, and landscape resiliency and sustainability by producing different stand structures and densities across the landscape.
- Enhance the general health of forested stands and reduce susceptibility to insect infestations, diseases, and drought-related mortality by reducing stand density.
- Improve and promote stand and individual tree growth and vigor.
- Reduce future fire intensity and severity by reducing surface ladder fuels, increasing the height to canopy, decreasing crown density, and retaining large, fire-resistant tree species.
- Maintain and enhance important wildlife habitat, mature forest ecosystem values, and connectivity of mature forest stands.
- Maintain and enhance the extent and connectivity of aspen stands and meadows by reducing encroaching conifers.

Pending the decision outcome of the NEPA process, one or more treatment activities would be implemented to achieve the desired conditions. Proposed treatment activities include biomass removal, hand thinning, mastication, mechanical thinning, prescribed burning and salvage. Currently, the draft proposed action identifies hand thinning and prescribed burning as potential treatment options on approximately 1271 acres within California spotted owl protected activity centers (PACs). In addition, if selected, the proposed action would implement biomass removal, hand thinning, mastication, mechanical thinning, prescribed burning and salvage on approximately 1244 acres within northern goshawk Home Range Core Areas (HRCAs).

INYO NATIONAL FOREST

June Mountain Ski Area Vegetation Mgt.

This project will provide hazardous fuel reduction and community protection within approximately 690 acres around the community of June Lake. This project is focused on the restoration of white bark pine, aspen, and meadow ecosystems, forest health thinning, and fuels reduction/defensible space clearing around facilities. Additional benefits will include improvement in watershed function for Rush Creek and Mono Basin, enhanced wildlife habitat, and improved scenic quality. Slopes within the project area are steep with loose soils which makes operations difficult, expensive, and may require substantial helicopter work depending on the site. This project was initiated in 2016 as part of a NFWF funded partnership between Mammoth Mountain Ski Area, Cal-Trout, and the INF. To date, existing partners have invested approximately \$850,000.

Casa Diablo Rx Burn

This project targets 1600-2000 acres for prescribed burning to restore the Casa Diablo area to its natural range of variation (NRV), and implement a tree well/ jackpot burning and other techniques consistent with treatment methods to restore Jeffrey pine ecosystem. Project area occurs to the northeast of Tom's Place, an unincorporated community in Mono County, CA. Project will reduce risks of catastrophic fire, and improve wildlife habitat, watershed function, and soil conservation within the Owens River and Crowley Lake watersheds.

June Loop Hazardous Fuels Reduction

This project's focus is on community and recreation site protection, WUI defense and threat zone protection, and improving defensible space within the June Lake area. This project complements fuels treatments on 550 acres of adjacent private lands treatments funded through Stevens grants. The remaining work needed is linking the work that has already been accomplished with approximately 3,106 acres of treatment (patch prescribed burning) in sage brush habitats to reduce fuels, and improve sage

grouse habitat. Project will benefit the Rush Creek watershed and greater Mono Basin, and improve urban defense zones, watershed health, scenic quality, and protect cultural resources.

Bishop Creek and Pine Creek Fuels Reduction

This project is primarily focused on fuels reduction within 136 acres within the Bishop Creek and Pine Creek watersheds, in and near popular recreation areas and creation and improvement of defensible space at 25 developed recreation sites. Anticipated benefits include improvements to watershed health and function, wildlife habitat, scenic quality of the recreation areas, and protection of cultural resources. Treatment units are designated for protection using a variety of mechanical treatment methods and Rx fire.

Mono City Fuel break (Interagency)

This project will involve periodic mowing, thinning and pile burning along 93 acres of Forest Service land, in strategic locations of the wildland urban interface of the Mono City community. This project will provide increased community protection from fire for Mono City and benefit the watersheds of Mill Creek and Mono Lake. NFS lands are south and east of community.

ANGELES NATIONAL FOREST

Mt. Baldy Forest Health and Community Resilience Project

The Mt. Baldy area of the Angeles National Forest host a multitude of resource, recreational, scenic, and wildlife values. It functions as a year-round mountain recreation landscape for the greater Los Angeles Area, with opportunities for solitude, hiking through spectacular big tree-cover vistas, and includes historic and scenic mountain resorts. The area currently lies within a heavily used Wildland Urban Interface area and the threat to resource damage and loss is high due to the threat of wildland fire. Residence cabins and evacuation and refuge routes currently lack adequate defensible space to protect life and property from unwanted effects of wildfire. A segment within this area, Icehouse Canyon, is a highly used recreation area that encompasses approximately 25 Special Use Cabins (along with numerous Private Cabins) and Protected Activity Centers (PAC's) for California Spotted Owl (CASPO). The Icehouse Trailhead was once the site of the Icehouse Resort and leads into some of the most scenic back country of the forest. In order to protect the multitude of values in this area in accordance with the Land Management Plan, the forest plans to reduce the potential for wildland fire and habitat degradation by reducing accumulated vegetation through hand mechanical and prescribed fire pile burning treatment methods. The entire forest lies within the Wildland Urban Interface Zone and implementing the project will also improve community defense for Mt. Baldy Village and the special use cabin tract communities of Glacier, West Icehouse, Upper San Antonio, San Antonio Falls, and Manker Flats. A secondary goal of this project would be that the treatment will improve the forest health in this area and improve habitat conditions for CASPO.

In order to reduce the risk of wildfire, while simultaneously improving forest health conditions, within the project area, the Angeles National Forest proposes to treat approximately 388 acres within the Icehouse Canyon and Upper Mt. Baldy area located near the junction of Mt. Baldy Road and Icehouse Canyon, within the San Gabriel Mountains National Monument of the Angeles N.F. Outcomes would be to bring the area into desirable conditions as identified in the Land Management Plan (ANF LMP, part 3 Appendix K) and to maintain and protect concerned wildlife species (ANF LMP, part 3 Appendix H). The project has gone through NEPA review under the Administrative Site Defense Zone Project. The NEPA Document describes in detail the specifics for techniques and conditions under which the work should take place.

This proposal will implement two units within the project area to treat hazardous fuels, perform biological surveys to monitor CASPO (see project map) and do invasive weed surveys and weed removal.

Table 1: Proposed Treatment Information

Name of Unit	Unit #	Acres	Biological Surveys for CASPO	Limited Operation Period (LOP)	Invasive Weed Survey and Removal
Icehouse	1	128	Yes	February - August	Yes
Upper Mt. Baldy	2	260	Yes	(none)	Yes

Fuel Treatments Design Criteria

To provide for defensible space around structures, project will include primary and secondary buffers. The intent is to allow for minimal required defensible space. The primary buffer is defined as an area up to 100 feet from all structures or improvements. Within the primary buffer, Vegetation removal will reduce ground and canopy cover as well as ladder fuels from structures. Snags within the primary buffer may be removed if they pose a hazard to the structure or to other property or to human life. Vegetation removal within this buffer must be efficient enough to provide for defensible space while also trying to maintain the natural and scenic landscape.

This secondary buffer will begin at the edge of the primary buffer and may extend to the end of the project site boundary. The vegetation removal within the secondary buffer will be variable depending on terrain and vegetation type. Within the secondary buffer, existing canopy cover may be reduced to 50-70% canopy cover but should maintain the natural and scenic landscape. Soft and hard snags may be left for wildlife habitat in the secondary buffer. Chaparral vegetation will be thinned by reducing the volume of leaf area to at least 60% with the primary focus being where brush creates a ladder that may promote crown fire in adjacent oak and conifer overstory. The remaining 40% of leaf area volume will be left in clusters or individual species with priority given to obligate seeders such as manzanita. Vegetation removal will be less than what was removed from the primary boundary and should resemble a tapered effect with percentage of removed fuel decreasing toward the edge. A mosaic pattern should be achieved.

The following design criteria applies to both buffer areas and Units 1 and 2. Within each buffer area and in Unit 1 and 2, if tree removal is necessary, suppressed, intermediate, and co-dominate trees will be the first to be removed. No tree larger than 24 inches in diameter will be removed. To prevent fire entering the oak canopy, ladder fuels will be targeted within and adjacent to oak clusters. Residual trees will be pruned to a height of 10 feet from ground level. Oak and conifer stands will be thinned by taking suppressed, intermediate, and co-dominate trees first. To ensure CASPO habitat needs, ANF LMP Standards S-11 thru S-33 will be applied as well as recommendations found in ANF LMP part 3 Appendix H.

Activity piles created for future burning will be constructed at least 10' outside the drip line of residual trees and outside of stream riparian conservation areas. Activity piles will be no longer than 10' in diameter and 6' high. Activity piles will be kept 40' from structures. Proposal does not include prescribed burning.

Invasive Weeds Design Criteria

Before project activities begin, conduct surveys for T&E, FS sensitive and invasive plant species. Surveys must be conducted during the correct floristic period and by a qualified individual approved by the ANF. Provide the ANF with a database and summary of results.

Based on the survey results, the ANF will determine which occurrences need to be flagged and buffered. Implementation of the flagging is the responsibility of the ANF. No project work or foot traffic would be allowed within the flagged buffer zone.

Implement invasive plant treatments according to the direction provided by the FS and in compliance with the guidelines in the 2011 San Gabriel Ranger District invasive species NEPA. Treatments will focus on high priority species identified by the ANF and can be implemented using a range of tools including manual removal, herbicide application, wilting.

To limit the introduction and spread of new invasive plant species, tool, vehicle and equipment washing requirements will be implemented. Any vehicles/equipment engaged in off-road travel and all ground disturbing and vegetation removal tools and equipment (including handheld) must be cleaned prior to entering Forest Service land. Protocol for washing equipment will be provided by the forest.

Additional information: [Project area maps](#)