

Los Padres National Forest

Land Management Plan Monitoring and Evaluation Report for 2017



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Los Padres National Forest Stakeholders,

I am pleased to present the Los Padres National Forest's (LPNF) fiscal year 2017 Monitoring and Evaluation Report. Included within the report is a summary of specific program accomplishments for the year, and evaluation of whether plans, projects and activities are implemented as designed and in compliance with the 2005 Los Padres National Forest Land Management Plan (LMP), as amended.

The LMP emphasizes and identifies monitoring as a key element in all programs to assure the achievement of desired conditions over time. Recently implemented projects are monitored as well as ongoing activities, programs, and resource status. Through monitoring, evaluation, and adaptive management, we aim to further increase management effectiveness and resource protection.

It is important to me to keep you informed of the results of our monitoring. If you are interested in becoming involved in a project or other planning activity, please see our national website http://www.fs.fed.us/sopa/. Additional information and opportunities on the Los Padres National Forest may be found on our Forest website http://www.fs.usda.gov/lpnf/.

Sincerely,

KEVIN B. ELLIOTT Forest Supervisor

Los Padres National Forest

July 29, 2021

Date

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Introduction

Monitoring is a means for confirming the sufficiency and adequacy of guidance in the Land Management Plan (LMP), and for tracking the status of and trends in changing resource conditions. It facilitates the process for adapting to change and documents the need to update, amend and eventually revise land management plans to achieve desired conditions while ensuring healthy National Forests exist for future generations. Monitoring requirements are found in all three parts of the LMP, and a summary of these requirements are in Appendix C in Part 3 of the LMP.

Part 1 monitoring assesses resource conditions and movement towards desired conditions over the long-term. This is completed by measuring the change over time to environmental indicators and outcome evaluation questions identified in the LMP. The status of the trend relative to the desired resource condition serves as the basis for determining when a need for change in land management planning is indicated.

Part 2 monitoring focuses on program implementation through accomplishments tracked in Forest Service corporate databases. The annual accomplishment indicators determine if the program areas are implementing the objectives and strategies established in Part 2 of the LMP.

Part 3 monitoring is conducted at the project level to evaluate the effectiveness and application of design criteria established in the LMP. Projects that were completed or were in ongoing implementation in FY 2017 were selected for monitoring from representative functional areas and districts. Selected projects were then visited by an interdisciplinary monitoring team to review the application and effectiveness of the design criteria.

The FY 2017 LMP Monitoring and Evaluation Report documents the evaluation of selected projects and programs where activities occurred during October 1, 2016 through September 30, 2017.

Part 2 Monitoring

Monitoring identified in Part 2 of the Southern California Land Management Plans is focused on program implementation including inventory activities. The National Forests currently use attainment reporting for tracking program accomplishments as discussed in Part 2 of the LMP. The attainment measures are linked to the National Strategic Plan and report accomplishments through a national reporting system. Although the system will evolve over time as management needs change, Table 1 represents the type of measures that are currently reported on an annual basis. These attainments reflect current budget and staffing.

Table 1: FY2017 Accomplishments generated from geo-enabled Performance Accountability System (gPAS)

| Indicator | Units | 2017 Accomplishment |
|--|--------|---------------------|
| Terrestrial Habitat Enhanced | Acres | 1079.4 |
| Aquatic Habitat Enhanced | Miles | 27.4 |
| Noxious Weeds Treated | Acres | 127.7 |
| Forestland Vegetation Improved | Acres | 132 |
| Watershed Improved | Acres | 6,144.30 |
| Land Ownership Adjusted | Acres | 0 |
| Heritage Programs Managed to Standard | Number | 7 |
| Recreation Special Use Authorizations Administered to Standard | Number | 80 |
| People at One Time (PAOT) Days Managed to Standard | Days | 260,283 |
| Recreation Sites Managed to Standard | Number | 86 |
| Land Use Authorizations Administered to Standard | Number | 194 |
| Mineral Operations Administered to Standard | Number | 39 |
| Grazing Allotments Administered to Standard | Acres | 77,876 |
| Hazardous Fuel Reduction | Acres | 1,829 |
| Passenger Car Roads Maintained to Objective Maintenance Level | Miles | 0 |
| High Clearance & Back Country Roads Maintained to Objective Maintenance Level | Miles | 0 |
| Road Decommissioned | Miles | 0 |
| Trail Operated and Maintained to Standard | Miles | 36.2 |

Part 3 Monitoring

Implementation and effectiveness monitoring for Part 3 of the LMP is conducted at the project level and is completed for new projects and ongoing activities and sites. A sample of projects and ongoing activities are selected, evaluated for compliance with the LMP, and visited by an interdisciplinary team (IDT) to review the application and effectiveness of design criteria. If the LMP design criteria are determined to be ineffective, then the IDT recommends possible corrective actions, and any required adjustments to the design criteria are documented in this report and updated in the LMP in accordance with Forest Service procedures.

The following questions are investigated for each reviewed project or ongoing activity:

- Is the project consistent with the LMP, and were LMP goals, desired conditions, and standards incorporated into the decision document?
- Were mitigations or design criteria identified from the LMP, consultations, and public input included in the decision, and implementation documents?
- Was the project implemented effectively?
- Were mitigations or design criteria effective?
- Were monitoring requirements identified and followed?

The following projects were chosen from a stratified sample of projects representing program areas and districts on the Los Padres National Forest. The LMP monitoring appendix calls for a 10% random sample of new and ongoing projects. Technically, an ongoing project is one that is either implemented over a long span of time, a routine ongoing activity, or is part of a long-term permitted activity such as livestock grazing on a range allotment, but which still requires National Environmental Policy Act (NEPA) compliant environmental review for reauthorization. A new project is one which is planned, implemented, or

completed within a recent period. The Los Padres National Forest strives to select projects covering a range of program areas geographically distributed over the Forest. When possible, at least one project per District is selected while striving to have several major program areas represented.

Table 2: Projects Selected for Review

| Ranger District | Project Name | Functional Area | Documentation Reviewed |
|-----------------------------|---|---|------------------------------|
| Forest-wide | Los Padres Tamarisk Removal | Resource Management | Record of Decision |
| Forest-wide | Los Padres Campground Concessionaire Special Use Permit | Public Use and Enjoyment | Decision Memo |
| Monterey | Pfeiffer Falls Trail Reroute and Observation Deck Reconstruction | Public Use and Enjoyment/ Facility Operations & Maintenance | Decision Memo |
| Mt. Pinos | Frazier Mountain Vegetation Management | Resource Management/ Fire & Aviation Management | Decision Notice |
| Ojai | Evaluation and Restoration of Degraded Chaparral within the Piru Fire Perimeter | Resource Management | NEPA Compliance Checklist |
| Santa Barbara | Santa Barbara Mountain Communities Defense Zones Project | Fire & Aviation Management | Decision Memo |
| Santa Barbara | Franklin Trail Restoration | Public Use and Enjoyment/ Facility Operations & Maintenance | Decision Memo |
| Santa Barbara / Santa Lucia | Happy Canyon Allotment | Commodity & Commercial Uses | Decision Notice |

Los Padres Tamarisk Removal

Project Description

The invasive weed, tamarisk (*Tamarix* spp.), is spreading within the Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sisquoc River, Sespe Creek, and Arroyo Seco River watershed of the Los Padres National Forest. The Tamarisk Removal Project was designed to eradicate current tamarisk infestations and prevent further spread. The project area is located along riparian zones of the above-mentioned waterways and covers approximately 368 linear miles along perennial and intermittent streams for an area of approximately 4,247 acres. Currently, the infestations are composed of scattered tamarisk within riparian habitat conservation areas, congressionally designated wilderness areas, and wild and scenic rivers. The project is located on all five ranger districts of the Los Padres National Forest.

Tamarisk is an invasive non-native tree-shrub that can grow in dense patches, outcompete native riparian vegetation, such as willows (*Salix* spp.) and cottonwoods (*Populus* spp.), change soil chemistry by depositing salts from deep ground water onto the soil surface, and remove large amounts of water from streams and riparian areas via foliage evapotranspiration. By removing tamarisk before it becomes the dominant vegetation component within riparian landscapes, native plant communities will be maintained and can continue providing habitat to species dependent on healthy, properly functioning riparian ecosystems.

Herbicide application along with mechanical removal treatments are known as effective and efficient control methods for tamarisk. Herbicide applications for the project are restricted to ground-based, hand applications. Invasive tamarisk removal treatments will occur through 2021 as part of the project. Monitoring and maintenance treatments will continue thereafter to re-treat existing infestations and to treat new infestations discovered within the project area. It is anticipated that most of the project will be implemented within ten years (from 2016 to 2026) with the most intensive treatments occurring during the first five years.



Figure 1. Pictures of volunteers manually removing tamarisk

Monitoring

The Tamarisk Removal Project was approved under a Record of Decision signed in November of 2016 and began implementation in the spring of 2017. The tamarisk within the Cuyama River Watershed was treated in three intervals along its inflowing Rancho Nuevo Creek. In March 2017, approximately 23 acres of tamarisk were chemically treated, while in April 2017, approximately 62 acres were treated. In May 2017, the chemical treatment covered 27 acres of tamarisk. Thus, the inaugural year of implementation of the Tamarisk Removal Project treated approximately 112 acres of tamarisk.

Conclusion

The tamarisk removal treatments conducted in 2017 were a successful initiation for the Tamarisk Removal Project implementation. Every acre treated removes numerous plants and prevents those plants from reproducing and spreading into surrounding environments.

Herbicide use for the project is consistent with the Forest Service Pesticide Use Policy; is in compliance with state and federal regulations; and follows Region 5 Best Management Practices (BMPs) for Vegetation Manipulation, the Region 5 Supplement for Pesticide-Use Management and Coordination, and the Los

Padres National Forest Land Management Plan guidance including the Supplement to Soil and Water Conservation Practices FSH 2509.22-2005-1.

This project is consistent with the following goals as identified in the LMP:

- Goal 2.1 Reverse the trend of increasing loss of natural resource values due to invasive species
- Goal 6.2 Provide ecological conditions to sustain viable populations of native and desired nonnative species

Los Padres Campground Concessionaire Special Use Permit Project Description

The Los Padres Campground Concessionaire Special Use Permit is a special use permit for the operation and maintenance of campgrounds and other developed recreation sites by the concessionaire, Parks Management. This new special use permit includes additional developed recreation sites that were previously managed by a different concessionaire. The developed recreation sites are located throughout the Los Padres National Forest (Table 3).

Table 3. Recreation Sites within the Los Padres Campground Concessionaire Special Use Permit

| able 3. Recreation Sites within the Los Padres Car | <u> </u> | | | | | | |
|--|---|--|--|--|--|--|--|
| Monterey Ranger District | | | | | | | |
| 1. Arroyo Seco Family Campground | 9. Mill Creek Day Use Area | | | | | | |
| 2. Arroyo Seco Group Campground | 10. Pfeiffer Beach Day Use Area | | | | | | |
| 3. Arroyo Seco Day Use Area | 11. Sand Dollar Day Use Area | | | | | | |
| 4. Bottcher's Gap Campground | 12. Willow Creek Day Use Area | | | | | | |
| 5. Kirk Creek Campground | 13. China Camp Campground* | | | | | | |
| 6. Nacimiento Campground | 14. White Oaks Campground* | | | | | | |
| 7. Plaskett Creek Family & Group Campground | 15. Escondido Campground* | | | | | | |
| 8. Ponderosa Campground | 16. Memorial Park Campground* | | | | | | |
| | | | | | | | |
| Santa Luc | cia Ranger District | | | | | | |
| 1. Cerro Alto Campground | 5. La Panza Campground* | | | | | | |
| 2. Davy Brown Campground* | 6. Navajo Flat Campground/OHV Staging Area* | | | | | | |
| 3. Figueroa Campground* | 7. Turkey Flat OHV Staging Area/Day Use* | | | | | | |
| 4. Nira Campground* | | | | | | | |
| | | | | | | | |
| Santa Bark | para Ranger District | | | | | | |
| 1. Fremont Campground | 8. Live Oak Day Use Area | | | | | | |
| 2. Los Prietos Campground | 9. Lower Oso Day Use Area | | | | | | |
| 3. Sage Hill Group CG & Aliso Trailhead | 10. Red Rock Day Use Area | | | | | | |
| 4. Fremont Campground | 11. Sandstone Day Use Area | | | | | | |
| 5. Upper Oso Campground | 12. White Rock Day Use Area | | | | | | |
| 6. Falls Day Use Area | 13. Red Rock Trailhead | | | | | | |
| 7. First Crossing Day Use Area | | | | | | | |
| | | | | | | | |

| Ojai Ranger District | | | | | | |
|------------------------------|----------------------------|--|--|--|--|--|
| 1. Holiday Group Campground | 4. Reyes Peak Campground* | | | | | |
| 2. Wheeler Gorge Campground | 5. Rose Valley Campground* | | | | | |
| 3. Pine Mountain Campground* | 6. Middle Lion Campground* | | | | | |
| | | | | | | |
| Mt. Pino | s Ranger District | | | | | |
| 1. McGill Family & Group CG | 4. Reyes Creek Campground* | | | | | |
| 2. Mt. Pinos Campground | 5. Campo Alto Campground* | | | | | |
| 3. Ballinger Campground* | 6. Chuchupate Campground* | | | | | |

^{*}New concession managed sites

Monitoring

This action was analyzed under a categorical exclusion and documented in a Decision Memo completed in October 2016. The applicable category of action was identified in agency procedures as "Issuance of a new special use authorization for a new term to replace an existing or expired special use authorization when the only changes are administrative, there are not changes to the authorized facilities or increases in the scope or intensity of authorized activities, and the applicant or holder is in full compliance with the terms and conditions of the special use authorization" (36 CFR 220.6(e)(15)). No extraordinary circumstances were identified by the interdisciplinary team or public commentors.

The special use permit was issued to Parks Management for a single five-year term and the decision was implemented in November 2016. Continued monitoring of this special use permit includes periodic inspections to ensure the concessionaire follows the permit requirements and properly maintains the developed recreation sites.

Conclusion

This project is consistent with Goal 3.1 as identified in the LMP:

 Goal 3.1 - Provide for Public Use and Natural Resource Protection.

Recreation Participation within Part 2 of the LMP also states: "maintain partnerships with businesses who operate and maintain exiting recreation facilities under the concession program to meet the needs of visitor demands". The level and quality of service provided by concessionaires to the public and the Forest was considered during the analysis process, as well as the potential concerns and impacts from stakeholders. The project is adequately designed to provide benefits to the recreational experience on the Forest. Future special use inspections will be documented in the



Figure 2. Example of a recreation site within the Los Padres Campground Concessionaire Special Use Permit

appropriate files and databases to ensure continued compliance.

Pfeiffer Falls Trail Reroute and Observation Deck Reconstruction

Project Description

The Pfeiffer Falls Trail is approximately 0.5 miles long and originates in Pfeiffer Big Sur State Park. A spur off this trail leads to an observation deck overlooking Pfeiffer Falls and extends onto the Los Padres National Forest land. The Pfeiffer Falls Trail was closed to the public and deemed unsafe for use in 2008 when it was significantly damaged by the Basin Complex Fire. Further inspection of the area identified unstable soils along the burned-over trail route following Pfeiffer Redwood Creek. California State Parks proposed to reroute the trail to mitigate impacts to the creek and riparian habitat and to rebuild the Pfeiffer Falls observation deck on National Forest System land.

Monitoring

The portion of the project within National Forest System land was analyzed under a categorical exclusion and documented in a Decision Memo in January 2017. The applicable category of actions is identified in agency procedures as "Construction and reconstruction of trails" 36 CFR 220.6(e)(1). No extraordinary circumstances were found to warrant further analysis. California State Parks also conducted an environmental review for their portion of the project. The project began on National Forest System lands in June 2018 and the trail and observation deck are expected to open to the public in June 2021. The reroute is being completed to applicable standards and monitored by California State Parks.

Conclusion

This project supports Goal 3.1 as identified in the LMP:

 Goal 3.1 - Provide for Public Use and Natural Resource Protection

The Pfeiffer Falls Trail Reroute and Observation Deck Reconstruction project is also consistent with the place-based program emphasis of Big Sur and conforms to LMP direction Part 2, Recreation 3 – Recreation Participation and Recreation 4 – Conservation Education, which include the following, respectively:

- Improve, remove or replace aging developed recreation infrastructure to better meet current needs and future demand
- Develop interpretive material so visitors have a greater understanding about the significance and importance of forest ecosystems, heritage resources, and the interrelationship between people and the natural environment.



Figure 3: Completed Pfeiffer Falls Observation Deck

Frazier Mountain Project

Project Description

The Frazier Mountain Project is designed to reduce fire hazard risk, maintain the health of mature

conifer stands and existing conifer plantations, and protect existing facilities from wildfire, including high value recreation areas such as campgrounds, trailheads, special-use dwellings and the Mount Pinos Ranger District Office and warehouse. Thinning and fuels treatments will occur on approximately 2,386 acres of the 2,850-acre project area. Initial treatments will focus on noncommercial mechanical thinning and fuels reduction. Further fuels treatments, such as pile and understory burning, will occur in subsequent years to maintain desired stand conditions.

Monitoring

Thinning and fuels treatments were approved under a Decision Notice signed in May of 2012. In 2017, the Forest implemented 132 acres of treatments on the lower slopes of the project area in proximity to the Mount Pinos Ranger District Office, along with 127 acres of understory thinning. Fuels treatments were accomplished utilizing tracked masticators and a combination of mechanical and hand falling were used to accomplish thinning treatments. Both fuels and thinning treatments were accomplished by Forest Service employees. Not all vegetation was treated within the unit and vegetated islands were identified and retained throughout to achieve desired conditions. Additional thinning, pile burning, and understory burning treatments are anticipated to continue in 2018 as funding becomes available.

Conclusion

The fuels and thinning treatments implemented in 2017 are partially consistent with the purpose and need of the Frazier Mountain Project to reduce trees per acre and stocking levels, create more structural diversity within forest stands, and reduce the risk of catastrophic wildfire. Two-thirds of the treated stands are still considered at risk following treatments because the final decision limits thinning to 10-inches diameter at breast height. Portions of the project are consistent with the



Figure 4: Picture of 132 acres of fuels treatments from the Frazier Mountain Project

following goals as identified in the LMP:

- Goal 1.1 Community Protection. Improve the ability of southern California communities to limit loss of life and property and recover from the high intensity wildland fires that are a natural part of this state's ecosystem.
- Goal 1.2 Restoration of Forest Health. Restore forest health where alteration of natural fire regimes has put human and natural resource values at risk.
 - Goal 1.2.1 Fire Regime I (0-35 years low severity). Reduce the potential for widespread losses of montane conifer forests caused by severe, extensive, stand replacing fires

Evaluation and Restoration of Degraded Chaparral within the Piru Fire Perimeter Project Description

Overlapping wildfires and drought have impacted the condition of chaparral in southern California. The cumulative effects of fire and drought can impede chaparral recovery and reduce ecosystem resilience following a disturbance. Often, the result is the loss of woody chaparral vegetation and the conversion to non-native grasses. The Los Padres National Forest and National Fish and Wildlife Foundation partnered with the University of California at Santa Barbara (UCSB) and Riverside to scientifically evaluate shrubland resilience and provide restoration methods for chaparral species degraded by the 2003 Piru Fire on the Ojai Ranger District.

The extent of chaparral loss was determined by comparing historical aerial photos to current day imagery. From this imagery, two degraded sites dominated by non-native grasses were selected for restoration. Seeds were collected and prepped for germination from five target native species: *Salvia*

Apiana (white sage), Salvia leucophylla (purple sage), Malacothamnus fasciculatus (chaparral mallow) Hesperoyucca whipplei (chaparral yucca), and Eriodictyon crassifolium (thickleaf yerba santa). The project's restoration methods included sowing the target native species into three experimental treatment blocks with no removal of non-native grasses, removal of half of the non-native grasses, and complete removal of grass.

The native seeds were added to the three treatment blocks in the winter of 2016-2017. In addition to seeding, degraded areas were scraped of non-native grasses and topsoil to stimulate native species germination and soil cores were collected to evaluate presence of native seeds in the



Figure 5: Watering outplanted seedlings at the degraded sites in February 2017 using backpack sprayers. Surviving seedlings of *Malacothamnus fasciculatus, Salvia leucophylla*, and *Salvia apiana* are visible in the image

seed bank. The target species were also grown in the UCSB greenhouse and outplanted in January 2017 in either weeded, partially weeded, or unweeded field conditions (Figure 5). Monitoring of germinants and seedlings began in spring 2017 and native plantings were monitored in the spring and summer of 2017 as shown in Table 4.

Monitoring

This project was analyzed under a categorical exclusion and documented in a NEPA checklist in October 2016. The applicable category of action is identified in agency procedures as "Inventories, research activities, and studies, such as resource inventories and routine data collection when such actions are clearly limited in context and intensity (7 CFR 1b.3(a)(3))".

Aerial photo analysis revealed an increase in chaparral cover in the Piru fire scar between 1934 and 2010. Rather than converting directly to invaded grassland, results indicate a stepwise conversion from chaparral to grassland, with coastal sage scrub as an intermediate vegetation type. In this study,

the initial conversion of chaparral to coastal sage scrub is driven by winter-time aridity, while conversion of coastal sage scrub to non-native grassland is driven by fire. These vegetation fluxes occurred in the other direction as well, with grassland converting to coastal sage scrub and coastal sage scrub transitioning into chaparral.

Overall, native seedling occurrence in the field was very low. Native seed collected from the field showed high viability in the UCSB greenhouse, however 2016-2017 seeding trials showed poor results with no native woody plant establishment in seeded plots. There was also no substantial germination of native seeds from the seedbank in plots where degraded areas were prepped by scraping off nonnative grasses and topsoil. Germination of native species occurred in soil cores collected from the degraded field sites, which indicates some native seed is present in the seed bank. Contrary to the seeding results, there was high survival of several out-planted seedlings with full exotic removal, as seen in Table 4.

Table 4. Survival of seedlings outplanted in 2017.

| | (\ | Salvia Apiana white sa | 1 | | Salvia eucophy ourple sa | /lla | f | lacothai ascicula parral m | tus | Hesperoyucca whipplei (chaparral yucca) | | cr | Eriodictyon crassifolium (thickleaf yerba santa) | | |
|-----------------|-----|------------------------------|------|-----|--------------------------------|------|-----|----------------------------------|------|---|------|------|---|------|------|
| Exotic removal | no | half | full | no | half | full | no | half | full | no | half | full | no | half | full |
| Feb. 2017 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 12 | 12 |
| May 2018 | 2 | 4 | 15 | 2 | 3 | 9 | 1 | 3 | 10 | 0 | 0 | 1 | 0 | 0 | 0 |
| Survival (%) | 8.3 | 16.7 | 62.5 | 8.3 | 12.5 | 37.5 | 4.2 | 12.5 | 41.7 | 0.0 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 |

Conclusion

There are two primary management conclusions of this study. One, restoration of degraded chaparral by seed addition is likely to have low success. Research from other locations in southern California have found similar results suggesting out-planting container stock may be the most effective means of reestablishing native woody species on the landscape. Two, because invasive grasses strongly reduced survival of all seedlings, the results of out-planted seedling survival suggests grass removal must be done, at least locally, for successful restoration of native woody plants.

The results of this project are valuable for continued and future management and consistent with the following goals as identified in the LMP:

- Goal: 1.2 Restore forest health where alteration of natural fire regimes have put human and natural resource values at risk
- Goal 2.1 Reverse the trend of increasing loss of natural resource values due to invasive species.
- Goal 6.2 Provide ecological conditions to sustain viable populations of native and desired nonnative species

Santa Barbara Mountain Communities Defense Zone Project

Project Description

The Santa Barbara Mountain Communities Defense Zones Project addresses defensible space from wildfires next to the Los Padres National Forest. Because these communities are located immediately adjacent to a chaparral ecosystem, fire behavior modeling and experience shows potentially severe wildfire impacts. Treatments for this project include thinning and brush control to create or improve existing fuel breaks located around the local communities in zones of strategic importance. The goals of the project are to enhance community wildfire protection and reduce the risk of loss of human life, structures, improvements, and natural resources from wildland fire and subsequent flooding.

Monitoring

This project was analyzed under a categorical exclusion and documented in a Decision Memo in March 2017. The applicable category of action is identified in agency procedures as "Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction." (36 CFR 220.6(e)(6). The regulation lists examples of the activities covered by the category that include but are not limited to, "thinning or brush control to reduce fire hazard," and "prescribed burning to reduce natural fuel build-up."

In 2017 during the Whittier Fire, the Rosario Park fuel break was opened with masticators as a contingency line to create conditions that support firefighting operations on the ground and to defend homes. The Rosario Park fuel break is a reinstallation of a former fuel break; it is approximately 2.7 miles long with a maximum width of 300 feet. As seen in Figure 6, the design features of the fuel break include existing roads and favorable topography. The fuel break is along a ridge mostly within the National Forest boundary and includes a small 4-acre portion on the northeast end located on private property. The Rosario Park fuel break is the largest portion of the Santa Barbara Mountain Communities Defense Zones Project with a total of 121 acres accomplished in FY2017.



Figure 6. Map of Rosario Park fuel break as part of the Santa Barbara Mountain Communities Defense Zone Project

Conclusion

The Rosario fuel break provided a contingency line for firefighting operations during the Whittier fire in 2017. This fuel break will continue to provide conditions to support firefighting operations and improve the ability of the community to strategically mitigate the potential impacts of wildfire. This project supports the following goals as identified in the LMP:

- Goal 1.1: Improve the ability of southern California communities to limit loss of life and property and recover from the high intensity wildland fires that are a natural part of this state's ecosystem.
- Goal: 1.2 Restore forest health where alteration of natural fire regimes have put human and natural resource values at risk.
 - Goal 1.2.2 Reduce the number of acres at risk from excessively frequent fires while improving defensible space around communities.

Franklin Trail Restoration

Project Description

The Franklin Trail was constructed in 1913 and abandoned in the 1970s due to a lack of access through private property. After a recent land acquisition, the trail was reopened by the Santa Barbara Trails Council in coordination with Santa Barbara County. The Franklin Trail Restoration project aims to connect and restore a 2.69 mile segment of the historic trail on the Los Padres National Forest. The Franklin Trail will be included in the National Forest trails system and be restored to Class 3 developed Pack and Saddle standards to provide shared use by pedestrians, equestrians, and mountain bikers.



Figure 7: Small crib-wall section on the Franklin Trail

The project primarily includes brushing, trail corridor and tread maintenance, and restoration where erosion control features and short sections of crib wall are needed. Additionally, 200 feet of crib wall construction will reinforce sections of washed out trail. The Forest Service collaboratively developed trail restoration plans with the Santa Barbara Trails Council to include resource protection measures related to trail design and Best Management Practices, the Migratory Bird Treaty Act, wildlife, noxious weeds, erosion and water quality, cultural resources and fire hazards.

Monitoring

This project was analyzed under a categorical exclusion and documented in a Decision Memo in December 2016. The applicable category of actions is identified in agency procedures as "Construction and reconstruction of trails" 36 CFR 220.6(e)(1).





Figure 8: Before and after of crib wall construction. Photo courtesy of the Los Padres Forest Association.

The Franklin Trail Restoration project is consistent with the place-based program emphasis of the Santa Barbara Front and conforms to LMP direction Part 2, Transportation 3 - Improve Trails, including the following objectives:

The Franklin Trail Restoration project was implemented in the summer of 2017 and unfortunately, required additional maintenance and repair from damage caused by the Thomas Fire. All major trail work was conducted outside the breeding season for birds protected under the Migratory Bird Treaty Act and prior to trail construction, late flowering mariposa lily surveys were conducted, and any occurrences were avoided. Monitoring indicates all resource protection measures were implemented as planned.

Conclusion

This project helped improve the long-term sustainability of the historic Franklin Trail, improved public safety, and helped reduce potential for impacts to federally and Forest Service listed wildlife and plant species. Regular maintenance and monitoring will help reduce erosion and siltation into nearby streams and assist in maintaining the surrounding habitat by keeping users within the trail boundary. The new trail location provides the public with scenic views of the surrounding landscape.



Figure 9: View towards the top shot south Trail in 2017 after the Thomas Fire.

- Construct and maintain the trail
 network to levels commensurate with area objectives, sustainable resource conditions, and the type
 and level of use.
- Maintain and/or develop access points and connecting trails linked to surrounding communities and create opportunities for non-motorized trips of short duration.

The Franklin Trail Restoration project also supports the following Forest Goals:

- Goal 2.1 Reverse the trend of increasing loss of natural resource values due to invasive species
- Goal 3.1 Provide for Public Use and Natural Resource Protection
- Goal 5.1 Improve watershed conditions through cooperative management
- Goal 5.2: Improve riparian conditions

 Goal 6.2 - Provide ecological conditions to sustain viable populations of native and desired nonnative species

Happy Canyon Allotment

Project Description

The Happy Canyon Allotment totals 5,901 acres with 4,216 acres in the Santa Barbara and Santa Lucia Ranger Districts. This decision authorizes continued livestock grazing consistent with the LMP on suitable National Forest System lands for a 10-year term. In addition to a grazing permit and new Allotment Management Plan, the permittee will complete reconstruction of existing non-functional range improvements to improve livestock distribution and riparian condition.

Monitoring

The Happy Canyon Allotment was approved under a Decision Notice signed in December 2016 and the 10-year grazing permit was signed in March 2017. The allotment includes a monitoring plan with two methods of monitoring. Implementation monitoring (short term) is used to evaluate whether the allotment is meeting or moving towards desired conditions as described in the LMP. Effectiveness monitoring (long-term) determines if conditions on the allotment are meeting or moving toward the desired condition of sustainable rangelands and ecosystem health.

Several actions were implemented or adjusted because of implementation monitoring:

- A riparian exclosure was constructed as planned in the northeast portion of the allotment to improve riparian condition in 2017
- Three water developments proposed for reconstruction are delayed indefinitely due to lack of a reliable water source. Continued monitoring will determine if conditions become ideal for reconstructing these water developments.
- Monitoring indicated some existing spring developments on the allotment lack enough water to provide for cattle troughs. This led to redesigning existing water developments to protect the spring water source and reduce water waste.



Figure 10: Left – riparian area near range improvement. Right – The same riparian area after the exclosure was constructed

Effectiveness monitoring is also in progress. There is a long-term rangeland health monitoring transect with data collected every 5-10 years and a study on grassland communities with data collected every other year for 10 years. The transect monitors long-term condition and trend while the study addresses public concern about potential cattle grazing impacts on blue oak. The study will monitor paired grazed and excluded sites for species richness, thatch accumulation, small mammal activity and oak recruitment and survivorship. Plot analysis reports are available to the public upon request.



Figure 11: Photo inside a riparian exclosure

Conclusion

The Happy Canyon Allotment will continue to provide livestock grazing consistent with the LMP and continued monitoring will guide management decisions in the short and long term. The allotment is meeting or moving towards desired conditions and is consistent with the following goals identified in the LMP:

- Goal 2.1 Reverse the trend of increasing loss of natural resource values due to invasive species
- Goal 5.2: Improve riparian conditions
- Goal 6.1 Move toward improved rangeland conditions as indicated by key range sites
- Goal 6.2 Provide ecological conditions to sustain viable populations of native and desired nonnative species



Figure 12: Photo of the Happy Canyon Allotment

Land Management Plan Amendments

The LMP is a dynamic document that can be amended in response to:

- Errors and or discrepancies found during implementation;
- New information;
- Changes in physical conditions;
- New laws, regulations, or policies that affect National Forest management;
- New guidance indicated by application of adaptive management principles.

Significant LMP amendments change guidance or management zoning which, because the LMP is a NEPA document, requires NEPA. This is completed through a project-level NEPA decision that requires an LMP amendment to make the project consistent with the LMP, or directly in a supplemental EIS. Non-significant changes not requiring NEPA include corrections; clarification of intent; changes to monitoring questions; and refinements of management area boundaries to correct GIS inaccuracies. These are simply updates that are posted to the LMP and made public through such means as publishing on the Forest website, as is the case for this document. From the evaluation of monitoring results, no amendments are needed.

Public Participation

The 2017 Los Padres National Forest Land Management Plan Monitoring and Evaluation Report is posted on the Forest website.

List of Contributors

The following individuals participated in the completion of this report either as Part 2 contributors of program area assessments, or as team members in Part 3 project field reviews:

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