



United States
Department
of Agriculture



Forest Service
Pacific
Southwest
Region

Land Management Plan Monitoring and Evaluation Report

Cleveland National Forest Fiscal Year 2007

September
2008



September 2008

I am pleased to present the Cleveland National Forest's Annual Monitoring and Evaluation Report for your review. The purpose of the Monitoring and Evaluation Report is to determine if plans, projects and activities are implemented as designed and in compliance with the Land Management Plan; evaluate Plan effectiveness relative to species and habitats and the principles of adaptive management; and help identify necessary future Plan adjustments.

In April 2006, the revised Cleveland National Forest Land Management Plan was approved. In the Record of Decision, monitoring is emphasized and identified as a key element in all programs to assure the achievement of desired conditions over time.

This is the second monitoring effort conducted under the revised plan. Each year we monitor projects that were implemented the previous fiscal year (FY) as well as ongoing activities and programs. This report also addresses indicators that will help us assess resource status and trends and evaluate progress toward the Forest's desired conditions. Through monitoring, evaluation, and adapting our management, we aim to further increase effectiveness.

It is important to me to keep you informed of the results of our monitoring. If you are interested in becoming involved in project or other planning, please see our national website (<http://www.fs.fed.us/sopa/>). Additional information and opportunities on the Cleveland National Forest may be found on our website at <http://www.fs.fed.us/r5/cleveland/>.

Sincerely,

/s/ William Metz

WILLIAM METZ
Forest Supervisor
Cleveland National Forest

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Cleveland Land Management Plan Monitoring and Evaluation Report

Table of Contents

I.	Introduction.....	1
II.	Methodology.....	1
III.	Land Management Plan Monitoring and Evaluation of Projects, Activities, and Programs	3
IV.	Annual Indicators of Progress Toward Forest Goals.....	31
V.	LMP Monitoring Protocol Recommendations.....	42
VI.	Overall Recommendations.....	42
VII.	Potential LMP Amendments or Corrections.....	43
VIII.	Action Plan.....	43
IX.	Public Participation.....	46
X.	List of Preparers.....	47
XI.	Appendix.....	48

Cleveland Land Management Plan Monitoring and Evaluation Report

I. Introduction

The Fiscal Year (FY) 2007 Monitoring and Evaluation Report documents the evaluation of selected projects and programs where activities occurred during October 1, 2006 through September 30, 2007.

The revised Cleveland National Forest Land Management Plan (LMP or “Forest Plan”) went into effect October 1, 2005. Projects with decisions signed after this date must comply with direction in the revised plan. Decisions approved prior to this date that are not under contract or permit but continue to be implemented in phases are also expected to be consistent with the revised plan. This report documents the evaluation of activities and the interpretation of monitoring data to determine the effectiveness of the LMP and addresses whether changes in the plan, or in project or program implementation are necessary.

As one of the pilot Forests in the country, the Cleveland Forest implemented a Forest-level Environmental Management System (EMS) in June 2006. Since then the 2008 Planning Rule has gone into effect. On July 1, 2008, the Forest Service implemented a national EMS on all administrative units; accordingly this will replace the Forest-level EMS. This environmental management system provides us with a disciplined framework in which to practice adaptive management and meet our stated environmental policy, which is to comply with applicable legal and other requirements, prevent pollution and practice continual environmental improvement ([FSM 1331.03](#)).

II. Methodology

The monitoring plan for the Cleveland National Forest LMP is described in all parts of the plan. The monitoring requirements are summarized in LMP Part 3, Appendix C. The Cleveland Monitoring Guide further details the protocols that were used in this review.

The monitoring guide was updated to reflect the development of new mapping used in fuels treatment effectiveness monitoring. The fire regime condition class (FRCC) mapping reflects the ecologists’ review of scientific literature, and modeling and mapping of FRCC for the southern California province. The monitoring guide also notes that roads monitoring is now in accordance with a national, not regional roads monitoring protocol and that vegetation snapshot will be every ten years. This guide is available to the public upon request.

In Part 1, the LMP identifies outcome questions that will help to evaluate movement toward the desired conditions over the long-term. The monitoring guide describes the baseline data that will be used to answer these questions and evaluate progress over time toward desired conditions. A comprehensive evaluation of this movement will be prepared in the fifth year

following plan implementation. Corporate databases track accomplishment of work related to objectives and strategies (LMP Part 2).

Implementation and effectiveness monitoring for Part 3 of the LMP was conducted at the project or activity level. A ten percent sample of projects and ongoing activities was randomly selected and visited to review the application and effectiveness of the design criteria. If problems in implementation were detected or if design criteria were determined to be ineffective, then the team recommended corrective actions.

The Forest asked the following questions of each reviewed project or ongoing activity:

1. **Did we accomplish what we set out to do? (Compare expected results to actual results)**—Findings were documented on the Cleveland EMS Element 4.5.2 LMP Protocol checklist, shown below). To evaluate effectiveness, the team asked: Has project design criteria been effective at improving environmental conditions as expected?

Monitoring Question per LMP Protocol for Review of Projects and Ongoing Activity Sites	Y / N	If no, identify what phase of the process was deficient (i.e. NEPA or project administration) and describe deficiencies. If yes, identify any standard operating procedure or key reason(s) for the success.
Were LMP goals, desired conditions and standards incorporated into operational plans (i.e. burn plans, allotment plans, facility master plan, etc.)? Review site-specific checklists.		
Were NEPA mitigation measures or LMP project design criteria implemented as designed?		
Were requirements from biological assessments/ evaluations and heritage evaluations (ARRs) and watershed assessments implemented?		
Were legal and other requirements (LMP consistency review checklists) identified as applicable to the project or site?		
Were operational controls effective at protecting the environment as intended?		

2. **Why did it happen?** The Forest emphasized and sought out underlying cause-and-effect relationships not individual performance or behavior.
3. **What are we going to do next time?**
 - a. What activities should be continued to sustain success?
 - b. Are changes needed to correct any implementation or effectiveness-related problems?
 - c. If change is needed, will it require an amendment or administrative corrections to the Land Management Plan?

Results, conclusions, and recommendations were documented on the Cleveland National Forest LMP Monitoring and Tracking forms and in this annual LMP Monitoring and Evaluation Report.

III. Land Management Plan Monitoring and Evaluation of Projects, Activities, and Programs

In accordance with the methodology described in the monitoring guide, ten percent of new projects or ongoing activity sites for each type of activity were randomly selected for review and are listed in Table 1 in the appendix of this report.

Upper San Juan Campground (07-LMP-Dev_Rec-1)

The Upper San Juan campground is located on the Trabuco Ranger District along Highway 74 south of the El Cariso Campground. The campground is open only seasonally from about Memorial Day to Labor Day due to low use and the need to prioritize use of limited staff and resources. The monitoring team visited the campground on April 8, 2008 to review consistency with the Forest Land Management Plan and also to evaluate the use of Best Management Practices (BMPs) for a recreation site (BMP R22).

Monitoring Results

Damaged tables are being repaired, bathrooms are being painted, fire rings and grills are in good condition, and signage is new or in good condition. Weeds were pulled within 10 feet of roads/campsites and hazard trees were marked for removal.

The field survey included visual inspection of toilet facilities, refuse disposal facilities, and the water faucet in the campground as well as the riparian conservation area (RCA). The campground is historic. There is an intermittent drainage down the center of the campground loop. The washing facilities are at least 100 feet from the water, but more prominent signage regarding not washing dishes at the water spigots is needed. The Forest Plan allows for use within the RCA as long as the use either keeps the RCA in a neutral condition or the activity moves the RCA closer to the desired condition. An evaluation was made to determine if the campground design and use was keeping the RCA in a neutral condition.



Upper San Juan Campground: On the left, a closed campsite. On the right, road drainage.

Upon entry into the campground, observations were made of a closed campsite filled with and blocked off by boulders. This campsite, in the past, allowed for camping adjacent to a creek. Closing of this campsite protected the RCA. Another site (#8) is located next to a pond formed from road water that drains into the channel. Access to the site requires crossing the water. There is a high potential of contamination and sediment entering the water if this site is allowed to continue.

Runoff from the campsites and the access road was channeled into the center of the loop and in some cases the overside drains extended to the intermittent creek. These drains provided a direct path for sediment, trash, and storm water discharge from vehicles. This situation does not protect the RCA.

Trash barrels located at site #11 are within the RCA on the creek side of the road. The trash cans could be moved across the street, which would provide a better chance of containing the trash away from the creek.

Conclusions

The District staff has done excellent maintenance work in this campground. LMP goals, objectives, standards and place emphases are not incorporated into an operational plan. However, keeping the facilities clean, safe, and in good repair and the use of volunteers to help reduce the backlog of recreation facility maintenance is consistent with recreation program objectives. The site is also consistent with the Elsinore Place emphasis to provide a variety of quality recreation experiences including the improvement of developed recreation facilities.

The District has taken action to address watershed issues; however, the campground still has several BMP-related issues to address, as recommended below.

There is no operations and maintenance (O&M) plan for the site. These plans help to institutionalize activities needed to meet service or resources needs including best management practices (BMPs) to implement the Clean Water Act.

Recommendations

- Remedy issues surfaced in BMPEP monitoring:
 - Post standard “camper responsibility” sign.
 - Modify drainage off impervious surfaces to dissipate energy and if possible route off-road drainage away from creek
 - Clean mosquito pond by campsite 8; consider decommissioning.
 - Keep trash cans at least 30 meters from creek.
- Prepare operations and maintenance (O&M) plan for site.

Wildomar Campground (07-LMP-Dev_Rec-2)

Wildomar OHV campground and parking/staging area are located on the Trabuco Ranger District to the east of the San Mateo Canyon Wilderness. This campground on the Trabuco Ranger

District is managed year round. The site receives light to moderate use. The monitoring team visited the campground on April 8, 2008 to review consistency with the Forest LMP.

Monitoring Results

The site is well maintained. The tables were installed about five years ago and are in good condition. The site has vault toilets and a water pump. The Forest is proposing a fee increase for the site to help maintain and improve the facility. Improvements to nearby trails were made in 2007. There is no operations and maintenance (O&M) plan for the site.

The Forest has motorized mixed use by licensed vehicles and OHV's in Wildomar OHV Campground and Wildomar OHV Trailhead. These are facilities to park, unload, and load OHV's and to access the designated routes. In contrast, the adjacent South Main Divide Road (also evaluated in this review) is a level 4 maintenance, paved, passenger car road subject to the Highway Safety Act and mixed use is not permitted. Parallel OHV trails provide a path between the Wildomar OHV Campground and Wildomar OHV Trailhead.

The field survey included visual inspection of toilet facilities, refuse disposal facilities, and the water faucet in the campground as well as the sediment deposition basin in the OHV parking/staging area. The campground is adjacent to an intermittent creek that is tributary to the steelhead trout stream. The nearest campfire pit to the channel is at 55 feet. The trash cans were in good repair and there was little trash on the ground. During the high use time, trash cans have been reported to be overflowing. Previous to this inspection, the campground had access to the creek which led to unauthorized OHV route creation. The CNF recreation staff put fencing and large boulders at the bank of the creek to deny motorized access. Barriers were installed to define sites and to discourage erosion and "parking lot creep," but the level of erosion is still unacceptable in the picnic table area due to lack of vegetation. The campground had 70% bare ground (the BMP calls for less than 10%). As the campground is within the RCA, sediment and runoff are reaching the channel.



Wildomar Campground: (L) barriers protecting riparian values; (R) sign restricting vehicles to roads and spurs.

Recreation staff that maintain the site provide the District Recreation Officer with weekly reports detailing work done and work needs. Recommendations for improving this site include adding

signs specifying that no dishwashing should be done at the water spigot, or within 100 feet of the creek. Potentially the campfire rings within the RCA (100 feet) would need to be moved. More importantly, the ground should have a mulch cover installed and the cover should not be raked. The entry road had signs of gravel that had been dispersed. More gravel could be added. The degree of sediment produced has the potential to be significant and last more than one season and affect the stream reach. This site was found to not meet BMP effectiveness and implementation protocols, though there are plans to address these issues.

Conclusions

There is no operations and maintenance (O&M) plan for the site. These plans help to institutionalize activities needed to meet service or resources needs including best management practices (BMPs) to implement the Clean Water Act. Excellent progress has been made on watershed issues and implementation of BMPs. However, the campsite grounds are bare and further action is needed in this area.

The campground provides desired recreational opportunities. Although LMP goals, objectives, standards and place emphases are not incorporated into an operational plan, the facilities are clean, safe, and in good repair, which is consistent with recreation program objectives. The site is also consistent with the Elsinore Place emphasis to provide a variety of quality recreation experiences including the improvement of developed recreation facilities.

Recommendations

- Prepare operations and maintenance (O&M) plan for the site and include developed recreation BMPs.
- Implement Appendix D for campground regarding watershed protection. Remedy issues surfaced in BMPEP. Consider recommendations from the hydrologist to add mulch cover, install signs regarding no dishwashing at spigot or within 100' of the creek, keep campfire rings more than 100' from the creek, and add more gravel to the entry road.

El Cariso Picnic Area (07-LMP-Dev_Rec-3)

This is a small picnic area adjacent to the El Cariso Campground. The Trabuco Ranger District manages this site seasonally from about Memorial Day to Labor Day due to low use and the need to prioritize use of limited staff and resources. The monitoring team visited the picnic area on April 8, 2008 to review consistency with the Forest Land Management Plan.

Monitoring Results

This picnic area is located on the Trabuco Ranger District near the ridge above Lake Elsinore. The water flows west towards San Juan Creek, and not towards Lake Elsinore. The site is within an RCA, as evidenced by the willows growing in the creek bottom. There were picnic tables very close to the creek. There was also a burn pile in the picnic area, which put ash and charcoal within the RCA. It appeared that a hazardous tree had been dropped, possibly in relation to a

powerline. The tree rounds were placed within the channel. The recommendation was made to remove the tree rounds from the RCA and clean up the burn residue. In the picnic area, the trash cans were outside the RCA, but there was sufficient groundcover, so though sediment likely reaches the channel, it would be insignificant in amount.

The signage looks good. Tables are old but functional. One barbeque in the rear site across the walkway is deteriorated. This lone picnic site is inconspicuous and probably poorly maintained because only one recreation field staff is trying to cover for multiple vacant recreation jobs and was not aware of its presence. There have not been any recent maintenance projects.



El Cariso Picnic Area (riparian area in background).

Conclusions

The site is consistent with the Elsinore Place emphasis to provide a variety of quality recreation experiences including the improvement of developed recreation facilities. Most of the facility is clean and in adequate repair.

There is no operations and maintenance (O&M) plan for the site. These plans help to institutionalize activities needed to meet service or resources needs including best management practices (BMPs) to implement the Clean Water Act. Management operational controls are not effectively protecting the Riparian Conservation Area. Charcoal/pile burning and cutting and stacking rounds in the Riparian Conservation Area (RCA) is inconsistent with the LMP.

Recommendations

- Prepare operations and maintenance (O&M) plan for site.
- Schedule site for O&M including sanding and BBQ in far picnic site
- Work with utility to clean up and educate about RCA.
- Remedy issues surfaced in BMPEP: Remove the tree rounds from the RCA and clean up the burn residue.

Pioneer Mail Trailhead (07-LMP-Dev_Rec-4)



This picnic ground on the Descanso Ranger District is managed year round. Pioneer Mail provides a picnic area and a trailhead for the Pacific Crest National Scenic Trail.

The site receives light use. The monitoring team visited the trailhead and picnic area on April 9, 2008 to review consistency with the Forest Land Management Plan.

Monitoring Results

There is no operations and maintenance (O&M) plan for the site. These plans help to institutionalize activities needed to meet service or resources needs. The trailhead structures were destroyed in the Cedar Fire. The reconstruction looks great. The picnic sites and vault toilets are well maintained. The area has fencing to prevent vehicle encroachment. No trail user or resource conflicts were raised.



Pioneer Mail trailhead post-Cedar Fire (L); and today (R).

There have been no recent NEPA decisions associated with site and there are no biological or archaeological requirements to implement.

The trailhead and parking area are located in the headwaters of Cottonwood Canyon. There is no streamside management zone protection in the operation of the site, due to the ephemeral nature of the drainage and the ground cover. Monitoring indicates that operations are appropriate in regard to refuse disposal (pack in, pack out signs; no trash cans provided; little trash seen on ground), sanitation facilities, and groundcover and sedimentation.

Conclusion

The site is well maintained and is consistent with the Laguna Place emphasis, which includes: Supply high quality recreation settings, experiences, and facilities. Maintain facilities and support a variety of recreation activities. Develop interpretive opportunities where resources can be protected. Manage the trail system to minimize user and resource conflicts. Maintain views along the Pacific Crest National Scenic Trail.

Recommendations

- Prepare operations and maintenance (O&M) plan for site.
- Continue the outstanding work being done at this site.

Pine Creek Recreation Residence Tract (07-LMP- Rec SUA-1)

This tract of 37 cabins, with associated roads, septic systems and water wells is located just north of Pine Valley along Pine Creek. All recreation residences on the Forest are currently undergoing NEPA for reissuance of new permits. This project involves issuance of new permits for existing recreation residences on the Descanso and Trabuco RDs. Analysis will determine whether residence use will continue either unchanged or with modifications, or will be discontinued. The monitoring team visited the tract on April 10, 2008 to review consistency of management of the tract (not each lot and its improvements) with the Land Management Plan.

Monitoring Results/Findings

Site use, as well as cabin improvement projects in the Pine Creek Tract are managed to address resources conflicts. This tract is located in occupied arroyo toad habitat. Access routes are designated to reduce road density and reduce conflicts with arroyo toads. Cabin owners can only do construction from late July through late October. All projects have a MIS analysis as the toad is a management indicator species. Forest heritage personnel make site visits to check when activities occur.

Following the recent second round of fuels reduction work, there is now 100' clearance around each cabin (additional 70' from past). Not all wells are registered in name of Forest Service as is required.

There was a survey in the 1990's for historical character of cabins. Due to historical values, all proposed are reviewed by the Forest archaeologist.

Conclusions

Part 3 of the LMP's Appendix D guidelines apply to all existing and new recreation sites and uses whenever a conflict between uses or sensitive resources is detected. Sensitive resources include threatened, endangered, proposed, candidate, and sensitive species and habitats, riparian habitats, soil and watersheds, heritage resources, user conflicts, or other resources. Management of heritage resources is sound. The need will continue for the permit administrator to coordinate

with heritage personnel for historical classification. The District implements the B.O. terms and conditions for the arroyo toad.



Pine Creek Tract, located adjacent to Pine Creek, is managed to protect heritage and resource values.

The Place emphasis to conserve species is carried out through efforts such as designated access routes in the tract and seasonal restrictions. The involvement of permittees in this effort is consistent with the Place emphasis to enlist others to actively participate in managing, planning, designing, maintaining and monitoring resource conditions, and to help resolve problems as they arise.

Wells must be registered to Forest Service not as owned by permit holder.

Recommendations

- Continue to proactively address permit issues and implementing appendix D.
- The recreation residence permit project should resolve any remaining issues as cabins must be in compliance with permit, and bills paid before permits are reissued. With the re-issuance of permits, each new permit will include guidelines for cabin use and improvements including County compliance

Escondido Recreation Residence Tract (07-LMP- Rec SUA-2)

This historical tract is located on Laguna Mountain and consists of 4 cabins. The monitoring team visited the tract on April 10, 2008 to review consistency with the Land Management Plan.

Monitoring Results

Fuels clearance around cabins has been addressed and is 100 feet. The tract is adjacent to the current Laguna Recreation fuels project, and the 175 ac Wooded Hill fuels project which is currently being reanalyzed. Clearance and removal of hazardous (including bark beetle kill) trees is aided by improvement association that pays half the cost of hazardous tree removal via a Firesafe Council grant. The “Deadwood Gang” assists Laguna Mountain tracts to treat fuels appropriately. Fire personnel are slated to remove black oak mortality and hazard trees along road.



Shows tract after successful prescribed burn; unauthorized cutting of timber is also evident.

Due to historical values all proposed changes go through Forest archaeologist and SHPO. One of four cabins was out of compliance and found in willful violation of terms and conditions and fined. The numerous violations included cutting trees and grading of the area. Since then, the area has been re-graded and reforested. The water tank was removed. Statues not cemented to the ground were removed; concrete statue removal is underway. Non-native vegetation (daffodils, juniper) were removed. Most of the unauthorized actions have been addressed. The permit administrator has a few remaining issues left to resolve. No special tract management is needed for species per BA/BE.

Recently a water line was brought down to the tract. All lots have water now.

Conclusions

Permit administration is responsive to resolving problems and nurturing good relationships and partnerships. The active Firesafe Council and Mount Laguna Improvement Association do good work that is making positive contributions to forest management.

Recommendations

- Continue to remedy unauthorized improvements and managing for historic values.
- Continue solid permit administration and relationship with improvement association.

Guatay Allotment (07-LMP- Range-1)

This allotment is the former Roberts Ranch located just off Highway 8 near Descanso and grazes 25 head for five months. The monitoring team visited the tract on April 10, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (range management G24). The 2001 BMPEP Handbook draft procedure was used to evaluate the Guatay allotment.

Monitoring Results

The LMP is incorporated explicitly into grazing permit. Design criteria are implemented via an annual operating plan. Livestock use of forage is monitored throughout grazing season. Barriers keep cattle out of Pine Creek as long as gates are properly closed.

Site-specific standards and guidelines have been developed and implemented correctly for this allotment in the following categories: herbaceous utilization (through ocular estimate), streambank alteration and woody utilization (based on the Forest Plan). Implementation BMPs met protocols.

The standards and guidelines groundcover objective of 50% is meeting standards and there is no evidence of rilling or floodplain erosion due to grazing operations. Highway 8 crosses the meadow and CalTrans concentrates water into four specific locations. This channeling of water has caused gullies to cross the meadow and erode the streambank so that it is stable for only 50% to 60% of the reach. CalTrans has installed rock check dams, but the flows of water have bypassed the rock check dams and caused extensive erosion. Until the CalTrans situation is remedied, streambank restoration would have insignificant effect. The erosion primarily caused by CalTrans is significant in quantity, will last more than one season, and affects the stream reach. The sedimentation problems are contained on site due to manmade stock ponds at various points in the meadow which catch and retain sediment.



Guatay allotment (Roberts Ranch). On the right, Highway 8 can be seen in the background.

The cultural resource barrier is operational.

Yellowstar thistle was removed from a portion of allotment before seed set. *Poa bulbosa* may be a new invasive entering the area

The area was surveyed for Quino checkerspot as part of B.O. analysis; none was found.

Conclusions

Permit administration is solid. Monitoring has not determined any negative trends. Many/most watershed problems/threats result from uncontrolled rainfall runoff from Interstate 8.

Recommendations

- Continue permit administration, rangeland improvement and resource protection.
- As appropriate, pursue opportunities for Cal Trans to plan and implement watershed improvement projects.

Mendenhall Allotment (07-LMP- Range-2)

This allotment is located on the Palomar Ranger District and grazes 37 head for three months. The monitoring team visited the tract on August 28, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (range management G24). This allotment was monitored in August because the BMP evaluation must be conducted after the allotment has been grazed for the season, and the season for Mendenhall allotment is typically about June 1 through the end of August.

Monitoring Results

The CNF is currently in the process of NEPA to evaluate the proposal of renewing grazing permits for the next 20 years. As such, each of the grazing allotments are being evaluated for current hydrologic and soils processes and BMP implementation and effectiveness. The NEPA process and new permits, if approved, give the CNF an opportunity to impose mitigations, standards, and guidelines that were previously not implemented (such as streambank alteration). Including these standards and guidelines in future projects should better allow the CNF to follow the changing laws and policies of the Federal Government and State of California.

Planning for the Mendenhall allotment is scheduled for completion in 2008. Livestock use of forage is monitored throughout grazing season. Two Regional long-term monitoring plots indicate a stable trend. Site-specific standards and guidelines have been developed and implemented correctly for this allotment in the following categories: herbaceous utilization (through ocular estimate), streambank alteration and woody utilization (based on the Forest Plan). Implementation BMPs met protocols.

The evaluated meadow was acquired from the Mendenhall family in the 1970s. Prior to the acquisition of the land, year round grazing was the standard method. After acquiring the land, the management was changed to seasonal use and half of the animal units were permitted. Water from this meadow drains into Lake Henshaw. In the 1980s a large gully (that was formed by a 1936 storm) was raised by more than 3 feet and stabilized. At the time of this survey, the upper structures had been buried in. The gully corridor is about a half mile long. Walking the entire length of the gully revealed that 80% of the banks were in a stable condition (meeting the effectiveness protocol for channel stability).



Mendenhall allotment. On left the team reviews stabilization structures.

Near the boundary with the private land, a dam had been built in the 1920s to contain water for the livestock. Water flow below the dam could not be checked as it was on private land. The channel is not an active stream. The base of the channel is predominantly vegetated, preventing sediment from flowing downstream in significant quantities.

The standards and guidelines groundcover objective of 60% is meeting standards and there was no evidence of rilling or floodplain erosion due to grazing operations.

To address presence of the endangered species *Poa atropurpurea*, cattle are not allowed on the allotment until after seed set, typically as determined by checking seed set of the co-occurring, invasive non-native bluegrass (*Poa pratensis*). A contractor surveys for the endangered species periodically. To address the presence of the endangered Laguna Mountain Skipper and its host plant *Horkelia*, a fence was installed near the south side of the meadow. However, *Horkelia* appears to do well with disturbance and the fencing may be adjusted or removed if the FWS concurs that this would benefit the Skipper.

Conclusions

The Mendenhall rangeland is in healthy condition. Resource protection measures are in place.

Recommendations

Continue with allotment planning and incorporate revised LMP into new grazing permit.

US Border Patrol/DHB (07-LMP- SUA-1)

This checkpoint is located near the Glencliff Fire Station; improvements include office, lights, and a generator. The permit was issued February 2007. The monitoring team visited the permit site on April 9, 2008 to review consistency with the Forest Land Management Plan.

Monitoring Results

Permit issuance is supported by a decision memo including BA/BE and LMP consistency checklist. K-rails were installed for safety. Construction minimized soils erosion and a toad monitor was present.



US Border Patrol checkpoint.

Conclusions

Planning was well done including the District's use of a checklist to demonstrate LMP consistency in the project file. Measures were planned and implemented to address safety and species issues.

Recommendations

- Consider Border Patrol as a partner in area's management such as raptor or fire management.

Indian Potrero Road 14S02 (07-LMP- Roads-1)

The monitoring team visited the road on April 9, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (roads E08 and wet roads E20). Road 14S02 (Indian Potrero Road) is a part of the Indian Creek watershed. It is in a portion of the Cedar Fire. The surface treatment, drainage treatment, and slope treatment work (61 cubic yards material removed) was completed in January 2006. The road is scheduled for maintenance in 2008. In addition, the team evaluated a decommissioned road segment off 14S02 toward the meadow.

Monitoring Results

There are no NEPA projects to evaluate. At the time of the LMP review, the road was closed by downed trees about 1/2 mile in, and berms and fill had removed the road from being used.



Decommissioned unauthorized route

The road surface showed some rilling was present, but occurred on less than 10% of the road length. The drainage crossing monitored was ephemeral, though the drainage led to a meadow. The road is generally outsloped. In the area of the crossing, there is no evidence of rilling, rutting, or sediment movement. The road is closed seasonally due to snow. In addition, the road is only maintained once every two years, due to budget constraints. Some of the rolling dips are non-functional. Steep slopes have caused much rilling, but there is no sediment movement to the channel due to the large buffer below the road. The problems with the effectiveness of BMPs are minor in nature, short in duration (maintenance scheduled to occur in 2008), and have near stream effects (large buffer).

An unauthorized portion of Road 14S02 created by dozer or jeep use down to the meadow was decommissioned as a part of the post-Cedar Fire work. The treatment was full slope re-contouring and road obliteration. The pre-project site evaluation estimated the quantities needed

to be dealt with. The plans addressed water quality issues. The design met the objectives for the reshaping of the road prism, ground cover and revegetation, and road closure. Vegetation is growing on the slope. Large berms were placed on each side of the decommissioned area. There was also natural dead tree fall to help block the section of road. There was no evidence of rilling or slope failure. There was no evidence of unintended vehicle use.

Conclusions

Implementation and effectiveness BMPs for roads were met. Decommissioning of the unauthorized route to the meadow was successful. This action is consistent with the Record of Decision stating that unauthorized routes will be addressed over time and with the LMP. Problems such as downed trees have occurred since the maintenance.

Recommendations

Continue scheduling of next road maintenance.

South Main Divide Road 6S07 (07-LMP- Roads-2)

This road was chip sealed in approximately 1995 using 10% funds. The entire road 6S07 is now classified as ML 4 and renamed as South Main Divide Road rather than Wildomar on the south end. The monitoring team visited the road on April 8, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (roads E08). This road received normal road maintenance that was completed from October 2005 to December 2005.

Monitoring Results

The South Main Divide crossing evaluated is old but in good shape. The road itself is in good condition. The cable along roadside is not an approved guard.



Above, South Main Divide crossing. Below, unauthorized routes off the road.

Unauthorized routes off this road are causing watershed problems. The area near Wildomar and near the Rancho Capistrano community appear to be where management controls are not effective in keeping vehicles on the road, whereas the area closer to Tenaja is better controlled.

The team noticed that Wildomar Road, which intersects South Main Divide Road, was dozed recently not in coordination with the road engineer nor via the Forest road maintenance contract and not up to standard, though gate installation looks good. The road needs to be brought up to standard, especially in accordance with Best Management Practices.

Road 7S04 (South Main Divide Road) is in the San Mateo Canyon watershed, which is protected for steelhead trout. The road crosses the perennial San Mateo River. The design objectives for the road were addressed in an ERFO documentation package. The cement, culverted and low water crossing was installed long ago. The distance between the rolling dips and overside drains was sufficient to prevent rilling to occur. There was no evidence of scour, plugging, or piping at the crossing. Overall, the effectiveness protocols were met.

Near Tenaja Trailhead the road has a small group of non-native blue gum eucalyptus sprouts.

Conclusions

South Main Divide Road itself looks good and the road BMPs were implemented during maintenance. As stated in part 2 of the LMP, vehicular traffic traveling cross-country or on non-designated routes (such as is occurring off South Main Divide Road) is not allowed in any land use zone. To be consistent with the LMP and the Record of Decision, unauthorized routes need to be addressed over time. Regarding the small patch of eucalyptus adjacent to this road, part 3 of the LMP includes this as part of the weed strategy: identify and eradicate new infestations and new species on National Forest System lands.

Recommendations

- Inventory watershed improvement needs (WIN) projects off this road. Address unauthorized motorized travel off this road, including near the Rancho Capistrano community. Plan for barrier installation an appropriate distance from the road or approved material for a road guard.
- Plan to treat the small patch of eucalyptus before it becomes better established.
- INFRA travel routes database was updated to reflect the change in ML and the change in road names that was implemented in the mid 1990's. This road will no longer be part of the monitoring pool for the BMPEP.
- Develop a maintenance agreement with CALFIRE for Wildomar Road and fuelbreak.

Lusardi Road 11S03 (07-LMP- Roads-2)

Five miles of road was maintained via contract in January 2007 – blading, drainage function. The monitoring team visited the road on April 7, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (roads E08, 09, 11, 20). Road 11S03 (Lusardi Road) is a natural surface road and part of the Santa Isabel watershed.

Monitoring Results/Findings

The road maintenance contract included BMPs. The contract notes that where specified, section 204 and CalTrans BMPs apply, but does not spell out details. Details were discussed at prework meeting. Work was done in a dry winter. Drains were cleaned as blading was done. Certain places on this road fail continuously.



Post Witch Fire damage on Lusardi Road. Team discusses consistency with road BMPs and LMP.

The road maintenance COR (road engineer) states that operational controls were implemented during maintenance, but that the road was subsequently damaged by Witch Fire. A low water crossing was inspected along a perennial creek. The maintenance contract was for surface blading and drainage repair and return of watershed function. The contract has language indicating that CalTrans BMPs should be used. This system works sufficiently along with pre-work meetings when the Forest engineering specialist and the contractor are familiar with these BMPs. If a situation arose where the contractor was inexperienced, then there could be a problem. There was evidence of rilling on less than 10% of the road length and when present, the rills did not leave the road surface. There was no evidence that sidecast material was put in the RCA. Road 11S03 has been closed due to the Witch Fire and the subsequent intense storm year. The protocol for closed roads is to check them prior to maintenance being conducted. In the area of the fire, and under the influence of the current storm year, more than 10% of the road had rills greater than 10 feet in length which continued off the road surface. There was also some rutting and delivery of sediment into the streamside buffer area. These deficiencies were further along the road than the stream crossing that was monitored.

Conclusions

Road BMPs were well implemented; however, the was then damaged by fire. The contract has language indicating that CalTrans BMPs should be used. This system works sufficiently along with pre-work meetings when the Forest engineering specialist and the contractor are familiar with these BMPs. If a situation arose where the contractor (or COR) was inexperienced, then there could be a problem.

Recommendations

- Consider editing the contract language to specifically identify BMPs.

Maple Springs Rip-Rap Composition (07-LMP – Roads - 3)

The monitoring team visited the road on August 28, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (roads E08). The road was maintained in 2007 (contractor) and graded in Spring 2008 after the Santiago Fire.

Monitoring Results/Findings

In accordance with the road maintenance contract, road BMPs (e.g. no sidecasting) were implemented. Before doing road work after the Santiago Fire, the Forest Service road crew was instructed on the specifics of work including BMPs. Many dip and drainage problems were repaired including installation of 25 overside drains.

Road 5S04 (Maple Springs Road) is part of the Silverado Canyon watershed. As part of the Forest roads analysis (RAP), the road rated as high risk. The area is highly unstable and there is a lot of riparian vegetation and five road crossings. There are endangered species issues in the creek. In the past 16 years, there have been only five years when the road has not washed out. With these considerations in mind, the Forest chose to chip seal the road and provide low water in-channel crossings for the lower area. The road becomes dirt with rolling dips and overside drains when it leaves the riparian habitat. With the chip seal construction and the maintenance on the upper level, the road has no evidence of rilling and no sediment was seen to be delivered to the RCA or channel. The stream crossings are all functioning well and habitat is returning. No evidence of sidecast material was seen.



Maple Springs Road wet crossing. The team hydrologist evaluates the inchannel construction.

Road 5S04 (Maple Springs Road) has had five concrete crossings installed; the last installed (2006) was evaluated. Before concrete crossing installation, more intensive ongoing measures such as gravel were necessary to keep the crossings passable for fire engine access. During construction, water was diverted through a pipe to keep the area dry. All excavated material was removed from the area. The project was coordinated with the District biologist. Only the crossing was disturbed, but the District biologist assessed that the habitat was returning, the riparian vegetation was healthy, and the habitat had been improved in the long term. All effectiveness protocols were met.

Conclusions

The road maintenance and crossing have been beneficial for the watershed and habitat.

In followup to this monitoring, the Forest NEPA Coordinator reviewed the NEPA decision approving Forestwide road maintenance for scope of activities covered. The document needs updating.

Some changes need to be made to the Forest's BMPEP. The protocol calls for a 100% sample of in-channel projects after a rain season; therefore, monitoring of the crossing occurred later than it should have. Rip rap projects are not entered into INFRA; therefore the sample pool is defined by the road engineer.

Recommendations

- Sustain the current level of road maintenance.
- Update the Forestwide road maintenance NEPA document and make sure to communicate to Forest personnel the new decision and scope of the work covered.

Ortega Highway In-channel Construction (07-LMP – Roads - 4)

The monitoring team visited the road on August 28, 2008 to review consistency with Best Management Practices evaluation (in-channel construction E13).

Monitoring Results/Findings

The team reviewed the decommissioning of the San Juan Picnic Area and several of the new Ortega Highway cribwalls. The Ortega Highway is being reconstructed by CalTrans.



Decommissioning of Lower San Juan Picnic Area to protect riparian habitat.

In acquiring the necessary permits, CalTrans was informed that they would get a “jeopardy” opinion if they did work in the channel due to the presence of species. To avoid the channel, CalTrans has implemented a large number of BMPs, and uses on-site inspectors and ongoing surveys. Two areas were visited on August 28, 2008. The first was the Lower San Juan Picnic Area. In coordination with the Forest, CalTrans is going to close this area to protect species.

Intensive protection measures for arroyo toad were implemented effectively at the picnic area restoration site. The silt fences, slash spreading, fiber rolls, and planned mulching, as well as the constant surveys and inspections are keeping the project from delivering sediment to the riparian areas. In completed areas, there continues to be inspections. As the project is ahead of schedule, the permanent erosion control will not be implemented right away. As such, temporary erosion control measures are being put in place until the end of the project. Interaction with Forest engineering and biology staff continues to monitor the success of this project. The final phase of the project will be restoration of native vegetation now that the picnic tables and road/parking area have been removed. The arroyo toad fence will be left in place until the revegetation project is complete.



Cal Trans and Forest Service officials review use of best management practices.

Conclusions

Cal Trans and the District have done a good job in implementing road BMPs.

Recommendations

Continue construction and administration to completion.

Temporary Road 418606-3 Boulder (07-LMP – Roads - 1)

This is one of two roads associated with the SDG&E Powerlines that were evaluated. Original construction pre-dated NEPA. Because the roads are associated with a special use permit, they are classified as temporary. In both cases, there has been a 50-year right-of-way (ROW) in place. A new master permit is being worked on and the permit is being renewed annually until NEPA is complete. The BE/BA for SDG&E permit renewal as well as section 106 have been completed. Requirements are not implemented yet. Though classified as temporary, these roads are more realistically permanent roads, and should be managed as such.



The monitoring team visited the road on April 9, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (roads E14).

Monitoring Results/Findings

This road was inspected in 2004. The permit is expired; the Forest is working on a master permit for all 70 power poles.

Road operational controls are effective – water bars and drain dips have minimized erosion. Waddles were installed to complement dips/waterbars and help control erosion.

The team walked the road to Pole # Z372103. The Cedar Fire destroyed many of the poles in this area. After the poles were replaced, inspection by district staff identified that no drainage controls were put in place. Having identified a lack of BMP placement, SDG&E was contacted and directed to install BMPs. At the time of the monitoring, there were vegetated rolling dips and functioning lead outs along the road. All implementation and effectiveness BMPs were met.

Conclusions

Due to no permit in place, the road is not consistent with LMP direction. However, all implementation and effectiveness BMPs were met.

Recommendations

- Complete NEPA for SDGE permits.

Temporary Road 418621-10 Japatul-Barrett (07-LMP- Roads-2)

This is one of two roads associated with the SDG&E Powerlines that were evaluated. Original construction pre-dated NEPA. Because the roads are associated with a special use permit, they are classified as temporary. In both cases, there has been a 50-year right-of-way (ROW) in place. A new master permit is being worked on and the permit is being renewed annually until NEPA is complete. The BE/BA for SDGE permit renewal as well as section 106 have been completed. Requirements are not implemented yet. Though classified as temporary, these roads are more realistically permanent roads, and should be managed as such. The monitoring team visited the road on April 9, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (roads E14).

Monitoring Results/Findings

This road was inspected in 2005. As the ROW was put in place 50 years ago, water quality issues were not addressed. These roads weren't designed to allow for adequate movement of water off road surface. There are no functional culverts. The road is rutted and erosion is common on steep road segments. There is litter. Temporary roads are supposed to have closure



provisions; these do not. Maintenance is only done on this road every two years. The steepness of the area and lack of maintenance on the road has caused greater than 200 cubic yards of soil to be displaced through rills and gullies and into an ephemeral drainage. This is a significant issue that will last greater than one season and affect the stream reach if nothing is changed.

The LMP monitoring team discovered what appears to be a number of heavy equipment batteries thrown off the road. This potential hazmat is dumped by pole #Z571337.



The team evaluates the road for best management practices and notes effects on watershed.

Conclusions

The road is not consistent with LMP direction.

Best Management Practices are not being implemented on this utility road and it causes a lot of sediment movement. Demonstrating BMP implementation is vital to comply with the agreement with the State (Clean Water Act) and continue to receive waivers from the local water board.

Recommendations

- Complete NEPA for SDG&E permits.
- Follow hazmat notification procedure and clean up the site. At the time of this report, the Forest Hazmat Coordinator and SDG&E had been notified. The District and utility sorted out who had dumped the batteries. The batteries were reconnoitered and removal was being coordinated.
- Make erosion measures, road drainage function improvement and BMP compliance part of permit requirements.

Cryo-Genie Mine (07-LMP- Minerals- 1)

This is a mining claim in which pink tourmaline was discovered in 1994. Since 2001 the Cryo-Genie mine has been in full production. The monitoring team visited the road on April 7, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (minerals operations M26).

Monitoring Results/Findings

The Cryo-Genie gemstone mine of the Palomar Ranger District was evaluated with the District Recreation and Lands specialist. The operation has an expired permit and lacks a current plan of operation; however, planning is underway. The new permit will address water quality protective measures for access, occupancy, storage areas, human waste and refuse disposal, boundaries, erosion hazards, hazardous materials, water use, process water disposal, and site reclamation. The mine had a hydrologic inspection in the fall of 2006 and the recommendations for containment of oils and generators were implemented. The current access road has a steep area that requires a rolling dip and continued maintenance. The new permit has a section analyzing the changing of the access road to reduce the grade and reduce erosion potential. The BMP effectiveness protocols did not identify any sedimentation transport issues. The implementation evaluation indicated that the mine did not meet guidelines. When the Plan of Operation (POO) is next updated, all BMP aspects should be addressed, even if they are not applicable.



(L) Team listens to operator explaining operations and plans. (R) Mine entrance.

BMP evaluation E08 (road surface) was conducted for the access road from the road. The soils were quite soft and fluffy. Effectiveness monitoring indicated little to no evidence of rilling or sediment to the ephemeral channel. No cross drains were needed and there was sufficient vegetation from the leadouts.

The operator noted that there are tours of the mine and area offered, including looking for gems.

Conclusions

The team could not enter the mine due to Forest Service policy; however, the external mining operations and housing appears consistent with the LMP other than the tour issue.

Recommendations

Need to complete and approve a Plan of Operations and also address the tour issue.

Laguna Recreation Prescribed Burning (07-LMP- Prescribed Fire – 1)

The monitoring team visited the prescribed burn on April 10, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (prescribed burning F25). The Laguna Recreation Area prescribed burn was conducted in April 2007.

Monitoring Results/Findings

This project underburned fuels in pine forest on Laguna Mountain. Maps in the project planning file clearly display species locations in relation to project activities. Although the project NEPA planning file had no hydrologist report, the project met all requirements including Best Management Practices per review by the Forest hydrologist on the monitoring team.

The burn and intensity met the objectives as planned. Ground cover and in some cases lower limbs burned.



Regarding Best Management Practice F25, the monitoring indicated that implementation BMPs were being met. Though there was no hydrology specialist report, the burn plan goal #6 states “conserve or improve long-term soil productivity” as well as consistency with the Forest Plan. One of the supplements of the Forest Plan is the Soil and Water Conservation Protection Policy, which specifies the types of BMPs required on different types of projects including prescribed fire. The burn did meet the prescription. From an effectiveness standpoint, the burn met the BMP objectives of suitable groundcover, lack of hydrophobic soils, and rilling at a rate of less than 1 rill per 100 feet of transect. The burn was backed down into the riparian conservation area (RCA) and there was sufficient regrowth one year later to provide a buffer to the flowing water. The fire management specialists on the ground made sure that the objectives for soil and water protection were being met, such as fuel moisture limitation, time of year for burns, and backing fire into the RCA.

Conclusions

Introducing fire into this conifer stand adds a burn to an area that has not been burned as frequently as historically occurred and is in FRCC +3. This is exactly the kind of treatment needed to move toward the desired condition described in goal 1.2 in the LMP. In addition, fuel treatments completed within this project area have helped the Forest progress towards goal 1.1 through reducing the number of high risk acres adjacent to structures (in this case a mountain community and recreational structures) within the Wildland Urban Interface (WUI) defense zone. These acres will be incorporated into the trend monitoring that will occur at the 5th year comprehensive evaluation.

The project was well executed.

Recommendations

Continue to prioritize and conduct these kinds of treatments in montane conifer with missed fire return intervals as they are consistent with the LMP and they have a wide range of public support.

Aguanga Prescribed Burning (07-LMP- Prescribed Fire – 2)

The monitoring team visited the road on April 7, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (prescribed burn F25). The Aguanga Ridge prescribed burn was conducted in April 2007.

Monitoring Results/Findings

This project on the Aguanga ridge maintains a fuelbreak (type converted vegetation). The intent is to help hold fires from the east and keep such fires from burning into the forested area on Palomar Mountain and into the mountain top community. This type of strategically placed vegetation treatment is consistent with the LMP even though it is not immediately adjacent to the community it protects.



It is good that the burn plan calls for implementers to protect species. The BE was not specific as to whether “protect” means from fire and/or from mechanical disturbance.

Regarding Best Management Practice F25, the monitoring indicated that implementation BMPs potentially were not being met because the burn plan prescription did not reflect soil and water protection considerations. But the burn did meet the prescription. From an effectiveness standpoint, the burn met the BMP objectives of suitable groundcover, lack of hydrophobic soils, and rilling at a rate of less than 1 rill per 100 feet of transect. There was no evidence of sediment transport to any streamside management zone. The project was on a ridge, far from any flowing water. The burn occurred on just two days before the conditions changed and burning had to be stopped. Though the planning documents did not speak directly to soil and water considerations, the fire management specialists on the ground made sure that the objectives for soil and water protection were being met, such as fuel moisture limitation, time of year for burns, and sufficient buffer left between the burn and drainage channels.

Conclusions

Although the project's the planning and implementation protected resources, see the recommendations below for improving the connection between planning and execution. Also, the BE/BA needs to be specific about what "protection" means for each species as plant species in this area are well adapted to fire (but not mechanical disturbance).

Recommendations

- Decision documents need to define all approved actions and should also list approved specialist mitigation in order to help carry forward measures from planning to decision to implementation.
- Burn plan prescriptions should reflect soil and water protection considerations and describe BMP objectives.
- Carry forward any information key to implementers from the BE/BA into the burn plan (this includes the map).
- Specialist reports should define general terms like "protect" into more specific language helpful to implementers.

Aguanga Mechanical Treatment (07-LMP- Vegetation Management – 1)

The monitoring team visited the road on April 7, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (Vegetation Manipulation V28).

Monitoring Results/Findings

The 2002 decision memo approves 2528 acres of prescribed burn, but not mastication. The BMPs were implemented.



Heritage staff identified/flagged areas in advance. The project used a rubber tracked masticator per ARR. Post-burn monitoring upcoming by heritage staff.

Regarding Best Management Practice V28, review of the implementation protocol indicated that soil and water quality protection measures were not discussed in the environmental documents, nor were soil and water constraints incorporated in to the project plan or the contract. The primary reason for this deficiency is a result of the lack of watershed specialists on the CNF.

Though the implementation protocols were not met, the Forest fuels personnel directing the work have experience in the ridge area, and applied their knowledge of the clay content of the soils (no work when wet), fueling of vehicles on the road (with protections for drips and spills), and keeping the

equipment on slopes of 30-35%. Using these protocols, there was no evidence of rilling or rutting. There was sufficient groundcover and sufficient uncut buffer between the mastication and the nearest drainage channel. By applying these BMPs, the mastication met the effectiveness protocol.

Conclusions

Implementation was well executed. The decision memo (and analysis) should cover mastication in addition to prescribed burn. The project applied BMPs and met the effectiveness protocol.

Recommendations

See recommendations for Aguanga Prescribed Burn, above.

Laguna Mechanical Treatment (07-LMP- Vegetation Management – 2)

The monitoring team visited the road on April 9, 2008 to review consistency with the Forest Land Management Plan and also for Best Management Practices evaluation (Vegetation Manipulation V28). The project used rubber tracked light equipment.



Laguna Mountain mastication



Mastication in foreground; area shown in background was also burned.

Monitoring Results/Findings

The project was designed to avoid habitat of Laguna Mountain Skipper and to avoid meadows in which host plant *Horkelia* might occur. Biologist recommendations were noted and followed. Implementation measures identified in the decision memo were followed.

V28: The mastication relied on the same documentation as did the Laguna Recreation prescribed fire (e.g. no hydrology report, Goal #6, and Forest Plan compliance). The decision memo does not note compliance with Clean Water Act but does state LMP consistency which incorporates overarching law and direction (e.g. CWA and BMPs). There was a question as to whether the constraints identified within the decision document were incorporated into the contract.

Discussion on the ground indicated that if the contract was based on a newer template, then there would be language indicating protections for soil and water. Effectiveness protocol showed rills at a spacing of less than one per 100 feet, no evidence of rutting, and sufficient groundcover. The project implemented BMPs.

Conclusions

The project was well executed and carried out resource protection measures.

Recommendations

- Specifically list soil and water measures in decision memo.

IV. Annual Indicators of Progress Toward Forest Goals

This section documents the monitoring of indicators of progress toward the Land Management Plan (LMP) Desired Conditions. Tracking of annual indicators will help to discern trends over time and support the comprehensive evaluation that will be prepared in the fifth year following plan implementation.

Acres of High Hazard and High Risk in WUI Defense Zone (Forest Goal 1.1)

In 2007 a total of 2,212 acres of hazardous fuel treatments within Wildland Urban Interface (WUI) were reported as accomplished. This includes treatments that fell within WUI threat zones (1,608 acres) as well as within WUI defense zones (604 acres). These treatments contribute to the National Strategic Plan (Objectives 1.1 and 1.3). The Cleveland National Forest Land Management Plan identifies a more specific indicator focused on measuring progress toward increasing the level of the Forest fuels program in the defense zones as described in the LMP.

Background on this indicator:

The WUI defense zone is defined in Part 3 of the LMP in Standard S7 including the referenced Appendix K. The defense zone is the portion of the WUI that is directly adjacent to structures. It has a variable width which is determined at the project level up to maximum widths defined for general vegetation types in S7. For the LMP analysis, the maximum width was assumed and this was used to represent the present or “baseline” extent of the WUI defense zone.

High hazard fuels are those that have the potential to burn with high intensity. Fire intensity affects suppression effectiveness in protecting structures in interface areas. A key strategy in the LMP is to reduce fire hazard adjacent to communities and structures to improve suppression effectiveness and provide defensible space in interface areas.

Risk is related to human values or “risk of loss”. The presence of structures is the indicator of risk in this analysis. (It should be noted that due to rapid development of private lands in southern California, the inventory of areas with structures is constantly changing. It is likely that the map representing the WUI defense zone is out of date and should only be considered an estimate of the actual area. The actual presence of communities and substantial structures is determined at the project level. In other words, the WUI defense zone GIS coverage or map is not an LMP decision. The decision is to apply the direction in LMP Standards S7 (including Appendix K) and S8 to areas that are actually adjacent to communities or substantial structures at the time of project planning. Areas where old structures have been removed are not part of the defense zone.)

There is no Forest-wide site-specific inventory of fuel hazard within the defense zone. In addition, high hazard conditions can be dynamic, returning in as little as five years after a fire in some vegetation types. For this reason, the hazard indicator is assumed to be high in all areas until a project level assessment determines otherwise. Therefore, the monitoring task is to track the level of management effort directed at reducing fire hazard in the WUI defense zone including keeping the inventory of the actual defense zone up-to-date.

The method of calculating progress toward Goal 1.1 is described below and summarized in the following table. Indicators of progress toward Goal 1.1 are calculated by using the WUI defense zone from the LMP analysis database. Adjustments to this coverage based on documented project analysis or other monitoring are included. Accomplishment polygons for accomplishment code FP-FUELS-WUI for the year or years were analyzed from FACTS, then number of acres of overlap of accomplishment polygons with defense zone polygons was calculated as the annual indicator of progress toward the desired condition. Every five years the number of high hazard acres within the defense zone should be calculated to use for

documenting the trend as a long-term indicator. It can be assumed that acres documented as being treated in the corporate reporting system are no longer high hazard.

Template for adjustments to the baseline: 2007

A = Baseline Acres from LMP Analysis as adjusted in FY 2006 M&E Report	B = Acres removed due to new information on presence of structures	C = Acres added due to new information on presence of structures	D = Acres treated in WUI Defense zone.	Adjusted Acres (A-B+C-D)
Fire Regime I 6,469ac	0	0	350	6,119
Fire Regimes III, IV, V 3,318 ac	0	0	254	3,064
Total: 9,787 ac	0	0	604	9,183

2007 Fuels Treatment Accomplishment Detail

Burn of Natural Fuels Piles	9
Chipping of Activity Fuels	24
Chipping of Natural Fuels	221
Lop and Scatter of Natural Fuels	54
Mastication/Mowing	55
Natural Fuels Prescribed Burn	47
Piling of Natural Fuels	62
Precommercial thinning - individual or selected trees	24
Thin of Natural Fuels	108
Total	604

The table titled “2007 Fuels Treatment Accomplishment Detail” shows the status of fuels accomplishment as per the Forest Service Activity Tracking System (FACTS) database, which is the corporate database of record for fuels accomplishment thereafter. Annual querying of the corporate database will help to answer the outcome evaluation question: Has the Cleveland National Forest made progress in reducing the number of acres that are adjacent to development within WUI defense zones that are classified as high risk?

Use of spatially explicit information for adjusting the baseline is important so the cause of changes in the numbers can be evaluated. It is important to know if the change is due to improved inventory information, actual treatments or both. Also, it is not appropriate to simply add up the annual indicator (acres treated) and subtract it from the baseline. This could over count maintenance treatments and would not take into account acres added due to new development. Part of our evaluation should determine if new development is adding to the defense zone increase because we have an LMP strategy to prevent that from happening through involvement in local planning.

Baseline Conditions for monitoring Fire Regime Condition Class (Forest Goal 1.2)

This indicator is departure from either minimum or maximum fire return interval.

The Fire Regime Condition Class Monitoring Indicator was updated using new mapping procedures in 2006. In the new GIS maps, information is provided on presumed fire return intervals (FRIs) from the period preceding Euroamerican settlement and for contemporary fire return intervals, and comparisons are made between the two. Current “departures” from the presumed presettlement (Euroamerican) FRIs are calculated based on mean, maximum, and minimum FRI values. This map is a joint project of the USFS Region 5 Regional Ecology Program and the California chapter of The Nature Conservancy (David Schmidt, Fire Ecologist, The Nature Conservancy; Hugh Safford, Regional Ecologist, USDA-Forest Service, Pacific Southwest Region).

The information was compiled from the fire history literature, expert opinion, data collection, and vegetation modeling. The CDF-FRAP fire history database was used for characterizing current fire regimes. The vegetation type stratification was based on the 1996 CALVEG map (USDA-Forest Service Remote Sensing Lab) for the S. California National Forests. See CALVEG mapping metadata <http://www.fs.fed.us/r5/rsl/clearinghouse/data.shtml> and CA Fire History database metadata <http://www.frap.cdf.ca.gov/data/frapgisdata/select.asp> for data limitations in these datasets.

The following table displays the baseline status as of 2006 for departures from the mean FRI. Areas where the current FRI is more frequent than expected are shown as negative numbers while areas that have had longer than expected fire return intervals are shown as positive numbers. A condition class of either 1 or -1 indicated that fire return intervals are within the expected range of variability around the mean for a given fire regime. Class 2 and -2 indicate a moderate departure from the expected mean and 3 or -3 show a high departure. Both the moderate and high departure may indicate that altered fire regimes pose a risk to the ecological condition of the site. Type conversion from high fire frequencies (Class -3) or de-forestation from wide-spread high severity crown fires (Class 3) are more likely as the condition class rating increases.

Condition Class	Acres
3	21,932
2	9,503
1	30,466
-1	138,992
-2	172,048
-3	40,319
Unclassified	9,197
Grand Total	422,457

Increase Percent Montane Conifer in FRI Condition Class 1 (Forest Goal 1.2.1)

In FY 2007 there were 683 acres of hazardous fuels treated in Fire Regime I, montane conifer, including 369 ac in WUI defense zone. Therefore, more than half the acres treated were in montane conifer in FRCC +3 and are moving the Forest toward the desired condition. Two larger treatments on Laguna and Palomar Mountains in particular contributed toward this progress.

Maintain or Increase Percent Chaparral and Coastal Sage Scrub in Condition Class 1 (Forest Goal 1.2.2)

As of 2006, 51% of the forest land area was at moderate to high risk of type conversion from excessively frequent fires (condition classes -2 and -3). (See condition class table above.) Unlike in Fire Regime I (conifer forest) vegetation treatment in condition class -2 or -3 moves the site away from the desired condition by adding another burn or disturbance event to an area that has already been burned too frequently. The Forest strategy in treatment of chaparral and coastal sage scrub, therefore, is to focus our vegetation management into direct protection of communities or in pre-identified strategic locations where protection of communities can be improved such as major ridge tops upslope from developed areas. Fire history patterns show that fires are often held in the same locations due to topography or sometimes man made features such as reservoirs or freeways. WUI defense zones are the areas located immediately adjacent to developed areas.

Approximately 2000 acres were treated in areas with fire regimes other than Fire Regime I (montane conifer). Of this, 222 acres were in the WUI defense zone or (within 300 feet of structures).

Forest Vegetation and Health monitoring

The Forest Service Remote Sensing Lab provides vegetation resource inventories in an ecological framework for determining changes, causes, and trends to vegetation structure, health, biomass, volume, growth, mortality, condition, and extent. The existing Cleveland vegetation map was done in 2003 and is scheduled to be redone in fiscal year 2010. Details are available online: <http://www.fs.fed.us/r5/rsl/projects/> (see vegetation monitoring).

Aerial detection surveys are conducted annually. For an overview of the surveys (and Cleveland National Forest pdf map) see <http://www.fs.fed.us/r5/spf/fhp/fhm/aerial/2007/index.shtml>.

In recent years there has been decline of both California black oaks and coast live oak, predominately at the southern portion of the forest. Forest Service and other agency scientists did not identify any cause in 2007 other than drought. In summer 2008 Forest and province forest health personnel examined the dying and dead California black and coast live oaks. This time the forest health entomologist found pupae in the oaks and with further trapping and investigation identified an agent (golden spotted oak borer). This finding is reported in a forest health report: <http://www.fs.fed.us/r5/spf/fhp/socal/CnfOakMortalityBE080408.pdf>. Forest managers are currently reviewing management options to react to the new finding.

Information on southern California bark beetle-related mortality is available online at: <http://www.fs.fed.us/r5/rsl/projects/inventory/invdata/socalmort/> and <http://www.fs.fed.us/r5/spf/fhp/socal/2008WBBconditions052908.pdf>. Widespread pine mortality from bark beetles during 2003-2004 has been followed by low levels of bark beetle-

caused tree mortality during 2006-2007. Precipitation was reduced in 2007. Bark beetle activity commonly increases one year following drought, and can increase each year as drought conditions intensify. Some areas on the Forest did show an increase in activity including Laguna Mountain to the south and El Cariso to the north.

Post-fire vegetation monitoring has been completed for selected large fires that have burned forested sites since 2000. In FY 2007 the Cedar Fire of 2003 was added from the Cleveland National Forest. The following table details the burned acres in various vegetation types. Forest communities are further classified according to acres deforested or not, and steep slopes or those less than 30%. This data provides a quick assessment of possible reforestation treatment needs. A web site (<http://www.fs.fed.us/r5/rsl/projects/postfirecondition/>) provides similar information for all of the selected fires from 2000 – 2008.

Summary of Vegetation Conditions after the Cedar Fire on the Cleveland National Forest (acres)							
Vegetation Type	treatments NOT permitted		treatments permitted		treatments permitted		Total Within Fire Perimeter
	Deforested Condition	Forested Condition	Deforested Condition	Forested Condition	Deforested Condition	Forested Condition	
			Steep Ground (> 30 % Slope)		Flat Ground (< 30 % Slope)		
alpine							0
fir							0
pine	8	1	201	14	1,074	176	1,474
Douglas-fir							0
mixed conifer	2		298		89	2	391
closed cone conifers	1		127		62		190
coastal conifer/cypress			5		8	7	20
pinyon juniper							0
hardwood	21	13	1,166	275	1,879	461	3,815
Sub Total	32	14	1,797	289	3,112	646	5,890
shrub/non-forest							55,610
other ownership							209,561
Total							271,061

A five year post-fire sampling of the areas of the Cedar Fire with trees was conducted in 2008. In general, the oaks (both California black oak and coast live oak) have resprouted in the Cedar Fire area. The area needs to continue to be monitored to track movement of oak borer attack. Results are poor for conifers. Naturally regenerated seedlings of coulter pine appear to have thrived in the east side of Mt. Laguna through 2007, but the lack of rainfall (especially on Laguna Mountain) combined with increased shrub competition resulted in a significant die off of several year old seedlings. Very few Jeffrey pine seedlings were found.

Provide quality sustainable recreation opportunities that result in increased visitor satisfaction (Forest Goal 3.1 and 3.2)

An updated National Visitor Use Monitoring (NVUM) survey is currently being planned for the Cleveland NF for 2009. Results will be reported in the monitoring and evaluation report when they become available in 2010.

Significant heritage resource sites are preserved or enhanced

Two types of heritage program monitoring are conducted. Section 106 of the National Historic Preservation Act (NHPA) requires that the Forest locate and protect properties that are potentially eligible to, and sites that are on the National Register of Historic Places (NRHP), during project planning and implementation. Project monitoring is conducted to ensure sites are avoided, to monitor when activities are being conducted within a site boundary or to ensure project activities will not affect subsurface sites. The Archaeological Clearance Memo that is signed by the Forest Archaeologist and included in the project file identifies if management measures are necessary for protection of historic properties and if Section 106 monitoring is required during project implementation. Each year the Forest Archaeologist identifies all projects completed under the Programmatic Agreement, activities that occurred, and projects that were monitored.

Section 110 of the NHPA directs Federal agencies to assume more responsibility for stewardship and protection of historic properties they own or control. It is a proactive program for the purpose of identifying and evaluating historic resources for their potential inclusion into the National Register. Monitoring is completed to report historic property condition or to report if sites have been vandalized.

A total of 63 projects were evaluated under Section 106 of NHPA in FY 2007.

- Of 63, nine projects involved consultation with SHPO. These were projects that had effects on historic properties (e.g. Horse Fire, installation of barriers within site boundaries, Determinations of Eligibility, and inadvertent effects).
- The remaining 54 projects were considered under the Regional Programmatic Agreement.
 - 29 projects involved surveys (7 projects involved surveys in support of fuels reduction on non-NFS land);
 - Eight projects were located in previously surveyed areas;
 - 17 projects were exempted under the Programmatic Agreement from further Section 106 review.
- In FY07 four inadvertent effects were reported to SHPO in the annual report. The activities involved were Pine Fire suppression, two fuels reduction projects, and an unauthorized change to a recreational cabin. Consultation on these four effects is continuing.

The Section 110 work portion of the Heritage Resources program for FY 2007 involved one Passport in Time project, evaluation of 28 sites, and monitoring of 25 sites.

Air Quality Monitoring

Under the Regional air quality monitoring program, a sampling station near the Agua Tibia Wilderness monitors the air quality near this Class 1 airshed. This station is part of the IMPROVE national monitoring network. More information may be found at the IMPROVE web site at the following URL's:

Raw data: <http://vista.cira.colostate.edu/improve/Data/data.htm>

Reports: http://vista.cira.colostate.edu/improve/Publications/improve_reports.htm

Improve Watershed and Riparian Conditions (Forest Goals 5.1 and 5.2)

Best Management Practices Evaluation Program (BMPEP)

Forest Service obligations to the State Water Board Management Area Agreement include: 1) correcting water quality problems on the national forests, 2) perpetually implementing the Best Management Practices (BMPs) and 3) monitoring and evaluating effectiveness of BMPs.

FY 2008 BMPEP Summary

BMP monitoring was accomplished by identifying needs in the NEPA process; implementation monitoring was completed by contracting officer representatives or other Forest Service personnel on the project site as the work was being completed.

Effectiveness monitoring is completed through annual Best Management Program Evaluation Program (BMPEP) monitoring of randomly selected, recently completed projects and concurrent monitoring in which sites are selected based on management interest in specific ongoing projects. Effectiveness monitoring is designed to evaluate how well the Forest and Region implement BMPs and how effectively the BMPs control water pollution from National Forest lands. The summary and results of the monitoring are located in the FY08 Cleveland BMPEP Monitoring Report; much of that report is incorporated into the project monitoring narratives in this report.

Overall, in the past two years, BMP implementation protocols have shown success at varying levels (FY07=91%, FY08=83%). Effectiveness protocols have shown success at varying levels (FY07=86%, FY08=73%). Higher effectiveness ratings in FY07 were attributed to lower precipitation. Methods for dealing with the identified problems have been established and are currently being implemented. The San Bernardino National Forest Hydrologist participated in both LMP and BMPEP monitoring for the Cleveland NF.

Primary road protocols continue to show high success; furthermore, recommendations from FY07 monitoring were seen to be implemented in FY08.

Range allotments on the Cleveland National Forest are managed to standard and consistent with best management practices by local staff. When problems are identified the Forest works with the permittees through their annual operating plans.

Recreational sites that are historical in nature are often located near or within Riparian Conservation Areas, thus making reaching positive effectiveness of BMPs difficult. The Cleveland National Forest has made efforts to protect stream courses by moving campsites and day use recreation facilities away from streams. The BMPEP process has identified a number of concerns that are being addressed. The recreation department is well aware of the problems and uses adaptive management to prioritize repairs and rehabilitations. It is also important to understand that the combination of limited water locations and massive numbers of forest visitors in Southern California can lead to additional stress on riparian areas.

Fire and vegetation personnel implemented BMPs appropriately to meet effectiveness measurements. Identification of water quality BMPs has always been a consistent part of vegetation management and prescribed fire projects. Implementation of identified BMPs through design criteria and contract specifications has been identified as a need for the future. The new Forest Plan and LMP/BMPEP monitoring and education provide the avenue for increasing implementation success.

Water Quality

The FY 2006 LMP monitoring and evaluation report noted that the Cleveland NF collaborated with State and other agencies on water quality monitoring, as noted in the State of California Water Board’s Clean Water Act Section 305b Report “Water Quality Assessment of the Condition of California Coastal Waters and Wadeable Streams, October 2006.” There is no new report or findings since then and no newly listed 303(d) impaired streams.

Maintain or Improve Progress toward Sustainable Rangelands by Increasing Key Area in Good and Fair Condition (Forest Goal 6.1)

This is the baseline table and trend monitoring for the Range LMP indicator for 2007:

Outcome Indicator	Desired Condition	Baseline	Year 5	Trend	Trigger
Livestock Grazing Areas in Good Condition	Maintain Condition Rating	_14_ (Number) Allotment Key Areas	12	Down	Decrease in number of key areas in good condition.
Livestock Grazing Areas in Fair Condition	Maintain or Improve Condition Rating	_7_ (Number) Allotment Key Areas	10	Up	Decrease in number of key areas in fair condition.
Livestock Grazing Areas in Poor Condition	Improve Condition Rating	_3_ (Number) Allotment Key Areas	2	Down	Degrading conditions in key areas in poor condition

*trend down in two key areas could be attributed to drought and post-fire suppression impacts (Cedar Fire)

- Verdugo – good condition (rapid assessment information from allotment files 2007)
- Miller Mountain – good condition (rapid assessment information from allotment files 2007)
- Tenaja – good condition (rapid assessment information from allotment files 2007)
- Mesa Grande – Kelley Unit – Fair, improving condition (rapid assessment information from allotment files 2008)
- Mendenhall - Lower Mendenhall (High Functioning condition – stable trend(5yr)) – R5 long-term trend monitoring. Upper Mendenhall (moderate condition – stable trend (5yr)) - R5 long-term trend monitoring
- Black Mountain – good condition (rapid assessment information from allotment files 2006)
- Love Valley – dry meadow area good condition (rapid assessment 2006, R5 long-term monitoring – low condition in 01, moderate in 06 – trend upward)
- Warner Ranch – Good condition (rapid assessment information from allotment files 2006)
- Guatay – Moderate condition in 2003 – reread in 2008 – data not yet available.

Indian Creek – Indian Meadow - good condition (rapid assessment information from allotment files 2006)
Deer Park – good condition (rapid assessment information from allotment files 2006)
Samataguma – good condition (rapid assessment information from allotment files 2006)
Laguna – Cameron and La Posta Creek – two key areas – moderate condition – stable on reread.
Kitchen Valley – Low initial and reread; Rodeo Grounds – Moderate initial and reread.
Laguna Meadow – Mid-meadow plot – High in 2000, low in
 Las Rasalies Plot – high in 2000, moderate in 2005
Corte Madera – Lower Bear Valley – High condition initial and reread
 Lower Bear Valley (mesic site) - Moderate initial and reread

Continued maintenance of grazing is recommended, as is completion of grazing permit authorizations for the Mendenhall and Mesa Grade allotments in fiscal year 2008. Also recommend continued involvement with Region 5 long-term range monitoring program.

Threatened and Endangered Species Monitoring – B.O. Adjustments to LMP Environmental Baseline

Monitoring

The Forest Biologist provided an updated summary of monitoring efforts required by current biological opinions.

Results

All monitoring that is currently required has been completed and an annual report will be sent to the U.S. Fish and Wildlife Service (FWS). Monitoring requirements are being updated through new site-specific biological opinions. These will be updated on a priority basis. The biological assessment for riparian obligate species and ongoing activities was completed in June 2007 and consultation with FWS is underway. Baseline conditions established in the LMP monitoring guide are up-to-date for FY 2006.

The Forest re-initiated consultation with the FWS on the LMP for critical habitat designations. A biological opinion from the FWS is still pending.

Conclusions

The threatened and endangered species monitoring program is working well in most areas—a process is in place to update procedures based on what is learned, and changes are expected through the updated consultations with the FWS.

Recommendations

- Continue required monitoring;
- Add analysis of the recent designation of critical habitat for Laguna Mountains skipper butterfly to the baseline in FY 2007;

- As operational plans are developed for recreation sites, ensure institutional memory of problem resolution by making sure to document protection measures used in the past (whether on an annual, periodic, or one-time basis). These may be documented in the INFRA database for each site.

Management Indicator Species (Forest Goal 6.2)

In accordance with the Cleveland LMP, Goal 6.2, Biological Resource Condition, 12 management indicator species (MIS) were selected to monitor certain habitat types and issues, as described in Part 1, page 44-45. These species will be monitored along with other indicators of progress toward achieving desired conditions for biological resources. A Forest MIS Report was prepared (see FY 2006 report) to describe the current environmental baseline conditions. By design, continued long-term monitoring relies on data collection by other agencies or outside parties (e.g. Department of Fish and Game, breeding bird survey data) and for the tree species, via FIA plots. For California Black oak there is also tracking of mortality (see Forest Vegetation and Health Monitoring under Goal 1.2). MIS analyses are routinely prepared for projects planned.

MIS reports completed for the Trabuco Ranger District:

- ICE Project bore holes
- Old Dominion vegetation project
- South Main Divide/Hixon/El Cariso plantation vegetation project
- Blue Jay Campground renovations
- Sight Path for ICE monitoring project
- Soil samples for FERC project

MIS reports completed for the Palomar Ranger District:

- Navy SERE camp
- Mendenhall and Mesa Grande allotments

MIS reports completed for the Descanso Ranger District:

- Horsethief
- Corte Madera
- 100-foot clearance
- Viejas/Sweetwater
- Buckman Springs rest stop
- Conlin powerline
- Conejos Road
- Laguna Lodge
- Thing spillway

None of the projects listed above were expected to affect habitat or population trends for management indicator species.

Built Landscape/ Land Adjustment (Forest Goal 7.1)

Land Ownership Complexity

Phase 1A of the Lucky 5 land purchase was undertaken in FY 2007. The parcel that was purchased totaled 81.06 acres adjacent to the Laguna Mountain Recreation Area on the Descanso Ranger District and was acquired for \$268,100 using funds via the Receipts Act. Additional land acquisitions that were included with the Lucky 5 land purchase will be recorded as having been acquired in the following fiscal year.

Road Miles

The information in the following table serves as a baseline for the Forest to track changes to the road system over time. It is a Forest goal to reduce the number of inventoried unauthorized roads and trails over time and minimize the development and proliferation of new unclassified facilities is minimized.

BASELINE - Miles of Road in Forest Service Jurisdiction by Type 2006

OPER_MAINT_LEVEL	NFSR - NATIONAL FOREST SYSTEM ROAD	PERMITTED ROADS	UN-AUTHORIZED, UN-DETERMINED	UN-AUTHORIZED NOT NEEDED EXISTING	UNAUTHORIZED NOT NEEDED DECOMMISSIONED	Grand Total
NOT APPLICABLE			154.0		4.0	151.1
1 - BASIC CUSTODIAL CARE (CLOSED)	34.4					34.4
2 - HIGH CLEARANCE VEHICLES	280.9	136.9				425.1
3 - SUITABLE FOR PASSENGER CARS	11.5					11.5
4 - MODERATE DEGREE OF USER COMFORT	54.2					54.2
5 - HIGH DEGREE OF USER COMFORT	18.1					18.1
Grand Total	399.1	136.9	154.0		4.0	694.5

V. LMP Monitoring Protocol Recommendations

The team made minor modifications to the monitoring protocol. For the FY 2008 report next year, the team will replace the yes/no structure of the monitoring questions with open-ended questions and also omit or modify outdated EMS-related questions.

VI. Monitoring Team Recommendations

- 1) Shift the emphasis of the fuels program to Fire Regime I (montane conifer) treatments where there is both plenty of work to be done to address the missed fire return, risk of loss, and protection of mountain communities, but also where the Forest can count on a broad range of public support. Focusing work in these areas should ease the ability to implement needed treatments and accordingly movement toward the desired condition. The Forest

can still continue to maintain existing fuelbreaks as well as address new WUI defense zone in Fire Regime IV as consistent with the LMP, but there is a need for public collaboration to gain support for these defense zone treatments beyond 100'. The Forest should plan for an internal dialogue on fuels issues and program strategy followed by engaging the interested public in the dialogue and collaboration.

- 2) Emphasize continued learning by researchers and management about the oak decline and begin to take management actions.
- 3) Schedule the preparation of operations and maintenance plans for Forest Service recreation sites over time, beginning with the sites with the most sensitive resources to protect. While the team did not find problems in this area due to current staff's awareness and knowledge, it is foreseeable that new staff would need to learn the requirements and an O&M plan would be an excellent way to bundle up needed actions in one place.
- 4) Emphasize management controls and planning protocol to ensure NEPA quality:
 - a) Line officers will issue a Project Initiation Letter for all projects requiring documentation in a decision memo or higher level NEPA document, assign appropriate IDTs to each project, and ensure that heritage, biological, and other protocol is met.
 - b) Line officers, project interdisciplinary teams, and planning staff will engage in discussion of issues before project NEPA is initiated or early in the process. Planning staff will advise line officers or project planners of current planning direction.
 - c) Make sure to consider connected actions. In particular look for opportunities to address unauthorized routes whether appropriate action is to decommission or to add to the road or trail system.
 - d) Project leaders will ask the NEPA Coordinator to review each document to check for current requirements being met.
 - e) Line officers will ensure that all approved mitigation (including Best Management Practices) is specifically listed in the decision document and operational plans.
 - f) Line officers will ensure that project files document consistency of the NEPA planning and decisions with the LMP and any relevant legal mandates.
 - g) Project leaders will send all environmental documents and decisions to the Forest NEPA Coordinator for the Forest file.
 - h) The Forest NEPA Coordinator will share environmental documents and decisions with the local water board as required.
- 5) Continue to carry forward certain action plan items until they are completed or for ongoing actions, until the leadership team feels that these measures have become institutionalized as standard operating procedure.

VII. Potential Land Management Plan Amendments and Corrections

- 1) An amendment is needed to change 10 acres of Back Country Motorized Use Restricted (BCMUR) to Back Country (BC) land use zone in order to account for the location of

gates on the ground. The travel management EA includes this amendment in the proposed action.

- 2) Through a land exchange process (NEPA document), remove Viejas and Hulburt Tracts from “Other Designations—Recreation Residence Tracts” table 479 (LMP Part 2, p. 13).

VIII. Action Plan, Forest Leadership Team

The following are the actions that will be taken in response to LMP monitoring, including those actions from past monitoring that need to continue:

- 1) Shift the emphasis of the fuels program to areas that both contribute to LMP goals 1.1 and 1.2 and also have public support sufficient to be implemented in an efficient manner. Plan for an internal dialogue on fuels issues and program strategy followed by engaging the interested public in the dialogue and collaboration.
- 2) Emphasize continued learning by researchers and management about the oak decline and begin to take management actions.
- 3) Prepare operations and maintenance plans for Forest Service recreation sites over time, beginning with the sites with the most sensitive resources to protect.
- 4) Address departures from BMPs during the permit issuance process. The NEPA process and new permits, if approved, give the Forest an opportunity to impose mitigations, standards, and guidelines that were previously not implemented, or to eliminate a use as in the case of road decommissioning.
- 5) Update the Forestwide road maintenance NEPA document and communicate to Forest personnel the new decision and scope of the work covered.
- 6) The leadership team will clearly assign responsibility for the variety of database stewardship duties. An assigned team will continue to address data entry in FACTS as per the Forest FACTS Guide. Database stewards will keep corporate data current including both tabular and spatial data so that data used for project analyses and management decisions is reliable and so that Forest accomplishments are given proper credit in the budget allocation process.
- 7) Emphasize management controls and planning protocol to ensure NEPA quality:
 - a. Line officers will issue a Project Initiation Letter for all projects requiring documentation in a decision memo or higher level NEPA document, assign appropriate IDTs to each project, and ensure that heritage, biological, and other protocol is met.
 - b. Line officers, project interdisciplinary teams, and planning staff will engage in discussion of issues before project NEPA is initiated or early in the process. Planning staff will advise line officers or project planners of current planning direction.

- c. Make sure to consider connected actions. In particular look for opportunities to address unauthorized routes whether appropriate action is to decommission or to add to the road or trail system.
 - d. Project leaders will ask the NEPA Coordinator to review each document to check for current requirements being met.
 - e. Line officers will ensure that all approved mitigation (including Best Management Practices) is specifically listed in the decision document and operational plans.
 - f. Line officers will ensure that project files document consistency of the NEPA planning and decisions with the LMP and any relevant legal mandates.
 - g. Project leaders will send all environmental documents and decisions to the Forest NEPA Coordinator for the Forest file.
 - h. The Forest NEPA Coordinator will share environmental documents and decisions with the local water board as required.
- 8) Assign an interdisciplinary Program of Work/Budget team to continue to make progress toward developing an integrated FY 2010 program of work that in a more effective and integrated manner is responsive to common priorities such as identified work items in the Land Management Plan or Record of Decision.

The following table notes follow-up action taken in response to the action plan in the FY 2006 monitoring report (many of these are carried forward into this FY 2007 report):

Action Item from FY 2006 report	Action Taken
<p>The Forest Supervisor approved all of the recommendations in Section V. Certain monitoring protocol revisions were recommended.</p>	<p>The team revised the protocol as recommended. LMP protocol and tracking forms were consolidated into one form. The sampling pool of special uses focused on those with recent decisions to review. The focus of recreation residence monitoring remains on tracts not administration of individual lots.</p>
<p>The Forest Supervisor approved all of the recommendations in Section VI:Section VI, items 1, 2, and 3 regarded the Environmental Management System. The Forest will continue with implementation of the Forest Environmental Management System (EMS). The Forest EMS Rep will coordinate the EMS action items.</p>	<p>On July 1, 2008, the Forest Service implemented a national EMS on all administrative units; accordingly the Forest-level EMS is replaced by the national EMS. There has been EMS training for all employees with additional training for managers and supervisors.</p>
<p>Section VI, item 4. Line officers need to ensure that 2005 LMP consistency reviews are documented in every project file, even when projects were approved prior to October 2005. Support each NEPA decision with up-to-date analysis. Also ensure planning is consistent with new court rulings and direction (e.g. Roadless Rule).</p>	<p>The monitoring team projects and program activities were reviewed for consistency with the LMP and any relevant legal mandates. Forest personnel have been updated on relevant court decisions including regarding the Roadless Rule. This action will be ongoing.</p>
<p>Section VI, item 5. Line officers need to assign an appropriate interdisciplinary team to each project—this will always include the wildlife biologist, botanist, and archaeologist, plus others as appropriate.</p>	<p>The monitoring team checked for appropriate specialist involvement in project planning. This action will be ongoing.</p>

<p>Section VI, item 6. Clarify the protocol for employees to follow to ensure that heritage resources policy is met.</p> <p>The Forest Supervisor will issue a letter of direction to clarify and emphasize heritage resources policy.</p>	<p>Former Forest Supervisor Tina Terrell issued this letter of direction on February 8, 2007.</p> <p>Following this direction will be ongoing.</p>
<p>Section VI, item 7. Line officers should specifically list all mitigation in the decision document so that implementers are clear on approved resource protection measures to incorporate into any implementation plans (e.g. burn plan) and use on the ground.</p>	<p>The monitoring team checked if specialist report mitigation is brought forward into decision documents or operational plans. This action will be ongoing.</p>
<p>Section VI, item 8. Make sure to consider connected actions when planning. For example, take advantage of special use permit re-issuance to approve associated roads decisions and make corrections to the roads database. With limited personnel and appropriations, efficient analysis and approval of proposed actions is important.</p>	<p>The monitoring team reviewed project files.</p>
<p>Section VI, item 9. Improve accomplishment reporting in all the corporate databases including both tabular and spatial data. This is necessary in order to track and monitor projects, and to get proper credit for accomplished projects. It is recommended that line officers communicate to project leaders that NEPA projects must be entered into FACTS, including a shapefile. Likewise, the INFRA database also needs to be current.</p>	<p>By the end of FY 2007 the Forest had prepared and implemented a FACTS database guide detailing roles, responsibilities and processes to properly document accomplishment. Roads data in the INFRA database was updated by the Forest Planner and now just needs to be kept current. This action will be ongoing.</p>
<p>Section VI, item 10. Craft a 2008 Forest program of work that: a) is responsive to identified work items in the Land Management Plan or Record of Decision; and b) more effectively focuses the Forest's limited resources on making progress toward LMP desired conditions and completing identified work items through integration of functional programs around common priorities. The Forest Supervisor will assign an interdisciplinary Program of Work/Budget team to make progress toward developing an integrated out-year program of work</p>	<p>An interdisciplinary team planned the FY2008 program of work in Spring - Summer 2007. In Fall 2007 large fires including the second largest in California history burned through San Diego and Orange counties including the Cleveland NF. The large fires of 2007 placed heavy emphasis on post-fire BAER, restoration, and fuels workload. Engineering, recreation, lands and resources staff areas worked together on BAER and emergency supplemental projects that met multiple objectives including road and trail maintenance, landline, and watershed or habitat restoration.</p>
<p>The Forest recreation planner will prepare a LMP amendment for removal of the Corral Canyon and Wildomar Open Area designations by December 2008. Trails within the open areas will be designated through the route designation process.</p>	<p>The travel management EA includes this amendment in the proposed action. The amendment will change 10 acres of Back Country Motorized Use Restricted (BCMUR) to Back Country (BC) land use zone in order to account for the location of gates on the ground. An amendment is not needed regarding open area designation.</p>
<p>The Forest Supervisor will assign a team to create and implement a Forest strategy to improve accomplishment reporting in all the corporate databases including both tabular and spatial data. The team will create a Forest FACTS guide to identify Forest roles and protocol.</p>	<p>This item was accomplished in Spring 2007. The Forest had an excellent recorded accomplishment in fiscal year 2007.</p>

IX. Public Participation

People who indicated an interest in LMP monitoring received a letter notifying them of the availability of the Forest LMP Monitoring and Evaluation Report on the Forest web page (or print version upon request).

X. List of Preparers

The FY 2007 LMP monitoring team consisted of:



L to R: 1) Anne Carey, Recreation Planner; 2) Gloria Silva, Ecosystem Staff Officer (with Rob Taylor and Tom White); 3) Tom White, Forest Planner; Tom Brand, Fuels Mgmt Officer; Pete Gomben, Environmental Coordinator; Robert Taylor, Hydrologist; and 4) Mark Marquette, Road Engineer.

Tom White, Forest Planner

Pete Gomben, Forest NEPA Coordinator

Anne Carey, Acting Forest Recreation and Lands Staff Officer

Tom Brand, Forest Fuels Management Officer

Mark Marquette, Road Engineer

Robert Taylor, Forest Hydrologist (San Bernardino NF)

Gloria Silva, Forest Ecosystem and Planning Staff Officer

The team expresses its gratitude for the effort and support from program and project leaders across the Forest.

Appendix

Table 1. Projects and activities randomly selected for LMP monitoring and evaluation on the Cleveland National Forest.

Activity ID	Name	District	LMP	BMPEP	When	Project Leader
8937	Upper San Juan CG	TRD	YES	YES	April-May	Jake R
8987	Wildomar CG	TRD	YES		April-May	Jake R
8988	El Cariso Picnic Ground	TRD	YES		April-May	Jake R
BMP-R30 9020	Pioneer Mail Picnic/ Trailhead	DRD	YES	YES	April-May	Nick F
9028	Pine Creek Rec. Res. Tract	DRD	YES		April-May	Susie
9037	Escondido Rec. Res. Tract	DRD	YES		April-May	Susie
25405 BMP G24	Guatay Allotment	DRD	YES	YES	April-May	Lance
25309 BMP G24	Mendenhall Allotment	PRD	YES	YES	August	Lance
DRD019601	US Border Patrol DHS Non-rec SUP	DRD	YES		April-May	Tim C
BMP-E08-1 maintenance	14S02 – Indian Potereo	DRD	YES	YES	April-May	Mark M
BMP-E08- reconstruction	6S07 – South Main Divide	TRD	YES	YES	April-May	Mark M
BMP- E08+E09+E11	11S03 - Lusardi	PRD	YES	YES	April-May	Mark M
BMP-E10	Road Decommissioning (no projects noted at this time)	None	YES	YES	April-May	---
BMP-E13	Ortega Highway reconstruction -- In-channel Construction Practices	TRD		YES	August	Mary T/ Jake R
BMP-E20-1	14S02 – Indian Potrero – Wet Mgmt.	DRD		YES	Nov/ before rain, and April-May	Mark M/ Russ L
BMP-E20-2	11S03 – Lusardi – Wet Mgmt.	PRD		YES	Nov/ before rain, and April-May	Mark M/ PRD staff
BMP-E15	Maple Springs Crossings - Rip- Rap Composition	TRD		YES	April-May	Mark M
BMP-E14-1	TMP Road DRD418606-3	DRD	YES	YES	April-May	Mark M
BMP-E14-2	TMP Road DRD418621-10	DRD	YES	YES	April-May	Mark M
BMP-M26	Cryo-Genie Mining Operation	PRD	YES	YES	April-May	Rich T/ PRD staff
BMP-F25-1	Wooded Hill Rx burn	DRD	YES	YES	April-May	Brian R
BMP-F25-2	Aguanga Ridge Rx burn	PRD	YES	YES	April-May	Steve W
BMP-V28-1	Aguanga Ridge Mastication	PRD	YES	YES	April-May	Steve W
BMP-V28-2	DRD Mastication	DRD	YES	YES	April-May	Brian R
Program level	BO/MIS Monitoring	ALL	YES		April-May	Kirsten
Program level	OHV Restoration	ALL	YES	Maybe	April-May	Tim C
Program level	Rec. Facility Analysis	ALL	YES		April-May	Anne C
Program level	Route Designation	ALL	YES		April-May	Anne C, Steve E, Tom W

* TRD = Trabuco Ranger District; DRD = Descanso Ranger District; PRD = Palomar Ranger District

** The team may review additional projects if the District Ranger wants to share other projects to add to the forest's continuous improvement/learning.