



Land Management Plan Monitoring and Evaluation Report

August 2012

Cleveland National Forest Fiscal Year 2011



September 2012

Dear Cleveland National Forest Stakeholders:

I am pleased to present the Cleveland National Forest's annual monitoring and evaluation report for your review. The purposes of this report are to determine if plans, projects, and activities are implemented as designed and in compliance with the Cleveland National Forest ("Cleveland NF") Land Management Plan; to evaluate the effectiveness of the Land Management Plan; and to help identify potential future adjustments to the Land Management Plan.

Monitoring is emphasized and identified as a key element in all programs to assure achievement of the Land Management Plan's desired conditions over time. Each year we report on annual indicators of progress and every fifth year include a comprehensive review of any trends. This is the seventh monitoring and evaluation report produced since the Land Management Plan was revised in 2005.

Keeping Cleveland NF stakeholders informed of the results of our monitoring is important to me. This report will be posted on the Cleveland NF website at <http://fs.usda.gov/cleveland/>, along with additional information and opportunities on the Cleveland NF. If you are interested in becoming involved in project or other planning, please also see our national website at <http://www.fs.fed.us/sopa/forest-level.php?110502>.

Sincerely,

WILLIAM METZ
Forest Supervisor
Cleveland National Forest

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Cleveland National Forest Land Management Plan Monitoring and Evaluation Report Fiscal Year 2011

1. Introduction

This report documents the evaluation of projects selected from activities that were implemented on the Cleveland National Forest (“Cleveland NF”) during fiscal year 2011, which began on October 1, 2010 and ended on September 30, 2011. The Cleveland NF Land Management Plan—referred to as the “Land Management Plan” or “LMP” throughout this document—went into effect on October 1, 2005. Projects with decisions signed after this date must comply with direction in the Land Management 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 Land Management Plan. This report documents the evaluation of activities and the interpretation of monitoring data to determine the effectiveness of the Land Management Plan and addresses whether changes in the plan, or in project or program implementation, are needed.

2. Methodology

Monitoring is described in all parts of the Land Management Plan, with monitoring requirements summarized in Part 3, Appendix C. The Cleveland NF monitoring guide further details the protocols that were used in this review. This guide is available on request from the Cleveland NF environmental coordinator.

Part 1 of the Land Management Plan 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. A comprehensive evaluation of this progress is prepared every five years and is included in this monitoring and evaluation report. Part 2 monitoring is focused on program implementation including inventory. The current system tracks performance measures linked to the National Strategic Plan and reports accomplishments through a national reporting system (Performance Accountability System).

Implementation and effectiveness monitoring for Part 3 of the Land Management Plan was conducted at the project or activity level. A 10 percent sample of projects and ongoing activities was randomly selected and visited to review the application and effectiveness of the design criteria. If problems with documentation, or implementation were detected, or if the design criteria were determined to be ineffective, then the IDT recommended possible corrective actions. All recommendations are deliberative in nature and do not constitute a management requirement nor a commitment of funds. The following questions were asked for each reviewed project or ongoing activity:

1. By comparing expected results to actual results, did we accomplish what we set out to do? The protocol monitoring questions for review of each project or activity are:

Were relevant legal and other requirements applied to the project or site? Were Land Management Plan goals, desired conditions, and standards incorporated into operational plans, such as burn plans, allotment management plans, and facility master plans? Is LMP consistency documented, such as by a project-specific consistency review checklist?

Were National Environmental Policy Act (“NEPA”) mitigation measures or Land Management Plan project design criteria implemented as designed? Were requirements from biological assessments, biological evaluations, heritage evaluations, and watershed assessments implemented?

To evaluate effectiveness, the review team asked: Have the project design criteria applied effectively improved environmental conditions as expected?

2. Why did it happen? If the Cleveland NF did accomplish what it had set out to do, the review team attempted to identify the reasons for success; conversely, if not, reasons why not. The Cleveland NF emphasized and sought out underlying cause-and-effect relationships, not individual performance or behavior.

3. What are we going to do next time? What activities should be continued to sustain success? Are changes needed to correct any implementation- or effectiveness-related failures? If change is needed, is an amendment or administrative correction to the LMP required?

Results, conclusions, and recommendations were documented on Land Management Plan monitoring and tracking forms and in this monitoring and evaluation report.

3. LMP Part 1 and Part 2 Monitoring

This chapter documents the monitoring of indicators of progress toward the desired conditions described in the Cleveland NF Land Management Plan (LMP, Part 1 monitoring) as well as addresses program implementation (LMP, Part 2 monitoring). Tracking annual indicators will help identify trends over time, as well as support comprehensive evaluations that will be prepared every five years after implementation of the LMP, including in this section.

The following goals are as listed in Part 1 of the LMP.

Forest Goal 1.1: Community protection (LMP, Part 1, pg. 19)

Goal: Improve the ability of southern California communities to limit loss of life and property and recover from the high intensity wildland fires that are part of California’s ecosystem.

Activity, practice, or effect to be monitored: Vegetation treatments in the wildland/urban interface.

Monitoring questions: Has the Cleveland NF made progress in reducing the number of acres that are adjacent to development within wildland/urban interface defense zones that are classified as high risk?

Reference values (long-term/annual): Fire hazard/risk; annual indicators.

In fiscal year 2011, hazardous fuel treatments occurred on 2,174 acres in the wildland/urban interface. 2,618 acres were reported accomplished in the Forest Activity Tracking System database (FACTS) because some acreages received more than one type of treatment. This contributes to the National Strategic Plan (objectives 1.1 and 1.3). The LMP identifies a more specific indicator focused on measuring progress toward increasing the level of the Cleveland NF fuels program in the wildland/urban interface defense zone described in the LMP.

Background on this indicator

The wildland/urban interface defense zone—that portion of the wildland/urban interface that is directly adjacent to structures (LMP, Part 3, pg. 5, Standard S7; LMP, Appendix K)—has a variable width determined at the project level. The maximum width of the defense zone is defined for general vegetation types in Standard S7. For the LMP analysis, the maximum width was used. This information was used to represent the present, or “baseline,” extent of the wildland/urban interface 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. Due to rapid development of private land in southern California, the inventory of areas with structures is constantly changing. Maps representing the wildland/urban interface defense zone are typically a year or more old and therefore should only be considered an estimate of the actual area pending period updates. The actual presence of communities and substantial structures is determined at the project level. In other words, the defense zone 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. No Cleveland NF-wide, site-specific inventory of fuel hazard within the defense zone exists. 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 wildland/urban interface defense zone including keeping the inventory of the actual defense zone up-to-date.

The method of calculating progress toward Goal 1.1 is summarized in Table 1. Indicators of progress toward Goal 1.1 will be calculated by using the wildland/urban defense zone from the Land Management Plan analysis database. Acres of treatments in the wildland/urban defense zone were calculated for each of the fire regimes and entered into column D in Table 1. These entries represent 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. As part of the five-year monitoring process, the number of high-hazard acres will be re-calculated as the new baseline. Acres documented as being treated in the corporate reporting system can be assumed to no longer be considered a high hazard. The first monitoring and evaluation report after revision of the LMP showed that baseline acres from the previous year analysis was 10,230 acres and after 444 acres treated in WUI defense zone, adjusted to 9,787 acres left. This year's fifth year results (Table 1) show 8,652 baseline acres and 139 acres treated in WUI defense zone, leaving 8,513 adjusted acres left.

Table 1: Progress in treatment of wildland/urban interface defense zone, adjustments to baseline.				
A	B	C	D	E
Baseline acres from fiscal year 2010 LMP analysis	Acres removed due to new info on presence of substantial structures	Acres added due to new info on presence of substantial structures	Acres treated in WUI defense zone, per corporate database	(A-B) + (C-D) (adjusted acres)
Fire regime I: 5,686 acres	0	0	166	5,520
Fire regimes III, IV, and V: 2,827 acres	0	0	175	2,652
Total: 8,513 acres	0	0	341	8,172

Table 2 shows the status of fuels accomplishment as per the Forest Service Activity Tracking System database. An annual query of this database measures the progress that the Cleveland NF has made to reduce the number of acres adjacent to development within wildland/urban interface defense zones and 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. Knowing if the change is due to improved inventory information, actual treatments, or both is important. Simply adding the annual indicator—that is, the number of acres treated—and subtracting it from the baseline 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.

The Cleveland NF focused vegetation treatments in the wildland/urban interface threat and defense zones (see Table 2). Approximately 2,282 acres were treated during fiscal year 2011. Some 75 percent of the acres treated were in the threat zone, while 22.2 percent of the acres treated were in the defense zone. Only 2.8 percent of the acres were treated in the wildland/urban interface environment zone, which is defined as that part of the national forest that lies outside the threat and defense zones.

Table 2: Treatments in 2011.				
Activity	Wildland/Urban Interface Class			Total
	Threat zone	Environment	Defense zone	
Broadcast burning	585	51	9	645
Burning of piled material	619	15	133	767
Fuelbreak	47	0	48	95
Piling	415	5	146	566
Rearrangement of fuels	60	5	61	126
Thinning for hazardous fuel reduction	305.5	0	203	508.5
Sum of all acres treated (some areas had more than one activity type)	2,031.5	76.0	600	2,707.5
Percent of total	75	2.8	22.2	100

Trends in annual indicators for Goal 1.1: The Cleveland NF has achieved progress in meeting this goal. Starting with a baseline of 6,656 acres in the wildland/urban interface defense zone in Fire Regime I in fiscal year 2006, some 1136 acres had been treated by the end of fiscal year 2011. Starting with a baseline of 3,574 acres in the wildland/urban interface threat zone in fire regimes III, IV, and V in fiscal year 2006, some 922 acres had been treated by the end of fiscal year 2010.

Overall, between fiscal years 2006 and 2011, approximately 2058 acres have been treated in the wildland/urban interface defense zone. Many of these acres had multiple activities undertaken, such as an area that underwent piling and then burning of piles to reduce fuel loads.

Forest Goal 1.2: Restoration of forest health (LMP, Part 1, pg. 20)

Goal: Restore forest health where alteration of natural fire regimes has put human and natural resource values at risk.

Activity, practice, or effect to be monitored: Vegetation condition.

The overall longterm goal is to perpetuate plant communities by maintaining or re-introducing fire regimes appropriate to each type while at the same time protecting human communities from destructive wildland fires.

This indicator gauges departure from either the minimum or the maximum fire return interval. In 2006, the fire regime condition class monitoring indicator was updated using new mapping procedures. In the new GIS maps, information is provided on presumed fire return intervals from the period preceding Euroamerican settlement (“presettlement”) and for contemporary fire return intervals, and comparisons are made between the two.

Current differences between presettlement and contemporary fire return intervals are calculated based on mean, maximum, and minimum values. This map is a joint project of the California chapter of The Nature Conservancy and the U.S. Forest Service Region 5 Ecology Program

(David Schmidt, fire ecologist, The Nature Conservancy; Hugh Safford, regional ecologist, U.S. Forest Service, Region 5).

The information was compiled from the fire history literature, expert opinion, data collection, and vegetation modeling. The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program fire history database was used to characterize current fire regimes. The vegetation type stratification was based on the 1996 CALVEG map (U.S. Forest Service Remote Sensing Lab) for the four national forests in southern California.

For data limitations in these datasets, see the CALVEG mapping metadata:

<http://www.fs.fed.us/r5/rsl/clearinghouse/data.shtml>

and the California fire history database metadata:

<http://www.frap.cdf.ca.gov/data/frapgisdata/select.asp>

Table 3 displays the baseline status as of 2006 for departures from the mean fire return intervals. Areas where the current interval 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 indicates that fire return intervals are within the expected range of variability around the mean for a given fire regime. Condition classes 2 or -2 indicate a moderate departure from the expected mean, while condition classes 3 or -3 indicate a high departure from the expected mean. Both moderate and high departures may indicate that altered fire regimes pose a risk to the ecological condition of the site. Type conversion from high fire frequencies (Condition Class -3) or de-forestation from wide-spread high severity crown fires (Condition Class 3) are more likely as the condition class rating increases.

Table 3: 2011 baseline status for departures from mean fire return interval.			
Condition class	Acres	Percent of total (2006)	Percent of total (2011*)
-3	23,210	6	6
-2	195,750	43	46
-1	134,286	33	32
1	12,408	7	3
2	36,494	2	8
3	12,891	5	3
Unclassified	7,803	2	2
Total	422,842	100	100

*GIS data published May 2011 – can be found at

<http://www.fs.usda.gov/detail/r5/landmanagement/gis/?cid=stelprdb5329472>

Trends in annual indicators for Goal 1.2: From 2006 to 2011 the percent of the forest in condition class -2 (too frequent fire) increased from 43% to 46%, with a corresponding decrease in areas in condition class 1. The represents the 2007 wildfires reburning several areas burned in the 2003 wildfires. There was an increase in areas in condition class 2 (too infrequent fire). Some of this was due to wildfire and fuel treatments moving the condition class from class 3 to class 2 and also from a decrease in lands in condition class 1 due to lack of wildfire. In general, the trends in this indicator is away from LMP desired condition due to two unprecedented large wildfire events in 2003 and 2007.

Forest Goal 1.2.1: Fire Regime I, 0 to 35 years, low severity (LMP, Part 1, pg. 22)

Goal: Reduce the potential for widespread losses of montane conifer forests caused by severe, extensive, stand-replacing fires.

Activity, practice, or effect to be monitored: Vegetation condition.

Monitoring questions: Is the Cleveland NF making progress toward increasing the percentage of montane conifer forests in Condition Class 1?

Reference values (long-term/annual): Condition Class Fire Regime I; annual indicators.

Table 4 shows that in fiscal year 2011 a total of 661* acres were treated in montane conifer in all fire regime condition classes. Some 485.5 acres (73.5 % of all treated acres in montane conifer) were in Condition Class 3 and 34 acres (5%) were in Condition Class 2. Treating hazardous fuels in these areas that have missed expected fires is consistent with Goal 1.2.1 of the LMP, which directs the Cleveland NF to reduce the potential for widespread losses of montane conifer forests caused by severe, extensive, stand replacing fires (LMP, Part 1, pg. 22).

Table 4: Acres treated in montane conifer by fire regime condition class.						
Activity	Fire Regime Condition Class					Total
	-2	-1	1	2	3	
Broadcast Burning	4	13.5	0	31	106.5	155
Burning of piled material	82	34	0	3	15	134
Precommercial thinning	0	0	0	0	3	3
Underburn	0	0	0	0	62	62
Piling of fuels	0	4	0	0	0	4
Pruning to reduce canopy heights	0	0	0	0	86	86
Thinning for hazardous fuel reduction	0	4	0	0	213	217
Total	86	47.5	0	34	485.5	661

*Some units received more than one treatment in FY2011

Trends in annual indicators for Goal 1.2.1: Based on reported fuel reduction activities that have occurred from fiscal year 2008 through fiscal year 2011, approximately 2,287 acres were treated in montane conifer. Some 1,837.5 acres of the total, or 80.5 percent, were treated in

Condition Class 3, while 196 acres, or 8.5 percent, were treated in Condition Class 2. Over that same period, only 254.5 acres, or 11 percent of the total, were treated in condition classes, -1, -2 and -3.

Based on these data, the Cleveland National Forest has made good progress toward increasing the percentage of montane conifer forests in Condition Class 1, though the FRCC condition class data shows a reverse trend. This could be due to data collection problems in incorporating fuels treatment data into the FRCC condition class data.

Forest Goal 1.2.2: Maintain or increase percent chaparral and coastal sage scrub in condition class 1 (LMP, Part 1, pg. 25)

Goal: Restore forest health where alteration of natural fire regimes has put human and natural resource values at risk. Reduce the number of acres at risk from excessively frequent fires while improving defensible space around communities.

Activity, practice, or effect to be monitored: Vegetation condition.

Monitoring questions: Is the Cleveland NF making progress toward maintaining or increasing the percent chaparral and coastal sage scrub in Condition Class 1?

Reference values (long-term/annual): Condition Class Fires Regime IV, annual indicators.

As shown in Table 3, as of 2006, approximately 51 percent of the forest land area was at moderate to high risk of type conversion from excessively frequent fires (i.e., in condition classes -2 and -3). Unlike in Fire Regime I (conifer forest), vegetation treatments in condition class -2 or -3 move the area away from the desired condition by adding another burn or disturbance to a location that has already burned too frequently. The Cleveland NF strategy in treatment of chaparral and coastal sage scrub, therefore, is to focus 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 that are upslope from developed areas. Fire history patterns show that fires often stop in the same locations due to topography or, sometimes, man-made features such as reservoirs or highways.

Table 5 shows that 1,478 total acres were treated in chaparral and coastal sage scrub, 16 percent of which were in positive condition classes, meaning that they were within the natural range of variability expected for this vegetation type. Most of the acres in negative condition classes—47 percent of the total acres treated in chaparral and coastal sage scrub—were treated by a piling, burning piled materials, or broadcast burning.

Table 5: Acres treated in chaparral and coastal sage scrub by fire regime condition class.							
Activity	Fire Regime Condition Class						Total
	Undetermined	-3	-2	-1	1	>2	
Broadcast burning	25.5	20.5	137.5	237	0	16.5	437
Burning of piled material	88	49	182	212	24	31	586
Precommercial thinning	0	0	82	21	0	0	103
Piling of fuels	68	46	195	125.5	0	60.5	495
Rearrangement of fuels	3	0	70	37	0	0	110
Thinning for hazardous fuel reduction	35	46	142	18	0	9	250
Fuelbreak	7	0	1	50	0	23	81
Total	226.5	161.5	809.5	700.5	24	140	2,062

Trends in annual indicators for Goal 1.2.2: Based on reported fuel reduction activities that have occurred from fiscal year 2008 through fiscal year 2011, approximately 6,795 acres were treated in chaparral and coastal sage scrub. Some 512 acres of the total, or 7.5 percent, were treated in condition classes 2 and 3, while 2068 acres, or 30 percent, were treated in condition classes -2 and -3. Over that same period, 3,988.5 acres, or 59 percent of the total, were treated in condition classes -1 and 1. A small percentage was conducted in land mapped as an undetermined condition class.

Although 2,068 acres were treated in condition classes -2 and -3, which represent areas that have experience fire or disturbance more frequently than would be naturally expected, the areas that were treated are found mainly in areas that comprise wildland/urban interface defense or threat zones. Fuel reduction activities in these areas are expected to reduce the potential for wildfires to threaten the safety of persons living near the perimeter of the national forest.

Goal 1.2.3: Goal 1.2.3, which relates to maintaining long fire-free intervals in habitats where fire is naturally uncommon, is not addressed in this report because this goal was developed at a scope that accounted for all four southern California national forests and is primarily important on the three other national forests, not the Cleveland NF.

Forest Vegetation and Health Monitoring

The Forest Service Remote Sensing Lab provides inventories of vegetation resources in an ecological framework for determining changes, causes, and trends to vegetation structure, health, biomass, volume, growth, mortality, condition, and extent. The existing Cleveland NF vegetation map was completed in 2003 and is scheduled to be redone sometime in the near future. For details of the vegetation monitoring section, see: <http://www.fs.fed.us/r5/rsl/projects/>.

Aerial detection surveys are conducted annually. An overview of these surveys, as well as maps for the Cleveland NF, may be found at: http://www.fs.usda.gov/detail/r5/forest-grasslandhealth/?cid=fsbdev3_046696

Widespread oak tree mortality is occurring on federal, state, private, and Native American lands in San Diego County, including the southern portion of the Cleveland NF. Researchers from the Forest Service and other agencies discovered that dead and dying oaks were infested with a beetle called the gold-spotted oak borer (*Agrilus coxalis*). The oak borer infests and kills California black oak, coast live oak, and canyon live oak. Due to current and potential impacts, both regionally and throughout California, multiple agencies and organizations are working together in the research, education, and outreach efforts regarding this pest. Information on the gold-spotted oak borer may be found at: <http://groups.ucanr.org/GSOB/>.

Forest health is monitored via annual aerial surveys that detect tree mortality. Survey information and mapping (in .pdf format or view using Google Earth and Google Maps) is available at the following websites, shown by year of survey:

2011: <http://www.fs.usda.gov/detail/r5/forest-grasslandhealth/?cid=stelprdb5327987>

2010: <http://www.fs.usda.gov/detail/r5/forest-grasslandhealth/?cid=stelprdb5327981>

Forest Goal 2.1: Invasive species (LMP, Part 1, pg. 31)

Goal: Reverse the trend of increasing loss of natural resource values to invasive species.

Activity, practice, or effect to be monitored: Invasive species.

Monitoring questions: Does the Cleveland NF inventory of invasive plant and animal species show a stable or decreasing trend in acres of invasive species?

Reference values (long-term/annual): Invasive plants and animals; annual indicators

During fiscal year 2011, according to the Forest Service Activity Tracking System database, approximately 190 acres of invasive species were treated on the Cleveland NF. This included 9 acres of mustard treated on the Trabuco Ranger District; 115 acres of *Arundo donax* treatment on the Trabuco Ranger District, 5.2 acres of Black Locust removal on the Palomar Ranger District; and 69.5 acres of tamarisk re-treated on the Descanso Ranger District.

Trends in annual indicators for Goal 2.1: Because the Forest does not receive a level of funding sufficient to conduct a comprehensive inventory, we are unable to identify a stable or decreasing trend based on change from total inventoried acres. However, survey data is entered into the NRIS corporate database and acres treated are recorded in the FACTS database. Based on reported activities that have occurred from fiscal year 2008 through fiscal year 2011, approximately 619 acres were treated or retreated for invasive species on the Cleveland National Forest. Invasive species that were removed include *Arundo donax*, tree tobacco, tamarisk, yellow star thistle, Spanish broom, and mustard. Eradication of new infestations and planning and treatment of riparian areas were emphasized. In addition to those acres being treated, each year six miles of San Mateo Creek were enhanced by removal of invasive fish and bullfrog species.

Forest Goals 3.1 and 3.2: Managed recreation in a natural setting (LMP, Part 1, pp. 33 to 36)

Goals: (3.1) Provide for public use and natural resource protection.
(3.2) Retain a natural-evolving character within wilderness.

Activity, practice, or effect to be measured: (3.1) Visitor use of the Cleveland NF. (3.2) Wilderness use.

Monitoring questions: (3.1) Are trends in indicators and visitor satisfaction surveys indicating that the Cleveland NF has provided quality, sustainable recreation opportunities that result in increased visitor satisfaction? (3.2) Are trends in indicators and visitor satisfaction surveys depicting the Cleveland NF has provided solitude and challenge in an environment where human influences do not impede the free play of natural forces?

Reference values (long-term or annual): (3.1) Visitor satisfaction; annual indicators. (3.2) Natural processes wilderness; annual indicators.

Annual indicators are recreation facilities managed to standard including natural resource protection as described in Goal 3.1. Meaningful Measures provides a framework for measuring this but the linkage to resource protection is not as clear. Implementation and effectiveness monitoring of resource protection actions required by standards S34 and S50 (including Appendix D) help to measure the resource protection element of this goal.

Long-term indicators are visitor use trends by activity and overall satisfaction from the National Visitor Use Monitoring (“NVUM”) survey. The baseline NVUM survey reported 97 percent visitor satisfaction. The current report summarized data which were collected in 2009. Some 84.9 percent of respondents were satisfied with developed sites on the Cleveland NF; 95.5 percent were satisfied with access, including road and trail condition and parking availability; 79.4 percent were satisfied with services such as availability of information and signage; and 92.9 percent were satisfied with their perception of safety when they were recreating on the Cleveland NF. The report is available online at: <http://www.fs.fed.us/recreation/programs/nvum/>.

The third round of NVUM surveys is scheduled to begin in 2012.

Trends in annual indicators for Goal 3.1 and 3.2: Based on both the baseline NVUM survey and the current report from data collected in 2009, the Cleveland National Forest maintains a high level of user satisfaction. No trends can be determined between the two reports, however, because different methodology was used. The current report will serve as the baseline for determining trends in goals 3.1 and 3.2 for the next five-year reporting period due in fiscal year 2015.

Forest Program Goal – Her 1: Heritage Resource Protection

The desired condition is to preserve or enhance significant heritage resources. Fiscal year 2011 heritage program accomplishments under the Regional Programmatic Agreement (“RPA”) include:

A total of 42 proposed undertakings were analyzed for potential effects on historic properties by the CNF HPM in FY2011. Thirty-six of the 42 proposed undertakings were determined to be compliant with Section 106 through the application of the stipulations of the RPA. Six of the 42 proposed undertakings were reviewed and approved through the application of the Section 106 process, in consultation with the SHPO, as appropriate.

Of the thirty-six projects approved as compliant under the RPA in FY2011, four required cultural resources survey for the identification of historic properties and the assessment of the potential for effects. The four surveys conducted were completed in support of proposed undertakings associated with CNF Special Uses (2), Fish/Wildlife/Plants (1), and Heritage 110 activities (1). One Section 110 related cultural resource survey of approximately 165 acres resulted in the identification and recordation of Sixty-five (65) prehistoric archaeological sites. The Section 110 project is counted in Table 4, new sites recorded in association with the Section 110 survey are counted in Table 2 and listed in Table 7. The survey acres are reported under and discussed in association with the Broad Scale or Other Section 110 Plan Survey category in Table 8.

Of the thirty-six undertakings determined to be compliant under the RPA, four were determined to have historic properties (National Register eligible or unevaluated cultural resources) within the area of potential effects (APE) that would require the implementation of Standard Resource Protection Measures (SRPM) to avoid identified potential effects. Historic properties were not identified within the APE of 32 of the 36 undertakings determined to be compliant under the RPA, and no potential for effects to historic properties was identified for these undertakings. Twenty-six of these undertakings were within areas that had been previously surveyed for the presence of cultural resources. The Archaeological Reconnaissance Report(s) (ARR) for previous survey within the APE of each of these 26 proposed undertakings were reviewed by the HPM and determined to be adequate under the requirements of the RPA for determining the potential for effects to historic properties.

Table 1 provides a summary of the CNF program areas associated with the 42 proposed undertakings that were analyzed for potential effects in FY2011 and the type of data utilized for identification, avoidance of potential effects (if any) to identified historic properties (i.e. previous survey data, required survey data, and the number of proposed projects determined to have no potential for effects (Screened Exemptions). Table 2 summarizes the number of acres surveyed (168), the number of new cultural resources identified and recorded (65), the number of previously recorded resources for which site record updates were completed (27), the number of historic properties that were protected from potential effects through the implementation of SRPM (30), the number of sites that were monitored for the avoidance of potential effects (4), and the number of Inadvertent Effects (0) for FY2011. Table 3 provides additional information on Category of Undertakings for the 36 proposed projects that were reviewed and approved on the CNF under the RPA in FY2011. Of the 36 program undertakings that required a determination regarding the potential for effects to historic properties in FY2011, four required survey, twenty-six had been previously adequately surveyed, and six met the requirements for approval as Screened Exemptions.

Table 1 - Project Summary

Total Projects	36CFR800 Projects	PA Projects	Survey Projects	Previously Surveyed	Screened Exemptions
42	6	36	4	26	6

Table 2 - Historic Property and Survey Data

Acres Surveyed	New Sites Recorded	Sites Updated	Sites Protected	Sites Monitored	Inadvertent Effects
168	65	27	30	4	0

Table 3 - Category of Undertakings

Type of Project	Surveys (Table 4)	Screened Exemptions (Table 5)	Previously Surveyed (Table 6)	Total
Timber	0	0	0	0
Recreation	0	0	2	2
Facilities	0	0	1	1
Special Uses	2	5	16	23
Vegetation Management	0	0	1	1
Fish/Wildlife/Plants	1	0	0	1
Hydrology	0	0	0	0
Engineering/Roads	0	1	2	3
Fire/Fuels	0	0	3	3
Range	0	0	1	1
Minerals	0	0	0	0
Heritage 110	1	0	0	1
Total	4	6	26	36

Air Resources

The desired condition is to remediate and prevent human caused impairments to air quality values. Under the USDA-Forest Service Region 5 air quality monitoring program, a sampling station near the Agua Tibia Wilderness Area monitors the air quality near this Class I airshed. Information about this station, which is part of the Interagency Monitoring of Protected Visual Environments ("IMPROVE") national monitoring network, can be found at:

<http://vista.cira.colostate.edu/improve/Data/data.htm> (raw data)

http://vista.cira.colostate.edu/improve/Publications/improve_reports.htm (reports)

Forest Goals 4.1a and 4.1b: Energy and minerals production (LMP, Part 1, pp. 37 and 38)

Goals: (4.1a) Administer minerals and energy resource development while protecting ecosystem health.
(4.1b) Administer renewable energy resource developments while protecting ecosystem health.

Activity, practice, or effect to be measured: (4.1a) Mineral and energy development. (4.1b) Renewable energy resource development.

Monitoring questions: (4.1a) Has the Cleveland NF been successful at protecting ecosystem health while providing mineral and energy resources for development? (4.1b) Has the Cleveland NF been successful at protecting ecosystem health while providing renewable resources for development?

Reference values (long-term or annual): (4.1a) Energy success at protecting ecosystem health; annual indicators. (4.1b) Renewable resources success at protecting ecosystem health; annual indicators.

In FY 2011, the Forest worked on developing the special use permit for the construction and operation of the Sunrise Powerlink, a 500kV powerline across Forest Service land, was signed in July 2010. Construction of the Sunrise Powerlink began in the Autumn of 2010 and was completed in the summer of 2012. The project contained significant mitigation elements to protect ecosystem health and preserve habitats that would be impacted by construction.

Trends in annual indicators for Goal 4.1a and Goal 4.1b: Based on projects and activities that have been analyzed and authorized via the National Environmental Policy Act process, the Cleveland National Forest continues to meet the intent of both these goals. Projects that meet the criteria of these goals include the Sunrise Powerlink, temporary wind testing, and approval of various plans of operation for hard rock mines on National Forest System lands.

Forest Goals 5.1 and 5.2: Watershed function (LMP, Part 1, pg. 39) and riparian condition (LMP, Part 1, pg. 41)

Goals: (5.1) Improve watershed conditions through cooperative management. (5.2) Improve riparian conditions.

Activity, practice, or effect to be monitored: (5.1) General forest activities and watershed improvement projects. (5.2) General forest activities.

Monitoring questions: (5.1) Is the Cleveland NF making progress toward improving the Watershed Condition Class in Priority Watershed designated during the Watershed Condition Framework and sustaining or improving Watershed Condition Class in other watersheds? (5.2) Is the Cleveland NF making progress toward improving riparian condition?

Reference values (long-term/annual): (5.1) Sustaining Class 1 watershed conditions while reducing the number of condition class 2 and 3 watersheds; annual indicators. (5.2) Best management practice evaluation protocols, water quality and aquatic habitat attributes from the Watershed Condition Framework, and general field review of riparian areas on the Cleveland NF.

Table 6: Watershed Condition Framework – Initial Rating 2010					
Outcome indicator	Desired condition	Baseline Watersheds	Year 5	Trend	Trigger
Watersheds in Condition Class 1, Properly Functioning	Maintained condition ratings	9			Decrease in number of Class 1 watersheds
Watersheds in Condition Class 2, Functioning at Risk	Maintained or improved condition ratings	10			Decrease in number of Class 2 watersheds
Watersheds in Condition Class 3, Impaired Function	Improved condition ratings	28			Degrading conditions in Class 3 watersheds

In FY2011, the Cleveland NF completed the first steps of the Watershed Condition Framework which involved assessment of 47 HUC6 watersheds including the evaluation for 24 distinct attributes. We have also designed two priority watersheds the Cedar Creek watershed and the Kitchen Creek-Cottonwood Creek watershed to focus funding and program of work to increase the watershed condition class. Through the next years we will continue to designate priority watersheds and track watershed condition. Additionally the Cleveland will be assessing watershed change yearly if large disturbance events occur as well as better refine the attributes that define the watershed condition class.

The Cleveland NF's annual Best Management Practices Evaluation Program report was prepared and sent to the Regional Water Quality Control Boards. In addition, periodic road decommissioning projects are expected to contribute to improved watershed function as well as planned project to remove Aquatic Organism Passage barriers. We continue to look at watershed restoration projects and starting to complete planning processes to continue to improve watershed condition classes.

Forest Goal 6.1: Rangeland condition (LMP, Part 1, pg. 42)

Goal: Move toward improved rangeland conditions as indicated by key range sites.

Activity, practice, or effect to be measured: Livestock grazing.

Monitoring questions: Is forest rangeland management maintaining or improving progress toward sustainable rangelands and ecosystem health by increasing the number of key areas in good and fair condition?

Reference values (long-term or annual): Rangeland condition; annual indicators.

Table 7 displays the baseline and trend monitoring for the range and grazing for fiscal year 2011.

Table 7: Baseline and trend monitoring for range allotments in fiscal year 2011.					
Outcome indicator	Desired condition	Previous monitoring	Current	Trend	Trigger
Livestock grazing areas in good condition	Maintain condition rating	13	14	Upward	Decrease in number of key areas in good condition
Livestock grazing areas in fair condition	Maintain/improve condition rating	12	11	Down	Decrease in number of areas in fair condition
Livestock grazing areas in poor condition	Improve condition rating	1	1	Stable	Degrading conditions in key areas poor condition

Table 8 displays the most recent available allotment conditions.

Table 8: Allotment grazing conditions.			
Allotment, pasture	Condition	Assessment type	Year
Black Mountain	Good—stable	Annual compliance monitoring	2009
Corte Madera, Lower Bear Valley	Good	Annual compliance monitoring	2011
Corte Madera, Lower Bear Valley	Good – continued OHV trespass	Annual compliance monitoring	2011
Guatay	Good—good rainfall year, good diversity of desirable species, high ground cover	Annual compliance monitoring	2011
Indian Creek	Ungrazed, not monitored	--	n/a
Laguna, Kitchen Valley	Moderate	Annual compliance monitoring	2011
Laguna, Cameron, La Posta Creek	Moderate	Region 5 long-term trend monitoring	2010
Laguna, Joy Pasture	Low—2006 , Low - 2011	Region 5 long-term trend monitoring	2011
Laguna, Long Canyon Pasture	Low—2006; Moderate—2009	Region 5 long-term trend monitoring	2009
Laguna Meadow, mid-meadow plot	Good—not grazed	Annual compliance monitoring	2011
Laguna Meadow, Las Rasalies plot	High 2000, moderate 2005, moderate 2009, trend stable	Region 5 long-term trend monitoring, Annual compliance monitoring	2011
Love Valley	High—stable to improving	Annual compliance monitoring	2011
Mendenhall, Lower	Good—highly productive year	Annual compliance monitoring	2011
Mendenhall, Upper	High	Region 5 long-term trend monitoring	2011
Mesa Grande, Kelley unit	Fair – difficult to monitor	Rapid	2008
Miller Mountain	Good	Annual monitoring compliance	2011
Samataguma	Good	Annual monitoring compliance	2011
Tenaja	Good - ungrazed	Region 5 long-term trend monitoring	2011
Verdugo	Good	Annual compliance monitoring	2010

Table 8: Allotment grazing conditions.

Allotment, pasture	Condition	Assessment type	Year
Warner Ranch	Good	Annual compliance monitoring	2008

Trends in annual indicators for Goal 6.1: Based on period monitoring, a majority of allotments or pastures remain in good to high condition (Table 8). One livestock area was found to be in poor condition (Table 7); however, this is due to the fact that unauthorized vehicle activity damaged the area. The monitoring report for fiscal year 2007 indicated that a downward trend for two locations was tied to the effects of drought and the Cedar fire. These areas have recovered and no longer have a downward trend. Several issues with range condition are tied to illegal OHV use and not grazing management. These include areas on the Corte Madera allotment and on the Laguna Allotment. Work has occurred to barrier off sensitive meadow areas from vehicular trespass at Bear Valley and along Kitchen Creek Road.

Forest Goal 6.2: Biological resource condition (LMP, Part 1, pg. 44)

Goal: Provide ecological conditions to sustain viable populations of native and desired non-native species.

Activity, practice, or effect to be measured: General forest activities.

Monitoring questions: Are trends in resource conditions indicating that habitat conditions for fish, wildlife, and rare plants are in a stable or upward trend?

Reference values (long-term or annual): Threatened, endangered, proposed, candidate, and sensitive species baseline; management indicator species habitat trends; annual indicators.

Species monitoring: In 2011, the Cleveland NF continued with monitoring specified in applicable biological opinions. The Cleveland NF annual report to the US Fish and Wildlife Service included the following species and monitoring activities, where applicable:

- Laguna Mountains skipper: Surveys were conducted to monitor skipper populations at Palomar Mountain in 2011. Survey report sent separately to US Fish and Wildlife Service.
- Arroyo toad: Arroyo toad populations were monitored where occurrences are near roads and campgrounds.
- California red-legged frog: No action in 2011. This species is extirpated from the Cleveland NF.
- Mountain yellow-legged frog: No action in 2011.
- Southwestern willow flycatcher: No action in 2011.
- California gnatcatcher: Restoration project underway at San Diego River.
- Least Bell's vireo: No action in 2011.

- Western yellow-billed cuckoo: No action in 2011.
- Stephen's kangaroo rat: No action in 2011.
- San Diego thornmint: No action in 2011.
- Munz's onion: Checked on Elsinore Peak population.
- Braunton's milkvetch: No action in 2011.
- Encinitas baccharis: No action in 2011.
- Nevin's barberry: No action in 2011.
- Thread-leaved brodiaea: No action in 2011.
- Vail Lake ceanothus: No action in 2011.
- Slender-horned spineflower: No action in 2011
- Oval-leaved dudleya: No action in 2011. The Cleveland NF population formerly thought to be this subspecies has been determined to be a different, non-listed subspecies of *Dudleya cymosa* (*pumila*).
- San Bernardino bluegrass: Contracted with consultant to check populations.
- Southern steelhead: In 2011, the Forest completed planning and NEPA analysis to address fish barriers in Trabuco Creek and San Mateo Creek. One existing creek crossing is planned for removal and five culvert crossings will be replaced with bridges.

In addition, surveys for, or projects to benefit, the following threatened and endangered species occurred:

Munz's onion. Habitat was improved by removing a population of an invasive weed, yellow starthistle, near Elsinore Peak.

Laguna Mountains skipper. The Cleveland NF no longer surveys the Laguna Mountains for the skipper because the species is considered to be extirpated in the area. A contractor continued surveys in the Palomar Mountains. The Cleveland NF continued monitoring recreation use at the El Prado and Laguna campgrounds and the Meadow Kiosk. No problems were identified. Monitoring for impacts to habitat continued at eight grazing exclosures on Laguna Meadow.

Arroyo toad. Monitoring of road killed arroyo toads and the effects of recreation residence permit renewal on the toads were completed. No mortality was detected. Habitat improvement work (e.g., noxious weed removal) was completed in Trabuco and San Juan canyons. Habitat improvement work (e.g., non-native fish and amphibian removal) was completed in San Mateo Canyon.

Southwestern willow flycatcher. Monitoring indicates that the species continues to use existing habitat and territories near the San Luis Rey River.

California gnatcatcher. In 2008 the Palomar Ranger District started a coastal sage scrub restoration project in the upper San Diego River area. Seeding is being used to regenerate coastal sage scrub vegetation that has been lost due to wildfires. The project plans are to seed 331 acres of habitat. This project is nearly complete. In 2010 an additional project to restore coastal sage scrub was initiated at the Monte Fire near El Capitan reservoir.

San Bernardino bluegrass. Surveys for San Bernardino bluegrass were undertaken in the Mendenhall, Laguna Meadow, and Bear Valley areas.

Monitoring requirements are being updated through new site-specific biological opinions. These will be updated on a priority basis.

The environmental baseline identifies the extent of occupied and suitable habitat for each species and describes ongoing activities authorized by the Forest Service in relation to the occupied and suitable habitats. Implementation of LMP strategies over time is expected to cause changes, both positive and negative, in the baseline. Annual reporting of activities that may change the baseline conditions—including recovery actions proposed, new conservation strategies and new information from surveys or inventory—for threatened, endangered, proposed, and candidate species is recommended by the U.S. Fish and Wildlife Service.

The Cleveland NF will continue to consult with the US Fish and Wildlife Service regarding riparian obligate species and ongoing activities.

Conclusions

The threatened and endangered species monitoring program is adequate. More funding and staff time is needed for additional species monitoring. A process is in place to update procedures based on updated information and monitoring results. Changes are expected through updated consultations with the US Fish and Wildlife Service.

Management Indicator Species

Twelve management indicator species were selected to monitor certain habitat types and issues (LMP, Part 1, pp. 44 to 45). Ten of these species are found on the Cleveland NF and will be monitored along with other indicators of progress toward achieving desired conditions for biological resources. A Cleveland NF management indicator species report was prepared to describe the environmental baseline conditions. For California black oak there is also tracking of mortality (LMP, Part 1, Goal 1.2, pp. 20 *et seq.*). Approximately 30 management indicator species reports were completed for projects on the Cleveland NF for fiscal year 2011. None of the reports found that project implementation would affect populations or habitat trends for management indicator species. For the fifth year report, the individual MIS accounts were updated.

Recommendations

Continue required monitoring.

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

Trends in annual indicators for Goal 6.2: Monitoring has not identified any trends in resource conditions that indicate habitat conditions for fish, wildlife, and rare plants are not stable.

Forest Goal 7.1: Natural areas in an urban context (LMP, Part 1, pg. 46)

Goal: Retain natural areas as a core for a regional network while focusing the built environment into the minimal land area necessary to support growing public needs.

Activity, practice, or effect to be measured: Built landscape extent land adjustment.

Monitoring questions: Is the Cleveland NF balancing the need for new infrastructure with restoration opportunities or land ownership adjustment to meet the desired conditions?

Reference values (long-term or annual): Built area and land ownership complexity; annual indicators.

Goal 7.1 calls for minimization of the built environment. Roads are one element of the built environment and are part of the outcome indicators for this goal. In addition, Goal 3.1 instructs the Cleveland NF to remove roads that are determined to be unnecessary through a roads analysis and the analysis required by NEPA.

Table 10 below shows that the Cleveland NF has analyzed approximately 65.5 miles of unauthorized routes—many of which impact riparian conservation areas or habitat for endangered or threatened species—between 2006 and 2011 to determine if they should be closed and decommissioned to preserve resource values. Approximately 65.5 miles of unauthorized routes have been decommissioned. Current NEPA analyses may result in additional miles of unauthorized, unneeded routes being decommissioned.

Table 10: Miles of road in Forest Service jurisdiction by type, 2006 baseline and 2011.						
Maintenance level		NFS road	Permitted road	Unauthorized, undetermined	Unauthorized, unneeded, existing	Unauthorized, unneeded, decommissioned
Not applicable	2006	--	--	154.0	--	4.0
	2011	--	--	99.1	11.6	65.5
1: Basic custodial care (closed)	2006	34.4	--	--	--	--
	2011	34.4	--	--	--	--
2: High clearance vehicles	2006	280.9	136.9	--	--	--
	2011	281.2	133.5	--	--	--
3: Suitable for passenger cars	2006	11.5	--	--	--	--
	2011	11.5	--	--	--	--
4: Moderate degree of user comfort	2006	54.2	--	--	--	--
	2011	54.2	--	--	--	--
5: High degree of user comfort	2006	18.1	--	--	--	--
	2011	18.1	--	--	--	--
Totals	2006	399.1	136.9	154.0	--	4.0

Table 10: Miles of road in Forest Service jurisdiction by type, 2006 baseline and 2011.

Maintenance level		NFS road	Permitted road	Unauthorized, undetermined	Unauthorized, unneeded, existing	Unauthorized, unneeded, decommissioned
	2011	399.1	133.5	99.1	11.6	65.5

Trends in annual indicators for Goal 7.1: Between fiscal years 2006 and 2011, the Cleveland NF conducted NEPA analyses to determine if unauthorized routes are necessary for potential inclusion as part of its transportation system, if such routes should be actively decommissioned, or if such routes have already been naturally decommissioned by non-use and vegetation growth. Pending adequate funding, these analyses will continue in the future.

4. Part 3 Monitoring

This section addresses the monitoring and evaluation of projects and activities. As per the methodology described in the monitoring guide, 10 percent of new projects or ongoing activity sites for each type of activity were randomly selected for review and are listed in Table 11.

Ranger district	Project name (type and number)	Section in monitoring report
Descanso	Carveacre Fuels Project FY11	4.1.4
	Wooded Hill Timber Stand Improvement (Thinning)	4.2.2
	100-foot Private Residence Clearance Permit – Old Highway 80	4.4.3
	Laguna Water System (new well)	4.5.3
	Swanson mine closure	4.4.2
	Deer Park Road	4.7.1
	Horse Heaven Campground	4.6.2
	Noble Canyon Trailhead	4.6.5
	Carveacre Fuels Project	4.1.4
	El Centro Rec Residence Tract	4.5.1
Palomar	San Diego River Road Decommissioning	4.7.5
	Mendenhall Grazing Allotment	4.3.2
	East Grade Fuels Project	4.1.2
	Community Defense Palomar (Stoneridge)	4.1.3
	SUA381 –Patton Lode Mine Road	4.7.3
	Inaja Picnic Site	4.6.3
	Community Defense Rancho Carrillo	4.1.1

Ranger district	Project name (type and number)	Section in monitoring report
Trabuco	Arundo Removal	4.2.1
	Elsinore Communications Site	4.4.1
	7S09 Sitton Peak Road	4.7.4
	7S01 Tenaja Road	4.7.2
	El Cariso Campground	4.6.1
	Miller Mountain/Tenaja Grazing Allotment	4.3.1
	Hot Springs Rec Residence	4.5.2

4.1 Fuels Projects

4.1.1 Rancho Carrillo Community Defense

Monitoring

The site is located in the San Mateo Place on the Trabuco Ranger District. The project was designed to treat fuels within the Wildland-Urban interface, both WUI Defense and WUI Threat zones. The project is on NFS lands immediately adjacent to the community of Rancho Carrillo. The purpose of these treatments is to reduce the threat of severe wildfires to communities through the creation of defensible space and to provide for firefighter safety by reducing flame lengths, radiant heat, wildfire intensities, and rate of fire spread from wildland areas that might occur in the area. Fuel treatments in WUI defense and threat zones are considered a priority for fuels treatments in the Land Management Plan.

Results

During fiscal year 2011, the district conducted hand thinning of chaparral and pile burning of cut material in several locations directly adjacent to developed areas in Rancho Carrillo. The purpose of the treatments was to create a mosaic of vegetation types. This serves to break up fuel continuity to help meet goals of reduced flame length and wildfire intensity adjacent to the community. 31 acres were treated. The work was done within the San Mateo Canyon Wilderness Area.

The monitoring team found no problems with the way the project was conducted and it complied with all design features found in the EA for the project. Trimming of vegetation was conducted with hand tools and in such a way as to create irregular patterns in order to comply with wilderness mitigations.

The Best Management Practice (BMP) evaluation showed that the burn plan did not reflect soil and water protection considerations but the implementation of the burn protected soil and water values on the Cleveland NF. The BMP evaluation showed that the BMP's were effective and the groundcover and soil erosion was within Forest Service standards.

Conclusions

The project was fully consistent with Goal 1.1 of the LMP, which directs the Cleveland NF to improve the ability of southern California communities to limit the loss of life and property and recover from the high intensity wildland fires that are a natural part of California's ecosystem (LMP, Part 1, pg. 19), as well as other LMP objectives, standards, and place emphases. The Environmental Assessment, biological assessments and biological evaluations for wildlife and botany, a soils report, and a heritage review for the project are on file at the Trabuco Ranger District office.

Recommendations

The Environmental Assessment was completed with the use of an Enterprise Team. The final document contained a large list of design features, many that were not applicable to the project. It is recommended that a more intense review occur of Enterprise Team work before accepting documents. Some burn piles were placed on edge of meadow areas. These did not create resource damage, but care should be taken with working around meadows.



4.1.2 East Grade fuels treatment

Monitoring

The site is located in the Palomar Mountain Place on the Palomar Ranger District on NFS lands in-between Dyche and Will Valleys. Project activities on the site were analyzed and approved by a Decision Memo in 1991. In 2002, the DM and project file were reviewed and a letter to file was signed by the District Ranger concluding that the analysis from the early 90's was sufficient. In 2004, a BA/BE was written analyzing the project, but no new NEPA decision followed.

The goals of the project, as described in the 2002 letter to file, were to reduce fuels in the project area by removing brush and thinning pockets of overstocked Coulter pine saplings. There was an identified need of reducing the stocking level of planted trees and to release pine trees and

black oaks in the area. Brush (ceanothus spp.) were growing vigorously, choking out Coulter pine and other tree species.

Results

During fiscal year 2011, the District conducted a broadcast burn over 117 acres in the East Grade area. Prior to the burn, 65% of the site was in FRCC (Fire Regime Condition Class) 2 and 35% was in FRCC 3. After the burn, it was estimated the 25% of the site had been moved into FRCC 1, 50% remained in FRCC 2 and 25% in FRCC 3. There was also work done to obscure temporary roads that had developed through the treatment years by ripping soils in the tracked areas.

The monitoring team did have concerns over the way the project was conducted this year. The road decommissioning was not part of the project as described in NEPA and specialists were not consulted before it was undertaken. The primary concern with the decommissioning as it was undertaken where cultural resources. The Heritage Program Manager revisited the site and concluded that there was not damage to cultural resources due to the ripping of the road. The team noted that it was difficult to assess project compliance with terms of NEPA documents because the project file contained so many small reviews and specialist inputs since the initial decisions. In previous years there were problems with heritage resource compliance in the project area.

Ceanothus was rapidly reestablishing in the project area.

The Best Management Practice (BMP) evaluation showed that the burn plan had soil and water protection considerations and the implementation of the burn protected soil and water values on the Cleveland NF. The BMP evaluation showed that the BMP's were effective and the groundcover and soil erosion was within Forest Service standards.

Conclusions

The project was not fully consistent with Goal 1.1 of the LMP, which directs the Cleveland NF to improve the ability of southern California communities to limit the loss of life and property and recover from the high intensity wildland fires that are a natural part of California's ecosystem (LMP, Part 1, pg. 19), as well as other LMP objectives, standards, and place emphases. The placement of the project is not in WUI threat or defense zones. The project may help the forest towards Goal 1.2, Restoration of Forest Health, by releasing conifer seedlings from brush encroachment. However, it was unclear if the project methods will achieve that result based on the rapid reestablishment of Ceanothus spp. The Environmental Assessment, biological assessments and biological evaluations for wildlife and botany, a soils report, and a heritage review for the project are on file at the Palomar Ranger District office.

Recommendations

The District, in the field, acknowledged that this project does not fit with current priorities and is actively working to finish planning on new fuels projects for the District more aligned with the goals of the current LMP. Recommendations for the Forest as a whole are to only work on projects with "old" or frequently "refreshed" NEPA documents after a thorough LMP consistency review is undertaken with full interdisciplinary team involvement.

4.1.3 Community Defense, Stoneridge

Monitoring

The site is located in the Aguanga Place on the Palomar Ranger District. The project was designed to treat fuels within the Wildland-Urban interface, both WUI Defense and WUI Threat zones. The project is on NFS lands immediately adjacent to the community of Stoneridge. This project was analyzed in the Palomar Community Defense Zone and Fuelbreak Environmental Assessment. The purpose of these treatments is to reduce the threat of severe wildfires to communities through the creation of defensible space and to provide for firefighter safety by reducing flame lengths, radiant heat, wildfire intensities, and rate of fire spread from wildland areas that might occur in the area. Fuel treatments in WUI defense and threat zones are considered a priority for fuels treatments in the Land Management Plan.

Results

During fiscal year 2011, the district conducted hand thinning of chaparral and pile burning of cut material on 14 acres adjacent to the community. The purpose of the treatments were to create a mosaic of vegetation types. This serves to break up fuel continuity to help meet goals of reduced flame length and wildfire intensity adjacent to the community. 3

The monitoring team found no problems with the way the project was conducted and it complied with all design features found in the EA for the project. Trimming of vegetation was conducted with hand tools and in such a way as to create irregular patterns in order to comply with wilderness mitigations.

The Best Management Practice (BMP) evaluation showed that the burn plan had soil and water protection considerations and the implementation of the burn protected soil and water values on the Cleveland NF. The BMP evaluation showed that the BMP's were effective and the groundcover and soil erosion was within Forest Service standards.

Conclusions

The project was fully consistent with Goal 1.1 of the LMP, which directs the Cleveland NF to improve the ability of southern California communities to limit the loss of life and property and recover from the high intensity wildland fires that are a natural part of California's ecosystem (LMP, Part 1, pg. 19), as well as other LMP objectives, standards, and place emphases. The Environmental Assessment, biological assessments and biological evaluations for wildlife and botany, a soils report, and a heritage review for the project are on file at the Palomar Ranger District office.

Recommendations

Continue involving forest resource specialists during project implementation.

4.1.4 Carveacre Fuels Project FY11

Monitoring

The site is located in the Sweetwater Place on the Descanso Ranger District. This project has been implemented over several years to create defensible space adjacent to the community of Carveacre in conjunction with work being performed on private lands in the area. In FY11, the District completed the burning of slash piles that were created in previous years. The project was analyzed in the Carveacre Fuelbreak Decision Memo, signed in 2003. There was an updated Biological Assessment and NEPA review completed in 2009.

Results

During fiscal year 2011, the Carveacre fuelbreak underwent activities on approximately 8 acres, according to the Forest Service Activity Tracking System database. Activities included burning of piled material. The project has been implemented as designed. Design criteria from the biological assessment and biological evaluation were included in the project. The project record is on file at the ranger district office

Conclusions

The monitoring team did not travel to this site during the LMP tour due to the limited nature of the activity and the fact that the site had been monitored by several specialists during and after implementation. The project file and monitoring records show that the project has been consistent with LMP standards and mitigations identified in the project specific analysis. The district wildlife biologist was on site during FY11 project implementation. The fuelbreak as a whole has been evaluated for heritage resources.

This project is consistent with Goal 1.1 of the LMP, which directs the Cleveland NF to improve the ability of southern California communities to limit loss of life and property and recover from the high intensity wildland fires that are a natural part of California's ecosystem (LMP, Part 1, pg. 19), as well as other LMP objectives, standards, and place emphases.

Recommendations

Continue involving forest resource specialists during project implementation.

4.2 Vegetation Projects

4.2.1 Arundo Removal

Monitoring

This activity occurred in the San Mateo Place, in and around recreation cabin tracts in San Juan and Hot Springs Canyons. Similar work also occurred in Trabuco Canyon. This activity was analyzed in the Non-native riparian perennial plant removal, West Flowing Drainages of the

Trabuco Ranger District Environmental Assessment in 2009. The purpose of this project was to restore native riparian habitats in these drainages by removing the non-native plant, *Arundo donax*.

Results

The activities in 2011 were the second year of treatment for these infestations, which occur in patches within a 30 acre area. The success of treatments in the first year was low, so the approach in 2011 was altered from the first year. Contractors cut and piled arundo canes in August and then returned several weeks later to spray the resprouting cane. The monitoring team did not find any issues with the way this project was undertaken. The team look specifically at some of the biomass piles that remained on site to determine if they posed a fire danger. It was determined that they could be left in place to degrade.

Conclusions

The project has been implemented as designed. Mitigation measures are listed in the decision documentation and were followed. Design criteria were incorporated into operational plans for the project. The project is consistent with Goal 2.1 of the LMP, which directs the Cleveland NF to reverse the trend of increasing loss of natural resource values due to invasive species (LMP, Part 1, pg. 31), as well as other LMP objectives, standards, and place emphases. The project was listed as a priority in Appendix M of the LMP, the National Forests of Southern California Weed Management Strategy.

Recommendations

Continue to monitor site for new infestations and the need for follow up treatments.



4.2.2 Wooded Hill Timber Stand Improvement

Monitoring

This activity occurred in the Laguna Place of the Descanso Ranger District. In 2001, 75 acres were thinned according to silvicultural prescription and cut material was chipped on site. This activity was analyzed Wooded Hill Prescribed Burn Project Decision Memo in Nov. 2000. An updated BA/BE and scoping effort occurred in 2005. New specialists reports (BA/BE, Watershed and Heritage) were completed in 2011 and a letter to file summarizing their findings was issued on June 13th, 2011. The timber stand thinning was funded by the Western Bark Beetle Initiative. The purpose was to remove live trees from overstocked conifer stands in order to improve the health and vigor of the remaining trees and make them more resilient to future Western Bark Beetle outbreaks.

Results

The monitoring team found no problems with the way that the project was undertaken. The trees were marked and cut according to prescription. The trees were cut using Forest Service crews. Sporax was properly applied after cutting. A contractor was used to chip down logs. The contract specifications included mitigation identified in NEPA documents and the silvicultural prescription, including leaving a certain number of dead logs on the ground. The Forest Hydrologist had concerns about the wetness of the soils at the time the whole tree chipper was working, but the District felt that they had properly assessed conditions before allowing the chipper to work. The Forest Hydrologist agreed that detrimental damage to soils did not occur.

Conclusions

The project has been implemented as designed. Mitigation measures are listed in the decision documentation and were followed. Design criteria were incorporated into operational plans for the project. The project is consistent with Goal 1.2 of the LMP, which directs the Cleveland NF to restore forest health where alteration of natural fire regimes have put human and natural resource values at risk (LMP, Part 1, pg. 20). The timber thinning will allow prescribed fire to occur in the area to return the area to FRCC class 1.

Recommendations

Monitor the area to determine whether tracks in soil caused by whole tree chipper recover, or whether more stringent requirements over soils conditions at the time of use are needed.

4.3 Livestock Grazing Allotments

4.3.1 Miller Mountain grazing allotment

Monitoring

The allotment is in the San Mateo Place on the Trabuco Ranger District. This was one of two allotments visited during the monitoring process, though the visit occurred after the main tour as a separate field trip.

Results

The allotment was reviewed and the permit reauthorized under Categorical Exclusion in the Decision Memo for El Cariso/Verdugo and Miller Mountain/Tenaja Allotments, signed September 2007. The allotment is managed via term permit and annual operating instructions. The project was implemented as designed. Mitigation and other design criteria implemented for the allotment include an adjusted season of use based on annual monitoring.

The main design feature for the allotment is a seasonal restriction to allow for the flowering and seed set of *Brodiaea* spp on Miller Mountain per the 2001 Grazing Biological Opinion. Recent monitoring has demonstrated compliance with these restrictions. Monitoring has shown permit compliance and range condition is good. The Tenaja portion of the allotment has not been used in recent years due to difficulty maintain fencing in such a publicly accessible place.

A BMP evaluation protocol was completed for the site; all BMP's were noted to be implemented and effective.

Conclusions

The project is consistent with Goal 6.1 of the LMP, which directs the Cleveland NF to move toward improved rangeland conditions as indicated by key range sites (LMP, Part 1., pg. 42), as well as with other objectives, standards and place emphases found in the LMP. Grazing management complies with the terms and conditions of the April 27, 2001 biological opinion for the Cleveland NF grazing program.

Recommendations

The monitoring team identified the potential for repairing old water sources to improve water access for cattle and for wildlife. Continue managing to standards. Seasons of use and rotations are appropriate.



4.3.2 Mendenhall grazing allotment

Monitoring

The allotment is in the Palomar Mountain Place on the Palomar Ranger District. This was one of two allotments visited during the monitoring process, as established by protocol which directs the Cleveland NF to monitor ten percent of all on-going activities on the national forest.

Results

NEPA was conducted on the allotment in 2008 and a permit was reissued on the allotment based on the DN and FONSI for the Mendenhall Allotment Environmental Assessment signed in November 2008. Monitoring done as part of routine permit administration on the Mendenhall allotment has determined that existing resource conditions are meeting or moving toward desired conditions and the planning project file documents that management is consistent with all standards and goals detailed in the LMP. The allotment contains two Region 5 Long Term Trend Monitoring plots which are reread every 5 years. The most recent reread was conducted in 2011 and found the meadow condition to be good and stable.

This allotment contains two endangered species, the Laguna Mountain Skipper and *Poa atropurpurea*. The skipper is managed using exclosures that are checked for functionality before each grazing season. The exclosure is functioning and in good condition. *Poa atropurpurea* is monitored so that grazing does not occur until after “seed set”. This monitoring has been consistent and has utilized contract botanists in recent years to help better map the *Poa* population.

The project file documents LMP consistency. Standards from the LMP regarding livestock grazing were incorporated into the permit. The allotment is managed via term permit and annual operating instructions. The project was implemented as designed. Mitigation and other design criteria implemented for the allotment include an adjusted season of use based on annual monitoring.

A BMP evaluation protocol was completed for the site; all BMP’s were noted to be implemented and effective.

Conclusions

The project is consistent with Goal 6.1 of the LMP, which directs the Cleveland NF to move toward improved rangeland conditions as indicated by key range sites (LMP, Part 1., pg. 42), as well as with other objectives, standards and place emphases found in the LMP. Grazing management complies with the terms and conditions of the April 27, 2001 biological opinion for the Cleveland NF grazing program.

Recommendations

Continue to manage the allotment to standard. Evaluate opportunities to further improve the old gully in the meadow.

Continue managing to standards. Seasons of use and rotations are appropriate.

4.4 Lands Special Uses

4.4.1 Elsinore Communications Site

Monitoring

The project occurred in the Elsinore Place of the Trabuco Ranger District. The project involved the issuance of a special use permit to Riverside County for continued operation of communication sites and site upgrades at Elsinore and Santiago Peaks. The project looked at the monitoring tour was the construction of a new tower and new equipment building on Elsinore Peak, which occurred in FY 2011. The project was analyzed under the PSEC Radio Communication Site Enhancements: Elsinore and Santiago Peaks Decision Memo.

Results

The monitoring team examined whether mitigations and design features were implemented. The project was designed to so that the existing development footprint would not need to be expanded. BMP's were followed during construction and a barrier was installed on NFS lands to prevent continued off road vehicle trespass occurring off the communication site access road. There was a mitigation to prevent dust during construction off the access road for air quality and to protect the Munz's onion. This proved to not be necessary due to the nature of the road bed. There was also a mitigation to treat Yellow Starthistle along access road. Some of this work occurred by volunteers, but a complete and well-timed treatment of Yellow Starthistle did not occur.

During project implementation, the contractor asked for permission to temporarily use a previously disturbed that was not part of original construction plans to maneuver equipment. This permission was granted. However, the contractor then proceeded to blade a much larger area than was asked for. The County was notified and they committed to rehabilitating the disturbed site. A site restoration plan has been developed. Another violation of the permit occurred on another site shortly after. The combination of these violations led to the District issuing a stop work order at the other site.

Conclusions

The project is consistent with Goal 7.1 of the LMP, which directs the Cleveland NF to focus the built environment into the minimum land area needed to support growing public needs (LMP, Part 1, pg. 46), as well as other LMP objectives, standards, and place emphases. The violation that occurred was dealt with properly. The Forest Service does not have the resources to be on-site monitoring during every phase of construction on special use projects. Some mitigation listed in the environmental analysis were unnecessary, or difficult to implement with the timing of the project.

Recommendations

Ensure site rehabilitation occurs according to the agreement with Riverside County. It is necessary for project managers to evaluate project design features proposed by specialists (in this

case, treatment of Yellow Starthistle) to ensure that they are realistic. In this case, the project occurred when treatment of YST would have been impossible.

4.4.2 Swanson Mine Closure

Monitoring

The Swanson Mine on the Descanso Ranger District is a horizontal mine shaft near Deer Park Road. The mine is part of an active mining claim, however the claimant has not issued a notice to mine the area. The horizontal shaft was accessible to the public and it was necessary to install gates at the entrance for public safety. These gates were installed in FY2011. The project was analyzed under the Abandoned Mines Public Safety Hazard Remediation Decision Memo, signed in 2010.

Results

The monitoring found no issues with the way that this project was implemented. The gate installed still allows for operation of the mine in the future. The gate was designed to allow bat species which utilize that mine to enter and exit the mine unimpeded.

Conclusions

The project is consistent with Goal 4.1a of the LMP, which directs the Cleveland NF to administer minerals and energy resource development while protecting ecosystem health (LMP, Part 1, pg. 37), as well as other LMP objectives, standards, and place emphases.

Recommendations

Continue work on public safety closures and site remediation for vacated or currently inactive mine sites.



4.4.3 100 Foot Fuel Clearance Special Use Permit

Monitoring

The Descanso Ranger District issues special use permits to private landowners to create fire safe conditions on NFS lands within 100 feet of homes and adjacent private property. Fuel clearance work is conducted and paid for by the homeowner with guidance and restrictions set forth in the special use permit. A permit issued in 2011, to a homeowner in the Pine Valley area, was selected for monitoring. These permits were analyzed in the Private Residence Vegetation Reduction Environmental Assessment.

Results

The monitoring found no issues with the way that this project was implemented. The project record contained the site evaluation conducted by a Forest Biologist, as required in the EA. The project area was flagged by district personnel prior to implementation and an educational contact about proper fuel clearance was made by District fire prevention officers. Ground disturbance is not allowed with any activities authorized under these permits, and none was seen at this site.

The project record for this activity was complete and the permit, as issued, contained all necessary information for the homeowner to comply with agency goals and mitigation measures.

Conclusions

This project is consistent with Goal 1.1 of the LMP, which directs the Cleveland NF to improve the ability of southern California communities to limit loss of life and property and recover from the high intensity wildland fires that are a natural part of California's ecosystem (LMP, Part 1, pg. 19), as well as other LMP objectives, standards, and place emphases.

Recommendations

Continue working with landowners to allow responsible fuel clearance activities where needed. Continue to enforce that these permits are for existing primary structures at the time of the decision and does not allow

4.5 Recreation Special Uses

4.5.1 El Centro Recreation Residence Tract

Monitoring

This tract, which consists of 27 cabins, is located in the Laguna Place on the Descanso Ranger District. This was one of two recreation residents tracts visited during the monitoring process, as established by protocol which directs the Cleveland NF to monitor 10 percent of all on-going activities on the national forest.

Results

NEPA for the recreation residence tracts was complete with a decision notice and finding of no significant impact signed on May 11, 2009. New special use permits with a 20-year duration were issued to current permit holders who were found to be in full compliance with the terms

and conditions of their existing permits. Current permit holders who were found not to be in full compliance with the terms and conditions of their existing permits were issued a short-duration permit to take actions to achieve full compliance. Permit holders who do not achieve full compliance within the allotted timeframe may be required to sell or remove all structures. The biological evaluation and biological assessment, as well as the heritage report, are up-to-date.

Information on maintaining 30-foot and 100-foot fuels clearances around structures, as required to reduce the threat of wildfire damage, was sent to all recreation residence permittees in the area. This recreation cabin tract has several biologically active sites.

In FY11, a checklist was developed for internal permit administration to help determine when actions taken on cabins require heritage resource review. All cabins in this tract have been evaluated for their eligibility for the National Historic Register, and several cabins were determined eligible.

Conclusions

Management of the recreation residence tract is consistent with Goal 3.1 of the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases.

Recommendations

The Descanso Ranger District permit administration did an excellent job of maintaining clear channels of contact with permittees that facilitated exchange of information, especially with regard to ensuring fuel clearance requirements. Continue administration in accordance with the new permits.

4.5.2 Hot Springs Recreation Residence Tract

Monitoring

This tract is located in the San Mateo Place on the Trabuco Ranger District. This was one of two recreation residence tracts visited during the monitoring process, as established by protocol which directs the Cleveland NF to monitor 10 percent of all on-going activities on the national forest.

Results

NEPA for the recreation residence tracts was complete with a decision notice and finding of no significant impact signed on May 11, 2009. New special use permits with a 20-year duration were issued to current permit holders who were found to be in full compliance with the terms and conditions of their existing permits. Several permits in this track were not issued until compliance issues were dealt with. Certain cabins were drawing water from Hot Springs Creek and were mandated to remove piping from the stream. Other cabins were given one year permits until septic systems were brought into compliance to County inspection standards. One cabin was removed from this tract in recent years. Reconstruction just occurred on another cabin (Lot #5). This reconstruction was analyzed in Rebuild, Recreation Residence Lot #5, Hot Springs Tract Decision Memo, signed in 2009.

The monitoring did not notice new problems in the recreation tract that are not in the process of being addressed. The District has used the twenty year permit renewal process to bring the tract closer to full compliance in recent years.

Conclusions

Management of the recreation residence tract is consistent with Goal 3.1 of the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases.

Recommendations

The Trabuco Ranger District should continue managing this tract in the direction of full compliance and desired conditions. Work should focus on improving water quality in Hot Springs Creek.

4.5.3 Mount Laguna Water System, New Well

Monitoring

In recent years, the water system which serves campgrounds and other facilities on Mount Laguna has been increasingly unreliable due to age and an inability to shut down any part of the system for extended repair work due to lack of backup systems. The need has been identified to create another water source and reservoir system to add back up capacity to the water system. This project was to locate and drill a new well. The project was analyzed in the Mount Laguna Water Well Decision Memo.

Results

Many sites for the well were eliminated after screening for habitat and heritage resources issues. The project ended up drilling two wells, after the first one proved to not be productive. The second well was directly adjacent to the first well but was not part of the footprint analyzed in the Decision memo, however the new location did not have any differing resource concerns. The project had design features to limit impacts to the perched water table in order to maintain conditions in Laguna Meadow. Best Management Practices were used, such as waddles on the temporarily disturbed site and a sprinkler system to disperse water over a large area while the well was being tested to avoid gullyng.

Conclusions

The development of this well is consistent with the LMP goal 3.1, Provide for Public Use and Natural Resource Protection. This activity serves to maintain visitor infrastructure on Mount Laguna, the most popular recreation area on the Cleveland National Forest.

Recommendations

It should have been anticipated that there may have been a failure at the initial well site and several sites should have been cleared initially in doing the analysis for the decision memo. It is clear in the Decision Memo where well site could NOT be drilled and the final well site avoided these areas. However, several specialists felt that the second (and adopted) well drilled was not looked at specifically during the NEPA process.



4.6 Recreation Projects and Ongoing Activities

4.6.1 El Cariso Campground

Monitoring

The campground is an ongoing activity in the San Mateo Place on the Trabuco Ranger District. This was one of two campgrounds visited during the monitoring process, as established by protocol which directs the Cleveland NF to monitor 10 percent of all on-going activities on the national forest.

This campground contains 25 single sites and receives light use. It is directly adjacent to Ortega Highway and this proximity limits its use. The campground is open annually from roughly the beginning of May until the end of November. The campground was built in the 1930's by CCC crews and some of the retaining walls and other features in the campground are considered historic resources.

Results

The campground was closed at the time of the site visit. The monitoring team examined the campground for general condition, erosion concerns and the condition of historic walls. The most recent new improvements in the campground were new vault toilets. These toilets were in good condition, clean and well maintained. There was concern about the placement of one toilet because sediment would move onto the concrete pad during storms. The forest hydrologist gave suggestions for rerouting stormwater flow. There were no other concerns noted at the campground.

A BMP evaluation protocol was completed for the site; all BMP's were noted to be implemented and effective. There are several sites and faucets within 100 feet of the streamside management zone but are historic placements, movement of that infrastructure is pending planning and funding.

Conclusions

The overall operation of the campground is consistent with Goal 3.1 of the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases.

Recommendations

Implement rerouting of stormwater flow around new toilet.



4.6.2 Horse Heaven Campground

Monitoring

The campground is an ongoing activity in the Laguna Place on the Descanso Ranger District. This was one of two campgrounds visited during the monitoring process, as established by protocol which directs the Cleveland NF to monitor 10 percent of all on-going activities on the national forest.

The campground is usually open from approximately Memorial Day weekend until the first weekend in September.

Results

Horse Heaven campground is a group site campground with three large sites. The campground was closed at the time of the site visit. The campground is operated by the Forest Service without a concessionaire. Reservations are handled by a national on-line reservation system. The campground is also used the Navy Seals potentially year round under an agreement with the

Forest Service. In this agreement, use of the campground is exchanged for facilities maintenance work (specifically pumping of toilets).

The monitoring team had no issues with the management of the site. It was agreed that the toilets on the site were a priority for replacement as funding allowed.

A BMP evaluation protocol was completed for the site; all BMP's were noted to be implemented and effective.

Conclusions

Operation of the campground was consistent with Goal 3.1 of the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases.

Recommendations

Pursue toilet replacement as it fits with other recreational site improvement priorities.

4.6.3 Inaja Memorial Picnic Area

Monitoring

The picnic area and information kiosk is an ongoing activity in the Upper San Diego River Place on the Palomar Ranger District. This was a minor recreation site visited during the monitoring process, as established by monitoring protocol.

Results

The picnic area is an ongoing recreation activity. There has been recent work in the picnic area, including the installation of new shade structures. These shade structures were completed with a partnership with the San Diego River Park foundation. The monitoring team found no issues with the site. It was clean and the new shade structures are a nice addition to encourage public use. There was concerns with the condition of the short loop trail with leaves the picnic area in previous visits. The monitoring team walked the trail and noted that drainage off the trail has been improved by the District in recent years.

Conclusions

The Inaja Picnic Area is consistent with Goal 3.1 of the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. The site is well designed and recent improvements with addition of shade structures and to the trail were successful in improving conditions at the site.

Recommendations

Continue periodic checks of the location to report any potential problems with vandalism or trash dumping. Continue to monitor trail condition.



4.6.5 Noble Canyon Trailhead (Pine Valley)

Monitoring

The trailhead is an ongoing activity in the Laguna Place on the Descanso Ranger District. This was a trailhead visited during the monitoring process, as established by monitoring protocol. The trail provides is the lower elevation access point to the Noble Canyon trail.

Results

There was no operation and maintenance file nor any NEPA decision for this site. The monitoring team found the site to be clean and well maintained. The water at the site has been turned off. It was shut down due to personnel not being about to enter the area and test water quality as needed due to safety concerns with a recreation cabin permittee who had threatened Forest Service employees. The rec cabin permittee is no longer in the area and Forest Service employees can come and go from the site. The water is still off due to a lack of personnel. The District said that priorities have been work on the trail itself (a very popular mountain biking and equestrian destination) rather than the trailhead. There was garbage in a trail log box, but not trail log.

A BMP evaluation protocol was completed for the site; all BMP's were observed to be implemented and effective.

Conclusions

The trailhead is consistent with Goal 3.1 in the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. In general, the site was well managed and clean of garbage, except in the trail log box. The lack of water at the site is a hindrance to public use.

Recommendations

Investigate whether it would be possible to reopen the water source at the site. Reduced funding and personnel may not make this possible.



4.7 Road Projects or Maintenance

4.7.1 Deer Park Road

Monitoring

This road is in the Laguna Place on the Descanso Ranger District. This road is an official Forest Service System road and is open to the public seasonally.

Results

The road was part of the annual maintenance contract in 2011 and was regarded. The monitoring team found no issues with the road. Mitigations were followed during maintenance, mainly not blading where creek crosses stream. The road is closed seasonally during the winter when conditions become wet enough to avoid vehicle damage to road through rutting etc. The road does require vehicles to cross through a perennial stream (Indian Creek).

Conclusions

The road segment is consistent with Goal 3.1 in the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. In particular, Goal 3.1 includes direction to maintain a transportation system of roads and trails that is environmentally sound and efficient to manage, as well as reduce the number of inventoried unclassified roads. Road closures in the winter assure that the cost of maintenance of the road does not exceed budgetary requirements. The crossing of Indian Creek could be engineered to prevent need for vehicular crossing (either a bridge or culvert system. This may improve water quality.

Recommendations

Continue seasonal closure of Deer Park road and add the Indian Creek crossing to list of potential watershed improvement projects.

4.7.2 7S01 Tenaja Road**Monitoring**

This route segment is in the San Mateo Place on the Trabuco Ranger District. The segment is isolated between two private parcels. The landowners at the end of the road have an access easement and maintenance responsibilities for the road.

Results

The road appeared well maintained and no resource issues were identified during monitoring. The road is not maintained by the Forest Service and there were no records of previous monitoring of road condition. It was not apparent that Forest Service maintenance standards had been communicated to the landowners who maintain the road.

Conclusions

The route segment is consistent with Goal 3.1 in the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. In particular, Goal 3.1 includes direction to maintain a transportation system of roads and trails that is environmentally sound and efficient to manage, as well as reduce the number of inventoried unclassified roads.

Recommendations

Contact the landowners in charge of maintaining the road and ensure that Forest Service maintenance standards are communicated to them.

4.7.3 SUA381 –Patton Lode Mine Road**Monitoring**

This road is in the San Dieguito/Black Mountain Place on the Palomar Ranger District. The road is under a permit associated with an active mining claim.

Results

The route segment is authorized under special use permit for the operation of the Patton Lode Mine. During the monitoring site visit, the entire road was driven. The road was in poor condition and erosion of the road prism was significant. Where the road leaves Lusardi truck trail there were concerns about a stream crossing and sediment entering the stream.

Conclusions

This route segment is not consistent with Goal 3.1 in the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. In particular, Goal 3.1 includes direction to maintain a transportation system of roads and trails that is environmentally sound and efficient to

manage, as well as reduce the number of inventoried unclassified roads. Maintenance of the road segment is entirely the responsibility of the mining claim operator.

Recommendations

Contact owner of mine claim and communicate road maintenance responsibilities as part of Special Use authorization. Schedule follow up visit.

4.7.4 7S09 Sitton Peak Road

Monitoring

This segment is in the San Mateo Place on the Trabuco Ranger District. At the time of the site visit, the road was impassable and is being encroached on with brush. It is lightly used as a recreational trail.

Results

This road segment was not monitored due to its impassibility. It was determined that the road segment is not accessible to vehicular traffic and is effectively closed off to public motorized use.

Conclusions

The route segment is not consistent with Goal 3.1 in the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. In particular, Goal 3.1 includes direction to maintain a transportation system of roads and trails that is environmentally sound and efficient to manage, as well as reduce the number of inventoried unclassified roads. No significant effects to water quality were observed during the monitoring.

Recommendations

This road should be analyzed for possible decommissioning or conversion to recreational trail.

4.7.5 Upper San Diego River Unauthorized Routes Decommissioning Project

Monitoring

This project occurred in the Upper San Diego River Place on the Palomar Ranger District. It involved decommissioning unauthorized routes as analyzed in a DM signed in May 2009. The project was to decommission approximately 16.6 miles of unauthorized routes. This project was not monitored as part of the LMP tour, though a similar site was looked at. It was monitored later by several specialists with work in the area.

Results

The project was implemented as designed. Barriers were installed where prescribed and restored roads were properly ripped and obscured to allow natural regeneration. One segment, it was noted, off Highway 78, was not fully restored, but was instead waterbarred to prevent further damage. This was due to confusion with the purpose of the road with a local landowner.

Conclusions

This project was consistent with Goal 3.1 in the LMP, which directs the Cleveland NF to provide for public use and natural resource protection (LMP, Part 1, pg. 33), as well as other LMP objectives, standards, and place emphases. In particular, Goal 3.1 includes direction to maintain a transportation system of roads and trails that is environmentally sound and efficient to manage, as well as reduce the number of inventoried unclassified roads. No significant effects to water quality were observed during the monitoring.

A BMP evaluation protocol was completed for the site; all BMP's were observed to be implemented and effective.

Recommendations

Closed routes should be monitored to ensure barriers are working as designed. This project was not consistent with the NEPA document when first sent to contracting, however, it was corrected before work on the ground began. The project demonstrates the need to double check contract scopes with requirements and project descriptions in NEPA.

5. LMP Monitoring Protocol Recommendations

This year the team continued with the open-ended-question format used for the first time in the fiscal year 2008 monitoring and evaluation report. The monitoring guide, as revised in the spring of 2009, was used. The guide is available to the public upon request to the Cleveland NF environmental coordinator. This guide needs to be updated again to help streamline monitoring activities and blend this effort with other monitoring and reporting requirements for various program areas.

6. Monitoring Team Recommendations

The fiscal year 2011 monitoring team re-emphasized recommendations from previous reports, including:

Continue progress made to analyze the need for road segments that are found on the Cleveland NF but which are not part of the National Forest Transportation system, are not authorized under a special use permit, and are not needed for administrative use. Where applicable, after NEPA analysis has been completed, remove these road segments from the Cleveland NF geographic database.

The monitoring team identified problems with using "old" NEPA documents to conduct projects. Though this seems to be less of a problem than in the past and the Forest is making progress on updating NEPA analysis for district fuels and forest health programs.

The monitoring team identified problems with internal specialist review of NEPA documents produced by Enterprise teams. These documents often contained design features that were not applicable to the local environment or were known by local specialists to be ineffectual.

Implementation of these design features did not occur. The latest round of documents produced by an Enterprise team for the Trabuco Ranger District did go through extensive internal review which should help correct this problem in the future.

7. Potential LMP Amendments and Corrections

Monitoring did not surface a need for significant amendment of the plan. To date, the following individual project decisions have included insignificant amendments of the Cleveland LMP: 1) Motorized Travel Management (November 12, 2008); 2) West-Wide Energy Corridor (January 14, 2009); and Sunrise Powerlink (July 9, 2010).

The fiscal year 2008 monitoring and evaluation report anticipated the proposed exchange of the Viejas and Hulburt tracts through a NEPA planning process, which would result in a plan amendment to remove these tracts from “Other Designations—Recreation Residence Tracts” table 479 (LMP, Part 2, p. 13). This project remains in the first stages of the planning process.

8. 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:

Emphasize requirement to screen all projects for consistency with the current LMP, especially when implementing projects with “refreshed” NEPA that was started before the adoption of the LMP. Continue work to build NEPA ready fuels management projects for outyears that are consistent with the current LMP.

Ensure local Forest specialists review all NEPA work conducted for the Forest by Enterprise Teams or private contractors to ensure all design criteria and mitigations are appropriate and implementable by the local unit.

Specialists must continue to be engaged through project implementation, especially when field realities necessitate changes in projects that may have not been fully analyzed during the NEPA process.

Continue to emphasize decommissioning of undetermined, unneeded roads and resolving the status of “temporary roads.” This work serves to improve watershed function and further LMP goals and objectives.

For roads under special use permit (where the permittee is required to maintain), work to ensure that permittee is aware of current road management standards and monitor condition of roads. Issue notices of non-compliance for roads not meeting forest standards that are contributing to degraded watershed conditions.

Continue to fine tune an interdisciplinary process for developing the program of work, striving to create an integrated program of work that is responsive to common priorities under the LMP.

Continue to prepare operations and maintenance plans for Forest Service recreation sites over time.

9. Public Participation

Groups or individuals who have indicated an interest in Land Management Plan monitoring received a postcard notifying them of the availability of this report on the Cleveland NF web site, or whom to contact to obtain a print version of this document.

10. Members of the Monitoring Team

Members of the fiscal year 2011 monitoring team were:

Fuels/Fire:	Stephen Fillmore, Cleveland NF fuels specialist
Roads/Engineering:	Mark Marquette, Cleveland NF road manager
Soils/Hydrology:	Jason Jimenez, Cleveland NF hydrologist
Planning:	Lance Criley, Cleveland NF acting environmental coordinator
Resources/Planning:	Gloria Silva, Cleveland NF resources staff officer
Wildlife:	Kirsten Winter, Cleveland NF biologist

Program monitoring information was contributed by:

Archaeology:	Steve Harvey, Cleveland NF heritage resource program manager
Wildlife:	Kirsten Winter, Cleveland NF biologist
Range:	Lance Criley, Cleveland NF range management specialist

Members of the monitoring team express their gratitude to the program and project leaders on the Descanso, Palomar, and Trabuco ranger districts, for their support throughout the monitoring and evaluation process, including efforts to compile planning documents and host field project site visits.