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of Agriculture



Forest Service

Pacific  
Southwest  
Region

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# Land Management Plan Monitoring and Evaluation Report

## San Bernardino National Forest Fiscal Year 2009



July 2010

I am pleased to present the San Bernardino National Forest's Annual Monitoring and Evaluation Report for your review. The purpose of the Monitoring and Evaluation Report is to determine the effectiveness of the Land Management Plan and whether changes are necessary to the Plan, or in program or project implementation.

In 2005, the San Bernardino National Forest revised its Land Management Plan. In the Record of Decision, the monitoring requirements were identified as the cornerstone of our program emphasis for the future. We are now in the fourth year of monitoring conducted under the revised plan, and the Forest has learned a great deal from monitoring. The lessons we learn from monitoring help improve our programs and projects. We continue to find ways to increase efficiency and effectiveness of our monitoring and evaluation efforts. In our fifth year monitoring report we will answer questions designed to evaluate progress toward the Forest's desired conditions. It is my commitment to keep you informed of the monitoring results through this report. If you would like to participate in future monitoring, please contact the Forest.

Your continued interest in the San Bernardino National Forest Land Management Plan is just one way for you to stay current with activities on your public lands. Additional information can be found on our website at <http://www.fs.fed.us/r5/sanbernardino>.

Sincerely,



THOMAS F. GILLETT  
Acting Forest Supervisor  
San Bernardino National Forest

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# San Bernardino Land Management Plan Monitoring and Evaluation Report

## I. INTRODUCTION

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The Fiscal Year (FY) 2009 Monitoring and Evaluation Report documents the evaluation of selected projects and programs where activities occurred during October 1, 2008 through September 30, 2009. The primary purpose of this Evaluation is to determine the effectiveness of the 2005 Land Management Plan (LMP) and whether changes in the LMP or in project or program implementation are necessary.

## II. METHODOLOGY

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Monitoring requirements are found in all three parts of the San Bernardino National Land Management Plan. The Draft San Bernardino Monitoring Guide further details the protocols that were used in this review. This guide is available on the San Bernardino National Forest website at <http://www.fs.fed.us/r5/sanbernardino/> and to the public upon request.

The LMP Part 3, Appendix C summarizes our monitoring requirements as identified in each part of the LMP:

Part 1 Monitoring identifies outcome questions that will help evaluate movement towards the desired conditions over the long-term. The monitoring guide describes the baseline data that will be used to answer these questions and evaluate progress over time toward desired conditions. A comprehensive evaluation and report of this movement will be prepared in the fifth year following plan implementation, so it is not included in this annual report.

Part 2 Monitoring focuses on program implementation including inventory. Forest Service corporate databases track accomplishment of work related to objectives and strategies (LMP Part 2).

Part 3 Monitoring is conducted at the project or activity level. An approximate ten percent (10%) sample of projects implemented in 2009 and ongoing activities were randomly selected for monitoring. Selected project and ongoing activity sites were then visited by an interdisciplinary monitoring team to review the application and effectiveness of the design criteria. If problems in implementation were detected or if design criteria were determined to be ineffective, the team recommended corrective actions. For the FY 2009 monitoring, the Forest again successfully implemented a recommendation from the FY 2006 Monitoring Report to combine LMP monitoring with Best Management Practice (BMP) monitoring. Additionally, the Forest Leadership Team participated in monitoring on one day. The monitoring team asked the following questions of each reviewed project or ongoing activity:

**Project leaders answered following questions at project site or during the activity review:**

Monitoring Questions for Review of Projects and Ongoing Activity Sites	If no, identify what phase of the process was deficient (i.e. NEPA or project administration) and describe deficiencies. If yes, identify any standard operating procedure or key reason(s) for the success.
Were LMP goals, desired conditions and standards incorporated into NEPA documents and any procedural plans (i.e. burn plans, allotment plans, facility master plan, etc.)?	
What were the mitigation measures or LMP project design criteria and were they implemented as designed?	
What were the requirements from Biological Assessments/Evaluations and Heritage Evaluations (ARRs) and Watershed Assessments and were they implemented?	
Were legal and other requirements identified as applicable to the project or site addressed?	
Were operational controls effective at protecting the environment as intended?	

**The monitoring team asked the following questions of new projects or ongoing activities after the project leader described the actions in table above.** We compared expected results to actual results and sought cause and effect relationships, not individual performance.

1. Did we accomplish what we set out to do?
2. Has project design criteria been effective at protecting resources as expected?
3. If not why not?
4. What are we going to do next time?
  - a. What activities should be continued to sustain success?
  - b. Are changes needed to correct any implementation or effectiveness-related problems?
  - c. If change is needed, will it require an amendment or administrative correction to the Land Management Plan?



The results, conclusions, and recommendations were documented and used in this annual LMP Monitoring and Evaluation Report.

### **III. PART 2 LMP MONITORING – PROGRAM IMPLEMENTATION**

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Part 2 Monitoring is focused on program implementation, including inventory. The goal is to answer the question: Are projects being implemented as planned? Sixteen strategic plan performance indicators, presented in Table 1 below, are measured and reported annually. Additionally, the LMP specifies two additional monitoring questions for the San Bernardino National Forest involving pebble plain habitat and carbonate habitat, both of which are discussed in this section. This section also provides additional monitoring updates on the following Forest programs: OHV, Heritage, Water Quality, Roads, Air Quality, Biological Resource Condition, Threatened and Endangered Species, and Lands. Monitoring for these Forest programs is reported in various reports and Forest Service databases. The results of Forest program monitoring is summarized here so as to provide a consolidated report of monitoring conducted on the San Bernardino National Forest.

**Table 1. Annual Strategic Plan Performance Indicators (FY 2009)**

<b>Indicator</b>	<b>FY 2009 Accomplishment</b>
Acres of Terrestrial Habitat Enhanced	2,392.5
Miles of Aquatic Habitat Enhanced	165
Acres of Noxious Weeds Treated	348.5
Acres of Vegetation Improved (also see Hazardous Fuels Reduction)	3,911
Acres of Watershed Improved	954.5
Number of Heritage Resources Managed to Standard	45
Recreation Special Use Authorizations Administered to Standard	453
PAOT Days Managed to Standard (Developed Sites)	470,100
Land Use Authorizations Administered to Standard	107
Number of Mineral Operations Administered	11
Acres of Manage Grazing Allotments	237,769
Acres of Hazardous Fuels Reduction	4,420.8
Miles of Passenger Car Roads Maintained to Objective Maintenance Level	145
Miles of High Clearance & Back Country Roads Maintained to Objective Maintenance Level	205.9
Miles of Road Decommissioned	0
Miles of Trail Operated and Maintained to Standard	116

## **Carbonate Endemic Plant Habitat Management (Forest Goal 6.2)**

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### **Monitoring and Results**

The following LMP monitoring question was asked:

Is habitat being conserved through implementation of the Carbonate Habitat Management Strategy?

Yes, as outlined below under reference values.

Reference Values: The following actions from the Carbonate Habitat Management Strategy Part IV (Administration) were taken during FY2009.

13(a)(iii): The Habitat Reserve was managed for conservation of carbonate Plants and consistent public uses, as provided under section 9(f) of the CHMS. This management included use, maintenance and patrol of the Forest Transportation System, maintenance of fencing and signage, and administration of special use authorizations.

13(b)(i) and (ii): The habitat and credit registry were maintained and updated in the Mountaintop GIS during FY2009. These data were used to answer multiple queries from Mitsubishi, SMI, OMYA and the Cushenbury Mine Trust with regard to their ongoing activities under the CHMS, as well as new proposals.

### **Conclusions**

Management activities associated with carbonate habitat during FY09 made limited gains toward the desired conditions of protecting the habitat reserve, avoiding destruction of critical habitat, recovering listed species, and restoring carbonate habitat. The main factors limiting substantial gains in these areas was available funding and awaiting the Multi-Party Agreement drafting by the Industry partners.

### **Recommendations**

- Continue ongoing work towards the LMP recommended establishment of the Blackhawk RNA.
- Work on taking title to Mitsubishi Cement Co. (MCC) 17P and 18P via donation by MCC.
- Work on requesting mineral withdrawal to establish initial habitat reserve and implement mitigation measures for Omya and Mitsubishi.

## **Pebble Plain Plant Habitat Management (Forest Goal 6.2)**

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### **Monitoring and Results**

The following LMP monitoring questions were asked:

Is habitat being conserved through implementation of conservation strategies?

Yes, as outlined below under reference values.

Are resource conditions indicating a stable or upward trend toward meeting desired conditions?

Yes, resource conditions indicate a stable trend during FY09.

Reference Values: The following actions from the Pebble Plain Habitat Management Guide were taken during FY2009.

D-1 (5.): Coordination continued with Southern California Edison and Bear Valley Electric Service to avoid and minimize impacts associated with operation and maintenance of their electrical transmission lines through pebble plain habitat.

D-1 (6.): Patrols continued to monitor sensitive areas, record impacts, and maintain fences, signs and gates. Barbed wire continued to be replaced with smooth wire.

D-1 (9.): The Forest Minerals Officer, in coordination with the District Botanist, continued to manage mining-related activities in and around pebble plain habitat. The strategy is to work with claimholders to prepare Notices of Intent that avoid impacts to pebble plain habitat by design.

D-1 (12.): The effort to identify, close and restore unclassified roads in pebble plain habitat was folded into the OHV Route Designation Project. A final decision on this action was rendered in February 2009 and implementation is in progress.

### **Conclusions**

Management activities associated with pebble plains during FY09 made limited gains toward the desired conditions of conserving habitat, minimizing incompatible uses, restoring habitat, and recovery of listed species. The main factor limiting substantial gains in these areas was available funding.

### **Recommendations**

- Continue ongoing work towards the LMP recommended establishment of the Arrastre and Wildhorse Research Natural Areas (RNAs).
- Look for additional opportunities to improve pebble plain habitat through the integration of functional programs.
- Repair and expand resource fencing and signage in high use areas.

## **OHV Program Monitoring (Forest Goal 3.1)**

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In addition to the OHV Soil Monitoring described below, there are four additional methods of OHV program monitoring. Each program is described separately with conclusions and recommendations for all compiled at the end of this section.

### **1) OHV Trail Soil Monitoring**

#### **Monitoring**

The Cactus Flats motorcycle/ATV trail system was constructed in 1992. It consists of five miles of OHV trail with loops of varying difficulty levels. At that time, the District OHV staff working with a Regional Soil Scientist created a soil monitoring program and established soil monitoring stations, erosion sites and photo points on the Cactus Flats OHV trail system. Quarterly soil monitoring was conducted from 1992-2001 by Forest OHV staff and volunteers and annual soil monitoring reports were completed.

Subsequently, in 2003, soil monitoring sites were established along Forest Trails 3W12 and 3W13 (50' OHV trails) located north of Lake Arrowhead. New soil monitoring stations, sediment traps and channel crossing monitoring sites were established in spring 2003 on Forest Trails 3W12 and 3W13.

The results of the Cactus Flats soil monitoring were analyzed following the monitoring effort of 1992 to 1997. In sandy soils, OHVs driving on flat ground naturally created high banked turns through simple mechanical erosion. In loamy or clay soils, the trails experienced moderate to high erosion. In sections of trail with rocky soils, the trail tread stayed relatively stable with little soil displacement. The Cactus Flats OHV trail system had settled in and hardened by 1998. Analysis of soil monitoring data collected from 1998-2001 indicated very little soil movement and/or soil erosion occurrence. The Cactus Flats OHV trail soil monitoring program ceased in its previous capacity in 2001. Annual trail maintenance is performed on the Cactus Flats OHV trail system from 2001 to the present. Any increased soil loss or sediment loading is addressed during regular trail maintenance.

At Lake Arrowhead, in the 2003/2004 winter, the soil monitoring stations and erosion sites located on Forest Trails 3W12 and 3W13 were destroyed by heavy rains, flashfloods and effects from the burned watershed within the 2003 Old Fire. The floods destroyed (washed out) and/or covered the soil monitoring sites with large amounts of debris and sediment; these sites were not reestablished. Soil monitoring has shown that, when conducted after the wet season, good trail design becomes apparent. Trails that experience increased soil loss need additional soil monitoring and mitigation. In the FY06 Monitoring Report the team made recommendations to move the Forest towards the desired conditions for watershed function by considering another simple, yet effective OHV Trail Monitoring Program to provide specific information to help guide annual trail maintenance.

In 2008, funds were acquired to reinitiate the soil monitoring program. Emphasis occurred on sites that experienced moderate to high soil loss in areas rated as being 'high soil erosion hazard rating' by the Soil Conservation Service. Several employee/volunteer Soil Monitoring Coordinators were established across the Forest. These Soil Monitoring Coordinators work directly with the equipment operators during routine trail maintenance.

During fiscal year 2009, all of the designated OHV trails on the San Bernardino National Forest were monitored for soil retention and soil loss. During this time, it was determined that all of these trails were retaining soils at acceptable manageable amounts. The maintenance efforts from the fall of 2008 included clearing out over side drains, clearing rolling dips, armoring culverts with rock all contributed to the trails soil stabilization.

During spring 2009, all of the designated OHV Trails on the San Bernardino National Forest were maintained using a small bulldozer, front end loader or using hand tools. The trail treads were graded, rocks and debris removed. All of the trail drain structures were cleared and rolling dips reshaped.

**Recommendations:**

- Continue monitoring soil loss and retention on all of the designated OHV Trails and complete annual OHV trail maintenance using mechanized equipment and hand tools.

## **2) Wildlife Habitat Protection Program/ Habitat Monitoring Plan (WHPP/HMP) and OHV Restoration Site Monitoring**

### **Monitoring**

Wildlife Habitat Protection Program/Habitat Monitoring Plan (WHPP/HMP) and Restoration Site Monitoring are funded in partnership with the State of California Off Highway Motor Vehicle Recreation Division (OHMVRD). WHPP/HMP monitoring is conducted by Forest field staff four times a year using maps and checklists to protect and restore threatened, endangered and sensitive wildlife and plant habitat from unauthorized off road and trail use. Restoration sites are monitored to ensure they are not affected by unauthorized use and to schedule maintenance needs.

Under the 2009 WHPP/HMP, 22 locations of wildlife habitat and 36 locations of plant habitat were monitored 4 times. In 2009, 25 of the 58 sites had unauthorized off highway vehicle use occur. The number of sites being affected has continued to rise, despite the recently formed task force involving OHV, recreation, resource personnel and OHV volunteers formed in 2009. Mountaintop (combined) patrols have begun to meet bi-weekly to address OHV concerns. OHV volunteers have diligently resumed their "adoptive monitoring" program to increase monitoring and maintenance in areas with recurring effects in addition to the quarterly monitoring/maintenance performed by forest personnel. Interdisciplinary teams have been and will continue to be scheduled to address repetitive concerns in sensitive areas. Management plans are in the works for the T-6 crossing, Warm Springs, and the Cactus Flats Staging Area which are three main areas of concern on the Mountaintop District. Also in 2009, thirty three restoration sites in addition to 17 miles of newly restored trails at Baldy Mesa were monitored (several restoration sites have been removed from monitoring due to complete recovery). During field monitoring, newly created disturbances were disguised immediately by covering trails with (slash) forest litter, rocks and vegetation to prevent future damage. For locations needing intensive treatment such as well established trails, erosion control work or long stretches of fence maintenance, a work party was scheduled. In conjunction with the monitoring, OHV conservation funds were used to propagate plants to immediately disguise unauthorized trails and to maintain a supply of containerized plants for this use.

The 2009/2010 State of California Off Highway Motor Vehicle Recreation Division grant proposal on the SBNF was updated to include the prospectus for trends and expectations for OHV trails as described in the 2005 LMP. In addition, the proposal included goals to assist the Forest in achieving the desired conditions for OHV use. A shift has occurred in this cycle of grants to focus funding on monitoring/maintaining previous restoration sites rather than starting new ones.

## **3) Adopt-a-Trail Program Road and Trail Monitoring**

### **Monitoring**

The San Bernardino National Forest motorized Adopt-a-Trail (AAT) Program maintains over 250 miles of forest roads and trails. The AAT Program currently has over 48 active clubs and an estimated 4,000 volunteers that conduct monitoring on all three ranger districts (as of report date). In addition, some volunteers are trained to operate bulldozers, front loaders, backhoes, chainsaws, ATVs and motorcycles.

The Adopt-a-Trail clubs monitor thousands of acres of National Forest System (NFS) lands.

Every adopted road and trail has an annual written maintenance plan that identifies specific maintenance needs. Maintenance includes brushing, culvert clearance, off road restoration, maintenance of signs, and facilities and equipment needs. The maintenance plans include monitoring points which include fence lines, barricades for sensitive habitats, restoration sites, hiking trail interfaces (unauthorized use), private property trespass and stream crossing monitoring. OHV Employees and OHV Volunteers repair any breach of barricades, fence lines etc. These breach points become future monitoring points for OHV patrols and OHV projects. If an area has been illegally breached by motor vehicles multiple times, analysis determines what methodology will be employed to deter any future breach(es). Typically, signs are posted, Law Enforcement increased and any barricades are bolstered until the unauthorized motorized use stops occurring.

#### **4) SBNFA-OHV Volunteer Program Monitoring**

##### **Monitoring**

The San Bernardino National Forest Association (SBNFA)-OHV Volunteer Program has approximately 200 members that conduct monitoring on all three ranger districts (as of report date). The volunteers are skilled 4 x 4, ATV and motorcycle operators and they provide written reports surmising their daily activities monitoring in the forest.

After 80 hours of specific training, the OHV Volunteers are given the authority to patrol as OHV hosts, making public contacts while monitoring the forest use patterns. The OHV Volunteers report forest fires, illegal campfires, traffic collisions and other incidents while providing service to our public. While in the field, the OHV Volunteers are trained to monitor sensitive areas such as meadows, wilderness areas, urban interface (excessive sound), streams, and rare plant and wildlife habitats for unauthorized motorized use.

The OHV Volunteers are a vital Forest resource. Including all the services described above they are trained to identify and complete field projects and often assist in WHPP monitoring and completing required monitoring forms.

#### **5) SBNF Travel Management Monitoring**

##### **Monitoring**

Monitoring has begun in conjunction with implementation of the SBNF Travel Management NEPA decision. All Forest Roads and Trails that were affected by decommissioning or restoration efforts are monitored on a daily basis. If a site has been breached by motorized vehicles, the OHV Employee or OHV Volunteer will repair the breach immediately. If the breach requires equipment, supplies or a work party, this is reported to the US Forest Service Liaison and a project is initiated to repair the breach site.

#### **Conclusions for WHPP, Restoration Site, Adopt-A-Trail, SBNFA OHV Monitoring, and Travel Management Monitoring Programs**

Off-Highway vehicle use on designated routes is consistent with Forest Goal 5.2 to provide for public use and resource protection. Active management for OHV is also consistent with this goal and Strategy Law 1 (LMP Part 2) to utilize cooperative agreements with local law enforcement agencies, and

supplement field personnel and provide additional law enforcement support primarily on high use weekends or holidays when visitor use is highest. OHV management is a program emphasis in several of the Places across the forest. The LMP prospectus for trends and expectations over the next 3-5 years for Trails (Part 2 page 35) states that the program will emphasize improving the National Forest OHV system by designating OHV road and trail routes and effectively managing inappropriate use. The desired condition for OHV use is for the use to safely occur on designated routes only.

Along routes within any Wildlife Habitat Protection Program/Habitat Monitoring Program areas, Adopt-A-Trail and SBNFA OHV Volunteer use monitoring programs, mitigation of unauthorized OHV use to protect natural resources and wildlife habitats has been successful in most locations. In those areas where the Forest has a managed presence, unauthorized use is decreasing. The contribution of volunteers is key to the success of Wildlife Habitat Protection Program, OHV, and Adopt-A-Trail monitoring efforts.

The monitoring programs have the ability to move the Forest toward the LMP desired condition for OHV management.

### **Recommendations for WHPP/HMP, Site Restoration, Adopt-A-Trail, and SBNFA OHV Monitoring Programs**

- In order to comply with Standard 35 (LMP Part 3), for identified desired conditions for managed motorized recreation, watershed management and sustainable biological resource conditions. Our Staff will continue to coordinate the WHPP/HMP, Site Restoration Program, Adopt-a-Trail Program, SBNFA OHV Volunteer monitoring program and the internal OHV taskforce described in WHPP section above.
- To ensure all WHPP/HMP and restoration sites are monitored four times a year as required, continue to implement the monitoring dates established in 2007.
- Continue the Travel Management monitoring as scheduled.
- Look for opportunities to fund and train additional patrol staff.
- Continue to support volunteer programs.

### **Heritage Program Monitoring (Forest Goal 3.1)**

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#### **Monitoring**

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

Each time Section 106 monitoring is completed, the District Archaeologist completes a standardized form. The forms are not added to the project file; they are filed on the District by year. Annually, District Archaeologists provide information from the forms to the Forest Archaeologist for completion of the Regional Programmatic Agreement Report (RPA). This report identifies all projects completed under the Programmatic Agreement, activities that occurred and projects that were monitored.

Section 110 of the NHPA requires monitoring and evaluation of the condition of existing historic properties that are not affected by planned management activities. It is a proactive program for the purpose of identifying and evaluating historic resources for their potential inclusion into the National Register. Monitoring is completed to report historic property condition or to report if sites have been vandalized. The SBNF is required to conduct assessments and condition surveys on 20% of the Forest's Priority Heritage Assets each year.

### **Results**

In fiscal year 2009, under Section 106, the SBNF implemented methods to avoid, as well as monitor during and after implementation to avoid impacts to heritage resources during all fuel reduction projects and associated activities. A total of 44 projects required monitors to protect sites during fiscal year 2009. In fiscal year 2009, the SBNF requirement for Section 110 monitoring and reporting included 64 properties, through the implementation of a volunteer site stewardship program and through condition surveys.

### **Conclusions**

During fiscal year 2009, Section 106 monitoring was completed as required for 44 projects, and 64 Priority Heritage Asset sites were monitored under Section 110.

### **Recommendations**

- Ensure the Archaeological Clearance Memo and Tribal Consultation documentation is included in the project file prior to implementation and that it is implemented as described.

## **Water Quality Monitoring (Forest Goals 5.1 and 5.2)**

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### **Best Management Practices Evaluation Program (BMPEP)**

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

### **Results**

The SBNF contributed to the restoration of deteriorated watershed lands by completing road and trail maintenance and fuel reduction projects. Implementation of the BMPs was accomplished by conducting BMP training and including BMPs in every NEPA project that had hydrologic input. BMP monitoring was accomplished by identifying needs in the NEPA process; implementation monitoring was completed by contracting officer representatives or other Forest Service personnel on the project site as the work was being completed.

Effectiveness monitoring is completed through annual BMP monitoring of randomly selected, recently completed projects and concurrent monitoring in which sites are selected based on management interest in specific ongoing projects. Effectiveness monitoring is designed to evaluate how well the Forest and Region implement BMPs and how effectively the BMPs control water pollution from National Forest lands. The summary and results of calendar year 2009 monitoring are located in the San Bernardino National Forest 2009 Best Management Practices Region 5 Evaluation Program Water Quality Monitoring Report 2009. Methods for dealing with the identified problems have been established and are currently being implemented.

Forest hydrology staff members were also active LMP monitoring team-members and attended each of the project field reviews discussed in Section 4 of this report. BMP effectiveness monitoring completed for these projects will be included in the San Bernardino National Forest 2010 Best Management Practices Region 5 Evaluation Program Water Quality Monitoring Report 2010.

Currently the SBNF is party to three Clean Water Act Total Maximum Daily Load (TMDL) implementation plans: Big Bear Lake nutrient TMDL, Lake Elsinore/Canyon Lake nutrient TMDL, and the Middle Santa Ana pathogen TMDL. In fiscal year 2010, the Lake Elsinore/Canyon Lake TMDL implementation plan required water quality monitoring throughout the applicable watersheds. Requirements will persist in each of these areas for the foreseeable future.

### **Conclusions**

In the past four years, implementation of BMPs averaged 85% success on the Forest (FY06=78%, FY07=87%, FY08=91%, FY09=86%). Effectiveness protocols have averaged 84% success on the Forest (FY06=78%, FY07=97%, FY08=80%, FY09=80%).

High effectiveness ratings in fiscal year 2007 were attributed predominantly to lack of precipitation. Awareness of the importance of BMP implementation and effectiveness continues with increased training and interaction with District personnel, increased coordination with Forest Plan monitoring, and continued regulatory interactions with the Santa Ana and Lahontan Regional Water Quality Control Boards.

The 80% effectiveness rating for fiscal year 2008 was attributed predominantly to a legacy road problem where Deer Creek crosses Forest Service Road 1N09. The Forest Service has applied for Legacy Roads dollars for fiscal year 2010 to conduct the required NEPA for funding the appropriate structure in this location.

The 80% effectiveness rating for fiscal year 2009 is not attributable to the fuels reduction program, the reforestation program, or the minerals program (100% implementation and effectiveness). The roads monitoring showed 75% implementation and 55% effectiveness. The recreation monitoring showed 71% implementation and 57% effectiveness.

Continued interaction with all districts throughout the planning process for fuels treatments have improved communication and understanding of the importance of limiting sediment and erosion from fuels treatment sites. The addition of the Lahontan Timber Waivers has put BMP monitoring to the forefront of concerns on the Mountaintop Ranger District.

Forest leadership has been made aware that through the new Management Area Agreement between R5 of the Forest Service and the State Water Resources Control Board, being worked on during 2010, that monitoring of many more projects in TMDL watersheds may be required in the future.

Roads combined with much public recreation continue to be the areas with the most potential problems. Much of the Forest remains open during the winter and the Forest experiences a lot of public recreation including off-highway vehicle (OHV) use. Unauthorized trails are constantly identified and projects are moved forward to fix these problems. The Forest's Travel Management program and the Forest Service's Legacy Roads funding will both continue to be used to solve ongoing roads issues.

### **Recommendations**

- Continue training and interaction with district staff throughout planning process for fuels treatments, road and engineering projects, and recreation/OHV management.
- Continue combining BMP and LMP monitoring field trips, as applicable to both protocols.
- Continue to promote concurrent monitoring with regional water quality control boards.

### **Roads Monitoring (Forest Goal 3.1)**

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#### **Monitoring**

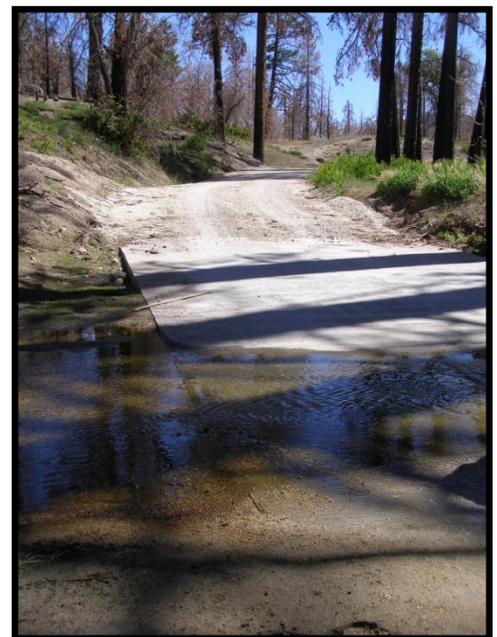
During May, June, and July of 2010, the monitoring team evaluated 10 NFS roads as part of BMP monitoring (see Appendix A for list of roads). Results and recommendations will be included in the 2010 BMPEP Report identified in Water Quality section above.

### **Air Quality Monitoring (Forest Goal 3.2)**

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Under the Regional air quality monitoring program, a sampling station at the Converse Fire Station monitors the air quality near the San Gorgonio Wilderness Class 1 air shed. This station is part of the IMPROVE national monitoring network. More information may be found at the IMPROVE web site at the following URL's:  
Raw data: <http://vista.cira.colostate.edu/improve/Data/data.htm>  
Reports:

[http://vista.cira.colostate.edu/improve/Publications/improve\\_reports.htm](http://vista.cira.colostate.edu/improve/Publications/improve_reports.htm)



## **Biological Resource Condition (Forest Goal 6.2)**

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The Forest participated in a number of programs and activities to improve habitat for wildlife and plant species. These activities are described in the 2009 Accomplishments for the SBNF found in the [Wildlife, Fish, and Rare Plants Management System](#) (WFRP Report).

### **Threatened and Endangered Species Monitoring – Biological Opinion Adjustments to LMP Environmental Baseline**

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#### **Monitoring**

The Forest Biologist provided an updated summary of species monitoring and monitoring of corrective actions and design criteria required by current biological opinions.

#### **Results**

All monitoring that is currently required has been completed and a status report is in preparation to be sent to the U.S. Fish and Wildlife Service (FWS) annually. The [Threatened and Endangered Species Monitoring Spreadsheet](#) describes the actions and accomplishments completed through 2009. Fiscal year 2010 monitoring is underway and the results will be incorporated into the FY 2010 LMP Monitoring and Evaluation Report. Monitoring requirements are being updated through new site-specific biological opinions. These are being updated on a priority basis.

#### **Conclusions**

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

#### **Recommendations**

- Continue required monitoring and maintenance of protection structures (barriers and signing, etc.)
- Continue resource patrols.
- As operational plans are developed for recreational sites and areas, ensure institutional memory of problem resolution by making sure to document protection measures used in the past (whether on an annual, periodic, or one-time basis). These may be documented in the INFRA database for each site.



## **Management Indicator Species (Forest Goal 6.2)**

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In accordance with the San Bernardino LMP, Goal 6.2, Biological Resource Condition, twelve management indicator species (MIS) on the four southern California national forests were selected to monitor certain habitat types and issues, as described in Part 1, page 44-45. Nine of these species are present on the SBNF and will be monitored along with other indicators of progress toward achieving desired conditions for biological resources. The [SBNF MIS Report](#) was prepared by compiling the individual MIS accounts that were updated last year to describe the current environmental baseline conditions. The individual MIS accounts will be updated each year based on monitoring and new information on habitats and populations.

## **Balancing Needs for New infrastructure with Land Ownership Adjustment (Forest Goal 7.1)**

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Accommodating urban infrastructure to support growing populations is one of the management challenges the Forest faces. There are increasing demands from private, semi-private and public industry, corporations, organizations, associations and private individuals for requests for various uses on National Forest System (NFS) lands including infrastructure for community support. In addition, the combination of increased development and the need to protect these developed areas from fire and other natural events puts increasing pressure on managers to alter landscape character to accommodate these uses. One strategy to reduce future effects is to be proactive in local planning efforts. In 2006, the Forest was an active participant in meetings for the San Bernardino County update of their General Plan, Development Code and nine of their Community Plans. The Forest also provided response letters to other proposed actions that could affect forest management.

The Forest's Land Ownership and Adjustment Program continues to aid other programs to meet LMP goals. The number of conservation organizations partnering with the Forest to acquire valuable habitat now includes three Conservancies, three Land Trusts and one Conservation Fund. Approval of several transportation projects generated significant mitigation funds. When combined with land donation opportunities, the Forest acquired 320 acres in the Santa Ana River headwaters and is at various stages of increasing acreages in meadow habitat, southern rubber boa habitat, spotted owl habitat and a critical wildlife linkage. Small, but important, land donations will facilitate access and better management of previously acquired and restored landscapes. Land adjustments mapped annually will be utilized in the fifth year trend monitoring to answer the question "Is the forest balancing the need for new infrastructure with restoration opportunities or land ownership adjustment to meet the desired conditions?"

## **Acres of High Hazard and High Risk in WUI Defense Zone (Forest Goals 1.1, 1.2.1, 1.2.2, and 1.2.3)**

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The Forest Service Activity Tracking System (FACTS) and the NFPORS databases of record for fuels accomplishment were used to record the accomplishments in FY 2009.

In 2009, a total of 16,490 acres of hazardous fuel treatment within the forest, county, private as found in the Wildland Urban Interface (WUI) were reported as accomplished.

The breakdown of acres accomplished from the forest and cooperators is as follows: San Bernardino National Forest 3,970 acres, with an additional target of 2,270 for carryover funding capability; San Bernardino County Fire target of 8,450 acres, Riverside County target of 1,100 acres and finally Forest Care target of 700 acres making a grand total of 16,490 acres.

## IV. PART 3 LMP MONITORING - PROJECTS AND ON-GOING ACTIVITIES

In accordance with the methodology described in the monitoring guide, approximately ten percent of new projects or on-going activity sites for each type of activity were randomly selected for review. These projects and activities are listed in Table 3 in Appendix A of this report. This section describes the projects or activities and findings of the monitoring efforts.

### **BNSF – Dace Relocation (09-LMP-Resource Management-1)**

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#### **Monitoring**

The monitoring team and District staff visited Santa Ana speckled dace relocation sites in the Cajon Place on the Front Country District on May 27, 2010.

Speckled dace are a small native fish whose distribution across the Forest has become extremely limited. This project was developed as mitigation for construction of Burlington Northern Santa Fe's (BNSF) third railroad track expansion project. BNSF provided mitigation funds for the Forest Service to collaborate with the California Department of Fish and Game (CDFG) to relocate fish within Cajon Creek. Mitigation funding from BNSF was limited to a 5 year time period. 2009 marked the third year of project implementation.



Construction of BNSF's third track required completion of an Environmental Impact Statement (EIS). Specialist reports were prepared in support of the EIS. In addition to the dace relocation project, other mitigations were required as part of the third track project including reduction of existing retaining walls, installation of OHV barriers, culvert improvement for wildlife movement, and 90 acres of habitat restoration. Although no operational plan was developed for dace relocation, a general plan was completed but was not available during our field review.

The Forest Service and CDFG have a Memorandum of Understanding in place. CDFG has the authority to capture and relocate fish in California waterways. CDFG staff were present during all electroshocking activities and subsequent movement of fish. Relocation of speckled dace within Cajon Creek accomplishes two primary goals. Natural movement of fish within Cajon Creek is extremely limited due to man-made barriers. Relocation of dace within the creek promotes genetic diversity that cannot be achieved naturally. Secondly, Cajon Creek is vulnerable to accidental contamination from hazardous materials due to the proximity of many utilities that travel through the Cajon Pass such as Interstate 15, gas pipelines, and railroads. Manual movement of the dace reduces concentrations of individuals, thus providing potential for some fish populations to remain unaffected if accidental contamination of the creek were to occur.

#### **Conclusions**

Among others, the desired condition for the Cajon Place is to improve habitat conditions for threatened, endangered, and sensitive species over time. The project is consistent with the Forest Goals 5.2 and 6.2

to improve riparian conditions and sustain viable populations of native species. CDFG standard operating procedures for the project are followed. The presence of man-made barriers will continue to prevent natural movement of Santa Ana speckled dace in Cajon Creek. Natural storm events can flush fish downstream and barriers prevent upstream movement. While the project is currently effective, desired distribution of speckled dace within Cajon Creek will only persist if project activities can continue.

### **Recommendations**

- Work with collaborators. Continue development of the Santa Ana speckled dace conservation strategy.
- Consider relocation in Perdew Canyon, a tributary to Cajon Creek, which is not as susceptible to potential contamination.
- Explore potential funding sources to continue with relocation activities after the mitigation funds have expired (total of 5 years) to sustain viability of Santa Ana speckled dace.

## **Miller Canyon East Fuels Reduction Implementation (09-LMP- Resource Management-2)**

### **Monitoring**

The monitoring team, District staff, and Forest Leadership Team visited the Miller Canyon East project on the Mountaintop District on July 7, 2010. The Miller Canyon Fuels Reduction Project extends through Silverwood and Arrowhead Places.



The Decision Notice for the Miller Canyon Fuels Reduction project was signed in 2007 and implementation of the project is ongoing. The team inspected a helicopter landing and staging area, a thinned plantation, and drove through roadside treatments.

The Miller Canyon project was the second project on the San Bernardino National Forest to be planned using the Healthy Forest Restoration Act (HFRA). An objection to the project was received and the project went through the objection resolution process. Agreements in the objection resolution included a nine inch diameter breast height (dbh) limit for tree removal and retention of large snags in California spotted owl habitat. In fiscal year 2009, Units 4, 5, 6, and 7 underwent implementation activities. Implementation progress has been restricted due to Limited Operating Periods (LOPs) for wildlife, Project Activity Levels (high fire danger), and inclement weather. As a result, project implementation has been extended by approximately one year.

Project layout was built into the contract and performed by the contractor. Development of the contract included easy to understand maps with clear mitigations built directly into the maps. An error in the contract specifications, however, caused a site to be treated with ground-based equipment when a helicopter was the treatment analyzed. The contract was modified during implementation to correct this oversight.

Design criteria for this project included flag and avoidance of heritage resources, closure of skid trails during periods of inactivity to prevent creation of unauthorized routes, retention of ground cover, mitigations that were included in the timber waiver issued by the Lahontan Water Board, BMPs, retention of slash piles for wildlife, and Limited Operating Periods (LOPs) for California spotted owl, arroyo toad, and southwestern willow flycatcher.

### **Conclusions**

The project is consistent with the LMP long term Goals 1.1, 1.2 and 1.2.1 to limit loss of life and property, restore forest health where alteration of natural fire regimes have put human and natural resources values at risk, and to reduce the potential for widespread losses of montane conifer forests caused by severe, extensive, stand replacing fires. Community protection from wildland fire is of the highest priority in both the Silverwood and Arrowhead Places. Overall, the project design criteria have been very effective. Specialists worked closely with, in addition to functioning as, contract inspectors to ensure that mitigations were being met. Cooperation with resources, as a result, has been very effective during project implementation. Flag and avoid measures were successful. Chipping has been very effective in prevention of non-native weed establishment.

### **Recommendations**

- Continue post-treatment monitoring of California spotted owl use in and adjacent to treated areas to increase our knowledge of impacts to this species.
- Utilize knowledgeable Forest Service staff to complete project layout. Do not incorporate project layout as part of the contract.
- Continue to improve Design Criteria for wildlife and botanical resources to increase clarity of interpretation during implementation.
- Continue to explore options for disposal of non-merchantable products, such as the market for construction of pallets and soil amendments.
- Encourage close coordination with resource specialists during implementation and over the life of the project, not just during planning phases.
- Consider implementing a burning operation in thinned plantations to reduce chip density.
- To more effectively manage the dispersal and depth of chip residue, it may be beneficial to require in the contract that the contractor remove a pre-determined quantitative amount of materials from the site, where appropriate.
- Standardize with clear implementation tactics what the intent of spreading chips no more than 2" deep over 70% of the area looks like.
- Consider requiring contractor to develop a quality control plan subject to the approval of the Forest Service to clearly focus responsibilities.

## **Idyllwild West Fuels Reduction – Unit 17 (09-LMP- Resource Management-3)**

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### **Monitoring**

On July 1, 2009, the monitoring team and District staff visited the Idyllwild West project on the San Jacinto District to observe the results of ground based operations in Unit 17 (155 acres). The Idyllwild West project is located in the Idyllwild Place.

The visit focused on a large landing area which was rehabilitated in October 2009. A Decision Memo was signed in 2003 using categorical exclusions 1905.15 section 31.2 categories 6 and 10. Unit 17, which is incidentally part of the Fisherman's fuelbreak system, and is strategically placed to limit fire spread into the town of Idyllwild. The unit contained 3 formal landing areas which were used repeatedly by various contractors who implemented different phases of the project. The desired condition was to reduce fuel loading and vertical fuel structure. Materials removed from the unit were used as soil amendment although some merchantable materials were removed during the initial entry.

In June, 2009, a subcontractor working in Unit 17 impacted heritage resources and botanical resources within the project area that had been clearly flagged for avoidance. The damage was discovered quickly by Forest Service staff and as a result, the subcontractor was removed from the project.

Design criteria for this project included flag and avoidance of botanical and heritage resources, BMPs, retention of downed logs and snags, reduction in visibility of burn piles, waterbar installation, and rehabilitation of skid trails and landings. Due to the density of the vegetation on site before treatment, heritage and botanical resources surveys were conducted concurrently to ensure that resources were protected

### **Conclusions**

The project has achieved its objectives in this unit for improving firefighter access and reducing a fire's resistance to control. The project is consistent with the LMP long term Goals 1.1, 1.2 and 1.2.1 to limit loss of life and property, restore forest health where alteration of natural fire regimes have put human and natural resources values at risk, and to reduce the potential for widespread losses of montane conifer forests caused by severe, extensive, stand replacing fires. With the exception of the contractor failing to adhere to several flag and avoid guidelines, the design criteria were effective.

### **Recommendations**

- Provide monitors when implementation occurs near or within sites of concern.
- Manage use of subcontractors better. Take action under terms of the contract for subcontractors who perform poorly, if appropriate.
- When possible, utilize a local Contracting Officer's Representative (COR) to improve efficiency.
- Conduct LMP consistency checks for older projects with current implementation.

## **HWY 243 Evacuation Route – Unit 2P-4-1 (09-LMP- Resource Management-4)**

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### **Monitoring**

The monitoring team and District staff visited the Highway 243 Evacuation Route Unit 2P-4-1 on July 1, 2010. The project is located in the Idyllwild Place on the San Jacinto District.

The Decision Memo for the Highway 243 Evacuation Route Project was signed in 2005. The desired condition of the overall project was to increase the viability of Highway 243 as an escape route in accordance with Mountain Area Safety Taskforce (MAST) priorities. In particular, the objectives of Unit 2P-4-1 were initially to increase the health of the plantations that were planted in the 1970s. The initial objective for the stands complemented the MAST evacuation route priorities. Given the dual project objectives, there was some confusion regarding referenced specialist reports that were not labeled in the same manner as the overall project (Hwy 243 Evacuation Route). Project activities in fiscal year 2009 included mastication, green tree thinning, hand cut and pile, and chipping to increase crown spacing within the plantation and reduce competition with oak understory.



Design criteria for this project included weed control measures, BMPs, limitations on implementation in Riparian Conservation Areas (RCAs), retention of woodrat middens, protection of a historical logging road, downed log retention, and avoidance of rocky outcrops. Highway 243 is a scenic byway, which resulted in conceptual challenges to meet scenic objectives. For example, the project design included removal of brush along scenic points of interest to open vistas. Slopes greater than 45% were not treated with equipment.

### **Conclusions**

In the Idyllwild Place, program emphasis includes community protection emphasized through public education, fire prevention, and fuels management. The scenic focus will be on maintaining views of jagged rocks and towering pines, especially from the scenic byway. The project is consistent with the LMP long term Goals 1.1, 1.2 and 1.2.1 to limit loss of life and property, restore forest health where alteration of natural fire regimes have put human and natural resources values at risk, and to reduce the potential for widespread losses of montane conifer forests caused by severe, extensive, stand replacing fires. Already, improved cone and needle development have been observed within the unit. Project design criteria were effective in protecting sensitive resources. Retention of chipped material to limit non-native weed growth was effective in this unit.

### **Recommendations**

- Conduct LMP consistency checks for older projects with current implementation.
- Standardize naming convention of all project documents (such as NEPA decision documents and specialist reports) to ensure project file consistency.

- Include the ability to conduct future maintenance treatments and planting within the project area in the NEPA analysis and decision. Doing so may secure future funding from outside sources for activities such as tree planting and release activities, which incidentally benefits fuels objectives.

## **TES Habitat Monitoring and Maintenance (09-LMP- Resource Management-5)**

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### **Monitoring**

The monitoring team and District staff visited several threatened and endangered species habitats on the Mountaintop District protected by this project on June 25, 2010. Project activities are occurring in the Arrowhead, Big Bear, Big Bear Back Country, Desert Rim and Silverwood Places.



This project was developed to meet conditions in the 2001 Southern California Conservation Strategy (SCCS). SCCS was a settlement agreement resulting from a 1998 lawsuit where the court found that the Forest Service failed to consult with US Fish and Wildlife Service over the 1988 Land and Resource Management Plan. This project continues to protect threatened and endangered species under the 2006 revised Land Management Plan. Patrols enforce the design criteria written into the SCCS Biological Assessment and resulting Biological Opinions for management of riparian areas, carbonate, meadow, and pebble plain habitats.

To meet settlement agreement action items, two employees were hired to install, maintain, and monitor protection measures for threatened and endangered wildlife and botanical resources. Primary protection measures consist of fencing, placement of boulders, public education, and interpretive signage. In addition

to these duties, patrols also look for campfires, identify hazard trees, ensure adventure pass compliance, and remove trash. The patrols coordinate with other patrols and law enforcement officers as needed.

In fiscal year 2009, 317 acres of threatened and endangered species habitat was improved. Examples of activities include fence repair, fence removal, unauthorized road disguising (slashing), trash clean up, and installation of signs.

### **Conclusions**

The project is consistent with the LMP long term Goals 5.2 and 6.2 improve riparian conditions and provide ecological conditions to sustain viable populations of native species; and Forest Goal 3.1, providing for public use and natural resource protection.

This program has been one of the most effective methods for the protection of threatened and endangered wildlife and plant habitat over the last 9 years. Public contacts result in conservation education and an increased understanding of the natural resource values on the District. Patrols also

assist other recreation/fire/law enforcement staff by being out on the ground. A 100% increase in OHV use was predicted in the 2006 LMP revision; we are noticing that increase on the SBNF and need to utilize all methods possible to manage this use.

### **Recommendations**

- Collaborate with other forest programs to reach desired conditions and accomplish forest goals.
- To best utilize this patrol program, increased coordination between all patrols (recreation, fire, OHV, and volunteer patrols) is needed.
- Take advantage of opportunities to increase efficiency of monitoring activities.

### **Mountaintop Ecosystems Education (09-LMP- Public Use & Enjoyment-1)**

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#### **Monitoring**

Ecosystems Education takes place in several Places on the Mountaintop District. The monitoring team, District staff, and Forest Leadership Team met to discuss the project on July 7, 2010.

Like the project above, this project meets conditions in the 2001 Southern California Conservation Strategy (SCCS). This project implements the design criteria written into the SCCS Biological Assessment and resulting Biological Opinions and several other Biological Opinions for the protection of federally listed plant and wildlife habitats.

The Mountaintop District programmed about \$3,800 in fiscal year 2009 for various environmental education efforts. This funding combined with other funds and staff volunteered time, the District resources staff gave approximately 42 presentations, reaching a total of about 2,455 people. In addition, they worked closely with the San Bernardino National Forest Association (SBNFA) naturalist and CDFG to completely revise two brochures – one for the North Baldwin Ecological Reserve’s pebble plain trail and one for the Woodland trail. This included Forest staff time for creation of artwork for the brochures. District resource staff also trained volunteers working at the Discovery Center and those assisting in volunteer projects. Funding is also used to assist in the maintenance of captive animals that are used for these interpretive presentations.

One important aspect of this program is the utilization of Discovery Center and Children’s Forest staff and volunteers to convey the Forest Service messages to the public. By spending time developing and conducting trainings for the volunteer naturalists and other Forest volunteers, the District is able to maximize the amount and quality of those messages heard by the public.

#### **Conclusion**

The project is consistent with Forest Goal 3.1, providing for public use and natural resource protection, which also emphasizes the importance of conservation education.

## Recommendations

- Utilize multiple funds to continue these presentations and efforts. Look for other ways to gain additional funding.
- Continue to work in partnership with SBNFA because they are a key partner in environmental conservation on the Forest. Develop other partnerships to assist in program development and delivery.
- As funding and time permit, review and revamp interpretive materials used on the Districts, develop new programs/materials, and pull together a cohesive environmental education plan in order to better position the Forest to seek grants and other funding to improve the overall environmental conservation program.
- Coordinate with the local high school to encourage education of local botanical resources like pebble plains endemic plants.

## Big Pine Flat Campground (09-LMP- Public Use & Enjoyment-2)

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### Monitoring

The Big Pine Flat Campground is a developed campground situated next to a Forest Service fire station within the Big Bear Back Country Place on the Mountaintop District. It was selected for monitoring as an ongoing project, and the monitoring team and District staff visited the site on June 25, 2010.

The Big Pine Flat Campground was constructed in the 1940s and is operated by a concessionaire. This is a very cost-effective way of providing visitor services and maintaining the cleanliness and safety of the site. The campground is available on a first come first served basis and is not available on the reservation system. The campground consists of 16 campsites, water, a generator, and vault toilets. The water for the campground comes from a ground water well that is in close proximity to Willow Creek. There is an adjacent equestrian camping area, although it currently receives little equestrian use. During the summer months, the campground is about 90% full, including spill over of non-equestrian campers who camp in the equestrian portion of the campground. The Big Pine Flat Campground receives high use by OHV users due to adjacent roads that are open to OHV opportunities.



During campground maintenance activities, resource monitors are on site as necessary. In between the main campground and the equestrian camping area is a meadow. There are a number of campsites that extend into or are immediately adjacent to the meadow. Signs are posted on the entrance bulletin board that OHVs are not to be ridden within the limits of the campground. Forest Service staff conduct pre-operational inspections as well as monthly inspections of the campground.

### Conclusions

Program emphasis for the Big Bear Back Country place includes balancing recreation use with protection of heritage resource properties within a natural appearing landscape. In addition, management of OHV roads and trail systems, non-motorized trails, and conservation education are

priorities. The ongoing activity at the Big Pine Flats Campground is generally consistent with LMP Goal 3.1 to manage recreation in a natural setting by providing for public use and natural resource protection.

Forest Goal 5.1 focuses on improvement of watershed conditions. The desired condition (LMP Part 1 page 40) identifies National Forest watershed that are healthy, dynamic and resilient, and are capable of responding to natural and human caused disturbances while maintaining the integrity of their biological and physical processes. Watersheds, streams, groundwater recharge areas, springs, wetlands, and aquifers are managed to assure the sustainability of high quality water. Many of the campsites within the Big Pine Flats Campground are approximate to a Riparian Conservation Area (RCA). For meadows, the LMP (Part 2 Appendix E) directs the Forest Service to determine width of the RCA and protection measures through project level analysis. The strategic objectives and tactics for watershed function and management are listed in Part 2 (Appendix B) of the LMP.

The LMP, Standard S50 (LMP Part 3), directs the Forest Service to mitigate long-term impacts from recreation use to soil, watershed, riparian, or heritage resources. Further direction from the Soil and Water Conservation Practices Handbook (FSH 2509.22 Chapter 3.21) states that “Existing uses, activities, or occupancy within RCAs should be evaluated for risks or impacts and mitigated during special use renewal or re-issuance. If mitigation measures are not effective, reassess with the option to modify or eliminate the use, activity, or occupancy when impacts are unacceptable.”

At this time, it is not clear if the Big Pine Flats Campground is consistent with Forest Goal 5.1. Further evaluation of ongoing recreational impacts to the meadow located within the campground is needed. For further information, see the SBNF 2010 Best Management Practices Region 5 Evaluation Program Water Quality Monitoring Report 2010.

### **Recommendations**

- Work with concessionaire to limit impacts to the RCA by defining camp sites. If impacts are occurring, apply adaptive mitigation guidelines to minimize or eliminate the negative impacts to the meadow (see LMP Part 3 Appendix D).
- Ensure that OHV activities are not negatively affecting resources within and adjacent to the campground.
- Educate visitors to the campground about the importance protecting hydrologic resources such as the meadow. Post information regarding nearby legal RV dump locations and monitor for unauthorized dumping.
- Continue to utilize concessionaires to operate and manage this campground.
- Analyze well records to determine if the well is affecting willow creek. If impacts are occurring, apply adaptive mitigation guidelines to minimize or eliminate the negative impacts to the creek (see LMP Part 3 Appendix D).

## **Green Valley Lake Campground (09-LMP- Public Use & Enjoyment-3)**

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### **Monitoring**

Green Valley Lake Campground is located in the Arrowhead Place on the Mountaintop District and was constructed in the 1930s. It was selected for monitoring as an ongoing project and the monitoring team and District staff visited the site on June 25, 2010.

This campground is operated by a concessionaire, California Land Management. There are a total of 38 campsites and many of the sites are available on the reservation system but some are first-come first-served. Water for the campground is from a storage tank on the hillside above the campground, which is fed by a groundwater well. The campground is connected to the community sewer system for waste removal. The Green Valley Lake Campground receives only limited OHV use. Within the boundaries of the camp is a large meadow and several campsites are immediately adjacent to the meadow. In addition, a number of intermittent and perennial unnamed streams flow through and adjacent to the campground.

In 2007, the Slide Fire burned through the Green Valley Lake Campground. During the Burned Area Emergency Response (BAER) process following the fire, 12 campsites were identified as being vulnerable from debris flow. In fiscal years 2008 and 2009, erosion control measures were installed in strategic locations within and above the campground for public safety. Several of the campsites were taken off the reservation system to allow for site closure during predicted storm events. Road improvements such as paving and culvert installation were also completed. Design criteria for protection of resources were in place during rehabilitation and hazard tree removal activities.

Rare wildlife species that may occur within the campground consist of southwestern willow flycatcher, southern rubber boa, California spotted owl, and potentially mountain yellow-legged frog. Sensitive plants may be associated with the meadow. Forest Service staff conduct pre-operational inspections as well as monthly inspections of the campground.

### **Conclusions**

Part of the desired conditions in the Arrowhead Place is to promote, where appropriate and environmentally sustainable, a wide variety of recreation uses. The ongoing activities at the Green Valley Lake Campground are also generally consistent with LMP Goal 3.1 to manage recreation in a natural setting by providing for public use and natural resource protection.

Forest Goal 5.1 focuses on improvement of watershed conditions. The desired condition (LMP Part 1 page 40) is that National Forest watersheds are healthy, dynamic and resilient, and are capable of responding to natural and human caused disturbances while maintaining the integrity of their biological and physical processes. Watersheds, streams, groundwater recharge areas, springs, wetland, and aquifers are managed to assure the sustainability of high quality water. For meadows, the LMP (Part 2 Appendix E) directs the Forest Service to determine width of the RCA and protection measures through project level analysis. For a perennial stream, the LMP (Part 2 Appendix E) identifies the width of the RCA as 328' on each side of the stream. Most of the Green Valley Lake Campground is probably within a Riparian Conservation Area (RCA). The strategic objectives and tactics for watershed function and management are listed in Part 2 (Appendix B) of the LMP.

The LMP, Standard S50 (Part 3), directs the Forest Service to mitigate long-term impacts from recreation use to soil, watershed, riparian, or heritage resources. Further direction from the Soil and Water Conservation Practices Handbook (FSH 2509.22 Chapter 3.21) states that “Existing uses, activities, or occupancy within RCAs should be evaluated for risks or impacts and mitigated during special use renewal or re-issuance. If mitigation measures are not effective, reassess with the option to modify or eliminate the use, activity, or occupancy when impacts are unacceptable.”

At this time, it is not clear if the Green Valley Lake Campground is fully consistent with Forest Goal 5.1. Further evaluation of ongoing recreational impacts to RCAs is needed. For further information, see the SBNF 2010 Best Management Practices Region 5 Evaluation Program Water Quality Monitoring Report 2010.

### **Recommendations**

- Continue to utilize concessionaires to operate and manage this campground.
- Evaluate if adverse effects to RCAs are occurring as a result of recreational activities in the campground. If negative effects are occurring, apply adaptive mitigation guidelines to minimize or eliminate the negative effects to the RCAs (see LMP Part 3 Appendix D).
- Site #35 is accessed by crossing a small flowing creek. Consider delineating a clear access path or constructing a pedestrian bridge across the creek to provide for public safety.
- Evaluate if effects to sensitive resources are occurring as a result of recreation in the Green Valley Lake Campground. Consider adaptive management strategies to reduce or eliminate adverse effects.

### **Grayback Amphitheater (09-LMP- Public Use & Enjoyment-4)**

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#### **Monitoring**

Grayback Amphitheater was selected for monitoring as an ongoing project and the monitoring team and District staff visited the site on June 28, 2010. It is located in the San Gorgonio Place on the Mountaintop District.

The amphitheater is operated by a concessionaire, Alpine Camping Services. The current concession permit, which includes the amphitheatre and several developed campgrounds in the Barton Flats area, will expire at the end of 2011. There is potable water, a portable toilet, and a generator on site. The concessionaire is responsible for trash removal and maintenance of the portable toilet. The site accommodates seating for 200 people and parking for 40 vehicles. The site is not ADA-compliant. The age of the amphitheater is unknown, but is estimated to be at least 30-40 years old. Thus, no NEPA documents were available. Although there are plant and wildlife resources nearby, there are no specific design criteria for ongoing activities at the amphitheater.

The San Gorgonio Wilderness Association (SGWA) provides free interpretive programs on most Saturdays and some Sunday evenings during the summer. Approximately 100 participants attend each program. Adventure Pass requirements are waived for vehicles parked at the amphitheater for these

interpretive programs. The site is also used for visitor events, such as weddings and memorials, on a first-come-first-served basis. Approximately two to three events occur each month during the summer.

### **Conclusions**

The ongoing activity at Grayback Amphitheater is consistent with LMP Goal 3.1 to manage recreation in a natural setting by providing for public use and natural resource protection. Adverse impacts to sensitive resources are not known to be occurring.

### **Recommendations**

- Consider planning to upgrade the site for ADA-compliance to encourage more Forest visitors to take advantage of the interpretive programs.

## **Humber Park Trailhead (09-LMP- Public Use & Enjoyment-5)**

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### **Monitoring**

Humber Park Trailhead was selected for monitoring as an ongoing project and the monitoring team and District staff visited the site on May 27, 2010. It is located in the Idyllwild Place on the San Jacinto District.

Humber Park provides access to two trails: Devil's Slide and Ernie Maxwell. In the winter months it is a popular snow play site. The site was updated to improve parking, among other things, about 12 years ago. Humber Park currently provides parking space for about 80 vehicles and is managed under the Forest Recreation Fee program. The site offers vehicle parking, picnic areas, vault toilets, and trash receptacles.



The Devil's Slide Trail is the most popular wilderness access trail on the San Jacinto District. Use level restrictions are enforced for access into the wilderness from Memorial Day to Labor Day. Wilderness use is limited to 25 permits per day; 12 people per permit. The current design of the facility allows for more parking than the permit system authorizes in the wilderness. There are several designated campsites in the wilderness. The Forest Service Volunteer Association (FSVA) focusing on monitoring the wilderness and enforcing regulations check hikers for wilderness permits

and provide interpretive education. In fiscal year 2009, the FSVA contributed 12,000 hours of volunteer time. No permit is required for hikers on the Ernie Maxwell Trail as it does not provide wilderness access. BMP design criteria are implemented for protection of natural resources at the trailhead.

Adjacent to the trailhead are Fern Valley Water District facilities. Due to security concerns regarding water quality, the water district has fenced the boundary to preclude public access.

### **Conclusions**

A desired condition of the Idyllwild Place is to maintain it as a natural appearing landscape that functions as a recreation setting and wilderness gateway. The ongoing activity at Humber Park Trailhead is consistent with LMP Goal 3.1 to manage recreation in a natural setting by providing for public use and natural resource protection. Although the relatively generous developed features provided at the Humber Park Trailhead is contrary to the desired use of the wilderness (i.e. limiting use and maintaining wilderness characteristics), use of the permit system and frequent monitoring by Forest Service staff and volunteers effectively minimize overuse of the wilderness. Ongoing activities at Humber Park Trailhead are therefore consistent with LMP Goal 3.2 to retain a natural evolving character within wilderness.

### **Recommendations**

- Explore options to install retaining walls at the upper level in the parking lot to prevent sloughing of debris onto the pavement.
- Use downed logs or other barriers to clearly identify the entrance to the Devil’s Slide Trail. Alternately, relocate the trail entrance to a more central location by the parking lot and restrooms.
- Consider repainting parking lines to clearly define the parking spaces and thus maximizing use of available parking space.
- Continue to utilize permit system and monitor its effectiveness to maintain compliance with LMP Goal 3.2.

## **Snow Creek Recreation Residence Tract (09-LMP- Public Use & Enjoyment-6)**

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### **Monitoring**

The monitoring team and District staff visited the Snow Creek Recreation Residence Tract on July 1, 2010. The tract is located in the Santa Rosa and San Jacinto Monument Place on the San Jacinto District.

The Snow Creek Recreation Residence Tract consists of one recreation residence near the community of Snow Creek. The residence, Lot #2, is managed under a special use permit. The permit holders are in residence primarily during the cooler fall months. Water is provided directly by the water district, which operates a small facility above the tract.



A consistency review and continuance determination for the tract was conducted and a decision was made to reissue a 20 year permits for Lot #2 in January 2009. It is unknown if the structure is historically significant. A date stamp on the concrete porch reads 1934. A Botany and Wildlife Biological Assessment/Evaluation was completed in 2008. Design criteria were minimal but included prevention of non-native weeds. The permit requires informational materials be provided to the permit holder regarding conservation of natural resources.

Forest Service standard practice is to inspect all cabins in recreation residence lots annually. A review of the permit file indicates that documentation of annual inspections was not available for some years. The permit administrator completed an inspection the same day of the monitoring teams' visit and the structure is in good shape. A second story was conditionally accepted in the newly issued permit. A culvert in the driveway is substantially exposed. A functioning sprinkler system is in place around the residence, but it is unclear if the system is intended for landscape irrigation or fire prevention/suppression purposes. There is a need to upgrade the septic system. A memo in the project file indicates that the permit holders are interested in modification/improvement of the septic system. Overall, the permittee is in compliance with the terms of their permit.

### **Conclusions**

The permitted Snow Creek recreation residences are consistent with LMP Goal 3.1 to manage recreation in a natural setting by providing for public use and natural resource protection. Management of the tract is in compliance with the strategy for recreation special use authorizations (LMP Part 2 REC 5).

### **Recommendations**

- The culvert running underneath the driveway is exposed and not meeting Health and Safety Code standards. Notify the permittee that repair is needed.
- Contact the permittee regarding the use of the sprinkler system and solicit information on the planned upgrade of the septic system.
- Strive to complete inspections on an annual basis.
- Provide the permit holder with educational materials for natural resource conservation as required in the permit.
- Recommend that the permit holder inspect and possibly upgrade electric system. Spark arrestors on chimneys should also be brought up to code.

## **Pinnacles OHV Trailhead (09-LMP- Public Use & Enjoyment-7)**

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### **Monitoring**

The Pinnacles OHV Trailhead is an ongoing activity in the Arrowhead Place on the Mountaintop district. The monitoring team, District staff, and Forest Leadership Team visited the site on July 7, 2010. Use of the Pinnacles Trailhead requires an Adventure Pass and valid Green Sticker issued by the state.

The Pinnacles OHV Trailhead was built as a central staging area for OHV users in the 1990s. It replaced the unauthorized dispersed staging activities at Rock Camp and along the urban interface.

There are several benefits to maintaining a centralized staging location. It allows law enforcement and forest protection officers to enforce laws and regulations at a compressed hub where OHV users gather. Also because of the focused use, volunteers are able to provide interpretive education to visitors at a centralized location. The construction of the Pinnacles staging area has been effective in reducing dispersed OHV staging sites on the District. The unauthorized areas have since been rehabilitated.

From the Pinnacles staging area, there are several accessible OHV trails. Most of the trails are 50” wide and have multiple destinations. Along with assistance of Forest staff, the SBNFA OHV volunteers conduct trail maintenance activities. The group strives to conduct maintenance on each trail once per year. Volunteers also patrol the trails and educate the public on OHV use on the National Forest. The volunteers have received positive feedback from the visitors of the area. The Adopt-a-Trail program also provides for trail maintenance through monetary donations. Additional information on these volunteer programs can be found earlier in this document in Part III “OHV Program Monitoring”.

Design criteria that are in place include BMPs, LOPs for arroyo toad and southwestern willow flycatcher, physical barriers to clearly delineate the staging area and prevent damage to resources outside of the staging area, a soil monitoring program, and restoration of unauthorized routes.

### **Conclusions**

The project is consistent with the LMP Goal 5.2 to provide for public use and natural resources protection and Goal 5.1 to improve watershed conditions. It is also consistent with the Arrowhead Place program emphasis to improve the OHV route system and direct motorized use to system roads and trails.

### **Recommendations**

- Continue to utilize volunteer groups to meet OHV objectives.
- Change the Forest recreation maps to reflect that this location is a “staging area” not a trailhead.
- Improve signage to also include non-English speaking visitors.

## **UCLA Unicamp Organization (09-LMP- Public Use & Enjoyment-8)**

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### **Monitoring**

The monitoring team and District staff visited the UCLA Unicamp Organization in the San Geronio Place on June 28, 2010. Use of this organization camp is an ongoing activity on the Mountaintop District.

A ten year permit was issued for the 10.77 acre UCLA Unicamp site in 2000. The site was constructed in 1936 and was operated as a Girl Scout Camp until 1983. The camp is open during the summer and focuses on providing outdoor experiences for Priority 1 children (at or below poverty level), typically ages 10 to 14. The staff is comprised primarily of student volunteers. The summer 2010 season is expected to begin on July 1, 2010, and run for seven weeks. The 2009 summer season accommodated a season total of 1,126 campers. The permit requires the permit holder to operate for 100 days per year and limits occupancy to 250 persons. Typical camp activities are provided such as a ropes course, bike

and hike program, archery, and swimming. A five-year development plan was approved in 2003 that authorized 18 separate projects.

The camp is an open-air facility and thus is not suitable for occupancy in the winter. There are 13 open-air sleeping cabins, shower and toilet facilities, staff cabins, dining hall, and other outbuildings. Southern California Edison provides electricity to the site. The camp's septic system is self contained and sewage is stored in 5 separate holding tanks. Sewage is pumped and removed from the tanks twice per year. The Santa Ana River runs parallel to most of the camp. Water is provided from a surface-water influenced well. A small diversion pond has been created off of the Santa Ana River.

Design criteria that are currently in place include LOP for southwestern willow flycatcher and providing environmental education opportunities to campers and staff. Walking paths are clearly delineated and no evidence of sedimentation is apparent. Wood chips that are used as ground cover is improving soil stability. Design criteria have also been developed for implementation of the activities authorized in the five-year development plan.

### **Conclusions**

The ongoing activity at the UCLA Unicamp is generally consistent with LMP Goal 3.1 to manage recreation in a natural setting by providing for public use and natural resource protection. Management of the site is fulfilling the program emphasis for the San Geronio Place which calls for maintenance and improvement of recreation infrastructure. By providing facilities for large groups of campers, they can be accommodated and the natural environment protected from more dispersed activity.

Forest Goal 5.1 focuses on improvement of watershed conditions. The desired condition (LMP Part 1 page 40) is that National Forest watersheds are healthy, dynamic and resilient, and are capable of responding to natural and human caused disturbances while maintaining the integrity of their biological and physical processes. Watersheds, streams, groundwater recharge areas, springs, wetlands, and aquifers are managed to assure the sustainability of high quality water. For a perennial stream, the LMP (Part 2 Appendix E) identifies the width of the RCA as 328' on each side of the stream. Most of the UCLA Unicamp is probably within a Riparian Conservation Area (RCA). The strategic objectives and tactics for watershed function and management are listed in Part 2 (Appendix B) of the LMP.

The LMP, Standard S50 (Part 3), directs the Forest Service to mitigate long-term impacts from recreation use to soil, watershed, riparian, or heritage resources. Further direction from the Soil and Water Conservation Practices Handbook (FSH 2509.22 Chapter 3.21) states that "Existing uses, activities, or occupancy within RCAs should be evaluated for risks or impacts and mitigated during special use renewal or re-issuance. If mitigation measures are not effective, reassess with the option to modify or eliminate the use, activity, or occupancy when impacts are unacceptable".

At this time, it is not clear if the UCLA Unicamp is consistent with Forest Goal 5.1. Evaluation of ongoing recreational impacts to the RCA will continue. For further information, see the SBNF 2010 Best Management Practices Region 5 Evaluation Program Water Quality Monitoring Report 2010.

## Recommendations

- Continue to evaluate and monitor impacts to the RCA. If effects are occurring, apply adaptive mitigation guidelines to minimize or eliminate the negative effects to the RCA (see LMP Part 3 Appendix D).
- Evaluate use parameters of this site with permittee to determine if adjustments are needed in the SUP.
- Conduct annual inspections.
- Require permittee to conduct inspections of sewage holding tanks for possible leaks, develop spill plan, and ensure that the sewage system is up to county code. Consider installation of barriers around tanks in the event of an accidental spill or leakage.
- Update five-year development plan for a period of time longer than 5 years. Given the nature of the camp operations, funding is often sporadic and a longer time period would allow the permit holder more flexibility to make improvements.
- Monitor developed pond for invasive aquatic species.

## Recreation OHV Restoration (Route Designation) (09-LMP- Facilities Operations & Maintenance-1)

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### Monitoring

The Recreation OHV Restoration project occurs on the Mountaintop District in the Silverwood, Arrowhead, Big Bear, Big Bear Back Country, and Desert Rim Places. The monitoring team and District staff met and discussed the project on June 25, 2010. Several revegetation sites were observed while in route to monitor other projects.

The Mountaintop Ranger District received \$187,000 from California State Parks Recreation OHV Grant to revegetate 20 miles of decommissioned roads. We are in year 2.5 of the 3 year grant that will conclude in December 2010. The District used the OHV funds to leverage for \$680,000 of American Recovery Reinvestment Act (ARRA) unauthorized route decommissioning funds that were acquired in 2009. Legal requirements for the project were completed in 2009 via the Travel Management NEPA and a Decision Memo for wildlife habitat improvement.



In fiscal years 2008 and 2009, the OHV grant funding provided for plant propagation specialists and volunteers to collect 178 pounds of native seed and to propagate 2,360 containers of 27 species of

native plants and shrubs. The native plant materials are propagated and maintained in a greenhouse located at the Big Bear Ranger Station; volunteer activities are also run out of this facility. As the in-kind requirement of the grant the District organizes and supervises volunteers that will contribute 3,500 hours at a value of \$72,000. Volunteers and partners that participate in the project include the Greenthumbs, SBNFA Children's Forest, California State University San Bernardino interns, Americorp crews and other individuals.

In 2009, several unauthorized roads were seeded and slashed to prevent unauthorized use using the OHV funds. In the summer of 2010, sixty six miles of unauthorized routes were decommissioned and barricaded to implement the Travel Management decision using ARRA funds. In most locations barriers were installed using boulders donated from a nearby Caltrans project instead of installing fence. OHV funds are being used to seed and disguise the decommissioned roadbeds this summer. The containerized plants will be out-planted in the roadbeds after fall rains have begun. Monitors were present on site during road decommissioning to ensure resource protection, and will continue to be utilized as necessary over the life of the project.

### **Conclusions**

Due to the additional funding provided by American Recovery and Investment Act, the District exceeded project goals and objectives. This project provides a good example of how combining funds and program objectives to meet LMP goals for soil, water, wildlife habitat improvement, and unmanaged recreation can be accomplished. District Ranger commitment to planning and utilization of large supply of donated boulders resulted in cost savings, meeting scenery objectives, and reduced barrier maintenance over the long term.

The project is consistent with LMP Goal 5.2 to provide for public use and natural resource protection, Goal 5.1 to improve watershed conditions and Goal 6.2 to provide ecological conditions to sustain viable populations of species. The design criteria of having monitors present during project implementation was effective and will continue in protecting sensitive resources.

### **Recommendations**

- Continue monitoring the 250 restored sites and distribute "lessons learned" to recreation, watershed, resource and patrol staff across the Forest.
- Seek additional opportunities and funding sources for patrol staff to ensure restored areas remain intact and to direct use on to designated roads and trails.
- Ensure revegetation standards are met over time on the 66 miles of decommissioned roadbeds and analyze decommissioned roadbeds and trails for future reforestation sites as appropriate.

## **3N31Y Road Repair (09-LMP- Facilities Operations & Maintenance-2)**

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### **Monitoring**

The 3N31Y Road Repair project is located in the Lytle Creek Place on the Front Country District. The monitoring team and District staff visited the site on May 27, 2010.

In the winter of 2008/2009, storms washed out much of Forest Road 3N31Y. Poor road drainage contributed to the failure. A Decision Memo was completed for the project in 2008. Project implementation was completed in April 2009. Project activities consisted of installation of over-the-side drains, blading, hazard tree removal, construction of a retaining wall, brushing and thinning roadside vegetation, installation of sub-surface drainage, and placement of boulders.

Design criteria were available in the Biological Evaluation for wildlife. Equipment was washed before being brought onto the Forest, no fill materials were brought in from off-site, no nighttime lighting was authorized, and no off-road equipment travel. An archaeological monitor was on-site during construction in sensitive heritage locations.



### **Conclusions**

The project is consistent with LMP Goal 5.2 to provide for public use and natural resource protection and Goal 5.1 to improve watershed conditions. Operational controls were effective in reducing impacts to sensitive resources.

### **Recommendations**

- Minor riling was evident under the erosion control cloth. Site monitoring and maintenance should be completed as needed.
- The road is currently closed due to the Sheep Fire Burned Area Emergency Response closure. The road will require maintenance prior to reopening to public access.

## **Keenwild Helibase Office Construction (09-LMP- Facilities Operations & Maintenance-3)**

### **Monitoring**

The Keenwild Helibase office construction project is located in the Idyllwild Place on the San Jacinto District. The monitoring team and District staff visited the site on May 28, 2010.

This project involved the removal of the old Keenwild Helibase offices and construction of new office. The project was a Capital Improvement Project (CIP). Construction started in July 2009 and was nearly completed on the day of the monitoring team's site visit. All work was completed by contractors.

A Decision Memo was completed as part of the CIP proposal. There were no special status wildlife or



botanical concerns. Section 106 clearance was required for removal of the old structures. Erosion control measures included hydroseeding, installation of rip rap, replacement of asphalt, and use of fiber rolls. The District Botanist approved the hydroseed mix. Erosion control measures were to be installed by the contractor. The contractor had some difficulties meeting the intent of these measures. Fiber rolls were in place but hadn't been keyed in properly. It was determined at a later date that silt fencing was necessary, which was not part of the original contract.

### **Conclusions**

This project is consistent with Forest Goal 5.1 to improve watershed conditions through cooperative management and National Strategic Plan Goal 6 – mission related work in addition to that which support the agency goals. Overall, design criteria for the project were effective in meeting objectives for resources.

### **Recommendations**

- Continued monitoring of erosion control effectiveness is necessary. Work with building occupants to help facilitate ongoing monitoring.
- Ensure that applicable BMPs are being met. BMPs (specifically, erosion control) need to be clearly defined and written into contracts.
- An After Action Review (AAR) for the contractor is to be completed.
- Allow flexibility in contract to effectively manage erosion.

## **Lazer Broadcasting Corporation 816 (09-LMP- Commodity & Commercial Uses-1)**

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### **Monitoring**

The Lazer Broadcasting Corporation site is an ongoing activity in the Big Bear Place on the Mountaintop District. Lazer broadcasts a Hispanic speaking radio station from a tower located on National Forest land at the top of Bear Mountain ski resort. Due to accessibility issues, the monitoring team and District staff did not visit the site. However, a viewpoint of the site was identified from which the following observations were made. The monitoring review was conducted on June 28, 2010.

A 20 year special use permit was signed by the District Ranger for use of the site in 2005 (prior to completion of the 2005 LMP). It is unclear if NEPA was completed for the renewal. In 1995, a new antenna measuring 110' utilizing guy wires was added. The original special use application dated July 19, 1974, articulates the following improvements: an 8' x 8' x 8' aluminum electronics building, a 100' high tower with three sets of guying cables approximately 105' from the base of the tower, a perimeter fence, 15' x 17' x 8' around the building, tower, and fuel storage. The drawings submitted for an FCC license in December 1973 indicate that a 1000 gallon underground fuel tank would be used to supply fuel for a generator that would provide electrical power at the site. The site was originally run on a generator, but now has power provided by a local power company. It is unknown if the fuel tank was removed when electrical service were supplied to the site, at the time subsequent improvements were made to the facility, or when the lease was reissued in 2005. The project file contained a 2003 draft communications plan. The communication site is not lit at night.

Height of the structures and use of guy wires is a concern for birds and bats. Songbirds, for example, migrate at night and may crash into the indiscernible guy wires. Bear Mountain contains designated critical habitat for San Bernardino bladderpod, a federally listed plant. There are no known occurrences of the plant in the project area, although, negative findings are not documented in the permit folder.

### **Conclusions**

The Lazer Broadcasting Corporation site is consistent with National Strategic Plan Goal 6 – mission related work in addition to that which support the agency goals. There is no final Electronic Site Management Plan for the project. Electronic Site Management Plan are required by Regional direction. When the permit was renewed for 20 years, it was signed by the District Ranger. District Rangers have authority to approve permits up to 5 years duration and Forest Supervisors have authority up to 10 years. This permit should have been signed by the Regional Forester. Standard 42 (LMP Part 3 page 9) provides direction to provide for raptor safety at power line locations and communication sites. The communications site may not be compliance with the Guidelines for Protection and Conservation of Bird Species and Mountain Top Communications Sites (LMP Part 3, Appendix G).

### **Recommendations**

- Complete annual inspections on high-priority sites. Document positive or negative findings for locations with threatened and endangered species concerns such as this site.
- Coordinate with the District Wildlife Biologist to bring the site into compliance with these guidelines, as applicable. Modifications may include installing visual flight diverters and anti-perching materials.
- Ensure that the communication site conforms to Scenic Integrity Objectives.
- Ensure that future permit signatories have the proper authority.

## **SCE – Deteriorated Pole Replacement (09-LMP- Commodity & Commercial Uses-2)**

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### **Monitoring**

The Southern California Edison (SCE) Deteriorated Pole Replacement project included replacement of a number of distribution power poles across the Front Country District. This section focuses on replacement of two poles that were replaced at the Mill Creek Ranger Station Compound. The monitoring group and District staff visited these poles on 7/15/2010 within the Front Country Place.

A total of four power pole replacements were authorized by a Decision Memo signed in the spring of 2009. Two of these poles were located on the Mill Creek Ranger Station Compound. Over time, creosote poles break down and start to decompose. At that time, it is necessary to replace the pole with a new one. Implementation was estimated to last one day. Using equipment stationed on adjacent pavement, new poles were placed adjacent to the old poles. Lines are moved onto the new pole and the old pole is removed from the site. In this case, the old poles were completely removed, not cut flush to the ground like sometimes is the process. There were minimal design criteria because there were limited resource concerns on the compound.

SCE has permits on the SBNF for several special uses consisting of power lines and hydrologic energy-generating facilities. On an annual basis, SCE submits its upcoming plan of work to the Forest for

review. The request is routed through the Supervisor's Office via a central SCE liaison. The central contact allows for increased organization and improved tracking/reporting purposes.

### **Conclusions**

The SCE Deteriorated Pole Replacement project is consistent with Forest Goal 4.1a to manage energy developments to facilitate production of energy resources while minimizing adverse impacts to surface and groundwater resources and protecting or enhancing ecosystem health and scenic values.

### **Recommendations**

- Take full advantage of the response team that was established in the Forest Supervisor's Office to address cooperators fluid work needs especially regarding the replacement of deteriorated poles. Response team was set up to be more adaptive to SCE's requests, and to provide relief to the District staff that, due to increasing workloads or large scale projects affecting a District's annual program of work, would still provide for a timely response back to SCE and retain electrical distribution to the communities that rely on this service.

## **KNB Engineering Fiber Optic Cable (09-LMP- Commodity & Commercial Uses-3)**

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### **Monitoring**

The KNB Engineering Fiber Optic Cable/Time Warner Cable project is located in the Idyllwild Place on the San Jacinto District. Due to accessibility issues, the monitoring team and District staff did not visit the linear site. However, a viewpoint of the site was identified which was visited by the monitoring team and District staff on May 28, 2010.

This project involved the installation of a fiber optic cable along an existing Southern California Edison power line in order to provide internet access to the community of Idyllwild. The project was authorized by a Decision Memo, signed in July 2008, and implemented in August 2008. A Cost Recovery Agreement was utilized to fund Forest Service staff and a contractor was hired. However, due to contractor timelines, the project documentation was completed by USFS staff.

The majority of the project area is inaccessible by vehicle. Installation was completed without any ground disturbance. Because there was no planned ground disturbance, no heritage or botanical issues were identified. Design criteria for the project consisted of an LOP for Quino checkerspot butterfly flight season and no off-road travel or creation of new roads.

### **Conclusions**

The KNB Fiber Optic Cable/Time Warner Cable project is consistent with Forest Goal 4.1a to manage energy developments to facilitate production of energy resources while minimizing adverse impacts to surface and groundwater resources and protecting or enhancing ecosystem health and scenic values. In addition, the project is consistent with National Strategic Plan Goal 6 – mission related work in addition to that which support the agency goals. Project design and project design criteria were effective in mitigating impacts to natural resources.

## **Recommendations**

- For future project proposals of this scale and magnitude, evaluate the cost-effectiveness and efficiency of doing the documentation internally.

## **Unavco Seismic Monitoring (09-LMP- Commodity & Commercial Uses-4)**

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### **Monitoring**

The Unavco Seismic site is located in the Anza Place at the Tripp Flats Fire Station on the San Jacinto District. The monitoring team and District staff visited the site on May 28, 2010.

The Unavco site is a seismic boring hole used to study the San Jacinto fault. The 10-year permit was signed in July 2006. A collection agreement for the project was finalized in February 2007 for monitoring. The monitoring team found that the project file was incomplete. It is unknown what type of NEPA document was completed for the project. Anza Electric Company provides power to the site. Bumper posts, to protect the infrastructure from vehicle damage, were identified as part of the proposed action but were not present on site.

It is not known if biological/botanical supporting documents were completed. Restoration of the disturbed area was built into the project and was completed satisfactorily. The project had no known archaeological concerns.

### **Conclusions**

The Unavco Seismic Monitoring project is consistent with National Strategic Plan Goal 6 – mission related work in addition to that which support the agency goals. It is difficult to determine if project was implemented as planned because the project file is not complete.

### **Recommendations**

- Ensure project files are completed and maintained, especially during periods of employee turnover.

## **OMYA/Claudia Burned Area Rehabilitation (09-LMP- Fire & Aviation Management-1)**

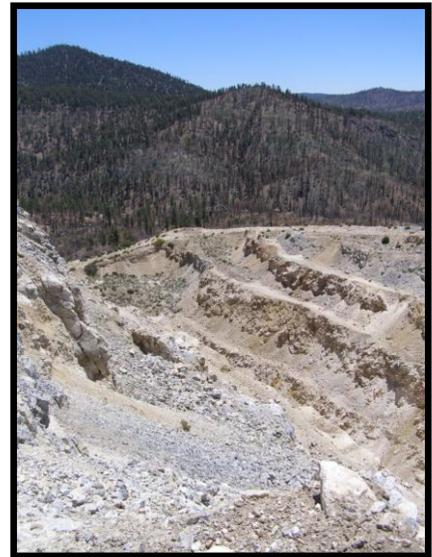
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### **Monitoring**

Reclamation of the OMYA operated Claudia quarry is an ongoing activity in the Desert Rim Place on the Mountaintop District. The monitoring team and District staff visited the site on June 25, 2010.

This quarry, containing calcium carbonate, was mined in the 1980s for three years. The deposit was small but of good quality and active mining operations have ceased. In total, about one million tons of ore and one million tons of waste were removed from the nine acre site.

An Environmental Assessment was prepared for mining activities and subsequent reclamation. Reclamation is required by state law and the San Bernardino County is the lead agency for reclamation. The project was approved under the 1988 Forest Land and Resource Management Plan and predated the Carbonate Habitat Management Strategy (CHMS).



Reclamation of the Claudia quarry was planned to be accomplished in phases. Design criteria that are required for the project include application of Permeon to visually disguise bare rock, installation of waterbars, replacement of growth medium (topsoil), invasive weed management, and retention of vertical slash for terrestrial species habitat. Re-vegetation with native species is a large part of the reclamation activities. In 2006, the Butler II Fire burned through the area and burned away much of the re-vegetation efforts that had taken place. Subsequently, the Forest received Fire Plan funding to supplement the re-vegetation process. A contractor was hired to collect local native seed to re-seed the disturbed site. Approximately 80 lbs. of seed has been collected. Some seed was propagated and about 150 plants were out-planted on the site in fiscal year 2009. Irrigation of the site is ongoing. Re-vegetation has continued into fiscal year 2010.

### **Conclusions**

The project is consistent with the desired condition in Forest Goal 4.1a to manage mineral developments to facilitate production of mineral resources while minimizing adverse impacts to surface and groundwater resources and protecting or enhancing ecosystem health and scenic values. Program emphasis within the Desert Rim Place focuses on implementation of the CHMS and continuation of mining while preserving and managing habitat for four federally listed plants. As stated in the desired conditions, areas that have been disturbed through past activity will be restored.

### **Recommendations**

- Add signing warning public of dangers of the closed mine due to the steep unstable slopes.
- Ensure that future mining operations are consistent with the Carbonate Habitat Management Strategy.
- Permeon applied about 10 years ago is wearing away. Consider re-application if it is determined that scenic objectives are not being met.

## V. OVERALL RECOMMENDATIONS

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### LMP Monitoring Protocol

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- Finalize the Draft LMP Monitoring Guide, including updates of the baseline tables. The update should be reviewed by the Forest Leadership Team.

### Forest and Project Planning

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The following recommendations do not originate from any one individual project or activity review but rather, grew out of considering how to improve Forest-wide programs, projects and activities:

- 1) Remind Forest Line Officers, Forest staff, and project leaders that:
  - Projects with a decision executed prior to October, 2005 (when the revised Forest Land Management Plan went into effect) that are under Forest control (i.e. no contract, permit or agreement) and have not yet been implemented or are ongoing (where contracts can be changed) require that a Plan ‘consistency review’ be completed and included in the project file. Checklists by project type are available for this purpose. Include a review of any newly designated land use zones or other special land designations.
  - It is especially important to ensure that the Terms and Conditions and take limits for threatened and endangered species that are required in Biological Opinions be strictly adhered to.
  - District Leadership Team staff are encouraged to attend LMP monitoring field trips on all Districts and to plan and participate in District After Action Reviews of ongoing activities as a leadership team.
- 2) During project planning there is a need to:
  - Address the [2001 Roadless Rule](#) at the onset of all project planning, which may involve Forest Service staff in Sacramento meeting with the State Resources Agency.
  - Address recommended Wilderness, eligible Wild and Scenic Rivers, recommended Research Natural Areas, newly designated Special Interest Areas, and Critical Biological land use zones and any new legislatively designated wilderness or Wild and Scenic River locations at the onset of all project planning.
  - Utilize LMP consistency checklists to display red flags prior to writing the “proposed action”.
- 3) During project implementation there is a need to:
  - Provide for contract oversight (Contract Inspector/Contractor Officer Representative) at the District level.
  - Ensure that project design criteria from NEPA documents are explicitly included in contracts.
  - Recommend that specialists who were involved in creating design criteria be invited to pre-work meetings to insure criteria are adhered to.
  - This report identified some concerns regarding impacts to RCAs for a number of existing developed recreation site. Inclusion of a hydrology specialist at pre-season

concessionaire meetings could help in educating hosts to reduce impacts and facilitate implementation of the LMP Part 3 Appendix D.

- Document the various types of monitoring that occur during project implementation such as natural resource monitoring and After Action Reviews. Include the details and results of this monitoring in next year's LMP monitoring report.

4) Forest leadership is needed to:

- Continue to provide direction on content and storage of hard copy and digital project files and adhere to the newly established Forest direction for project timelines and document storage.
- Improve the timeliness of accomplishment reporting in all the corporate databases including both tabular and spatial data. This is necessary in order to track and monitor projects, and to get proper credit for accomplished projects. This is especially needed for Fuels FACTS reporting to assess progress towards desired conditions in the upcoming sixth year monitoring effort.
- Create a 2011 Forest program of work that:
  - Is responsive to identified work items in the Land Management Plan or Record of Decision;
  - Effectively focuses the Forest's limited resources on making progress toward LMP desired conditions and completing identified work items through integration of functional programs around common priorities.

## VI. LMP AMENDMENTS

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

- Errors and or discrepancies found during implementation;
- New information;
- Changes in physical conditions;
- New laws, regulations, or policies that affect National Forest management.

The amendments to date are listed in the table below. Supporting documents are kept on file in the Forest Plan Tracking Notebook. We frequently learn about the need for amendments through monitoring, however no amendments are recommended from this monitoring effort.

**Table 2. Forest Plan Amendments**

Amendment	Implementation Date	Type of Change
1	October 24, 2005	Errata
2	April 21, 2006	Reissuance of Record of Decision (ROD) due to technical error in the FEIS regarding omission of public comments on wildlife issues and the agency's responses in the printed and published materials. Began a new 90 day appeal period April 21, 2006 which ended July 20, 2006. The Plan went in effect October 31, 2005 and will remain in effect. The decision to select Alternative 4A did not change.
3	April 2006	Errata- San Bernardino National Forest Plan – 1 page of errata specific to the SBNF.
4	September 2006	Errata- for Published Documents- southern California Forest Plans Revision. This is the final errata published for all 4 southern California forest plans. It is 31 pages and includes all prior errata. Available on website <a href="http://www.fs.fed.us/r5/scfpr/projects/lmp/errata">http://www.fs.fed.us/r5/scfpr/projects/lmp/errata</a>
5	September 8, 2006	Administrative Correction (36CFR 219.7). Correction to SBNF Part 2, p.16. Table 487. Designated Utility Corridors- San Bernardino National Forest. Added Devers-Valley No. 1, a 1.8 mile 500Kv (1) utility corridor to table. This corridor occurs on the San Jacinto Ranger District and was inadvertently left out of the table during the plan revision. The entire Devers –Valley No. 1 correction is available on the Forest website.
6	January 14, 2008	SBNF Plan Amendment. USDA FS Designation of Section 368 Energy Corridors on national Forest System Land in 10 Western States. Decision by Secretary of Agriculture to Amend Land Management Plans.

## VII. LMP UPDATES

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Forest Plan Amendments (discussed above) change decisions made by the Forest Plan. Consequently, they require environmental analysis under the National Environmental Policy Act (NEPA). From time to time other changes to the Forest Plan are needed which are not intended to affect earlier decisions or Plan objectives. Examples of such changes include corrections; clarification of intent; changes to monitoring questions; and refinements of management area boundaries to match management direction with site-specific resource characteristics at the margin of the maps. We call these types of changes “updates.” Since they do not change any Plan decision, they do not require NEPA analysis.

Updates to the San Bernardino Land Management Plan are described in the table below. The supporting document is on file in the Forest Plan Tracking Notebook. There are no updates recommended as a result of this monitoring effort.

**Table 3. Forest Plan Updates**

<b>Update</b>	<b>Implementation Date</b>	<b>Type of Change</b>
1	May 31, 2006	Removal of Mill Creek Recreation Tract from the list of Recreation Residence Tracts in Part 2, p.17., Other Designations-Table 481.Recreation Residence Tracts. The Decision Memo was signed May 31, 2006; the Tract was conveyed on December 13, 2007.
2	December 8, 2009	Removal of Middle Fork Recreation Tract from the list of Recreation Residence Tracts in Part 2, p. 17., Other Designations-Table 481. Recreation Residence Tracts. The Decision Notice was signed December 8, 2009.

## VIII. ACTION PLAN

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<b>Task and Responsible Official</b>	<b>Effective Date</b>
The Forest Supervisor approves all of the recommendations in section V.	November 2010
The SBNF 2009 LMP Monitoring and Evaluation Report will be discussed at an upcoming Forest Leadership Team (FLT) meeting.	January 2011
To ensure the recommendations of the on the ground and activity monitoring in section III are reviewed, the Forest Supervisor will inform project and program leaders who participated in the monitoring of the availability of the 2009 LMP Monitoring and Evaluation Report on the SBNF website.	November 2010
To promote LMP consistency in future projects, the Forest Supervisor will ensure that the 2009 LMP Monitoring and Evaluation Report is available on the SBNF website for all employees.	November 2010

## IX. PUBLIC PARTICIPATION

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In November 2010, those on the LMP monitoring mailing list will receive a letter notifying them of the availability of the 2009 Forest LMP Monitoring and Evaluation Report on the Forest web page (or printed version upon request).

## X. LIST OF PREPARERS

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The primary team for the FY 2009 LMP Monitoring and Evaluation consisted of:

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The team expresses its gratitude for support, input, and participation in monitoring from the following line and staff:

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## XI. APPENDIX A

Table 3. Projects and activities randomly selected for LMP monitoring and evaluation on the San Bernardino National Forest.								
Unit *	Place	Name	Project (10%)	Program	Ongoing Activity Site (10%)**	Monitor LMP Consistency	Monitor Effectiveness	Documentation reviews, field reviews and/or comments
FCRD	The Front Country	1N35 West Cucamonga			X-BMP	X	X	Field Review 5/27/2010
FCRD	San Bernardino Front Country	1N09 City Creek Road - Alder Creek and unnamed crossing near 1N64			X-BMP	X	X	Field Review 5/27/2010
FCRD	Cajon	BNSF – Dace Relocation	X			X	X	Field Review 5/27/2010
FCRD	Lytle Creek	3N31Y Road Repair	X			X	X	Field Review 5/27/2010
FCRD	San Bernardino Front Country	SCE – Deteriorated Pole Replacement	X			X	X	Field Review 7/15/2010
SJRD	Idyllwild	4S01M – 3 Replacement Culverts			X-BMP	X	X	Field Review 7/1/2010
SJRD	Idyllwild	Idyllwild West – Unit 17	X			X	X	Field Review 7/1/2010
SJRD	Idyllwild	5S06 Old Control Road			X-BMP	X	X	Field Review 5/28/2010
SJRD	Idyllwild	Hwy 243 Evacuation Route – Unit 2P-4-1	X			X	X	Field Review 7/1/2010
SJRD	Idyllwild	Keenwild Helitack Office Construction	X			X	X	Field Review 5/28/2010
SJRD	Idyllwild	KNB Engineering Fiber Optic Cable	X			X	X	Field Review 5/28/2010
SJRD	Anza	Unavco Seismic Monitoring	X			X	X	Field Review 5/28/2010
SJRD	Idyllwild	Humber Park Trailhead			X-BMP	X	X	Field Review 5/28/2010
SJRD	Santa Rosa and San Jacinto Mountains National Monument	Snow Creek Recreation Residence Tract			X	X	X	Field Review 7/1/2010
MTRD	Big Bear	2N13 Snow Slide			X-BMP	X	X	Field Review 6/25/2010
MTRD	Big Bear	2N13 Grout Creek and MP 1.80			X-BMP	X	X	Field Review 6/25/2010
MTRD	Big Bear	3N12 Delamar Springs			X-BMP	X	X	
MTRD	Arrowhead	3N34 Splinter’s Cabin Bridge			X-BMP	X	X	Field Review 7/7/2010
MTRD	Silverwood	2N45 near 2N59, near Silverwood			X-BMP	X	X	Field Review 7/7/2010
MTRD	Arrowhead	3N34 Squint Ranch Road – Section that failed protocols in 2009.			X-BMP	X	X	Field Review 7/7/2010
MTRD	Silverwood and Arrowhead	MT –Fuels – Miller Canyon East Fuels Reduction Implementation	X			X	X	Field Review 7/7/2010
MTRD	Many	TES Habitat Monitoring/Maintenance	X			X	X	Field Review 6/25/2010
MTRD	Many	Ecosystems Education	X			X	X	Field Review 7/7/2010

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Unit *	Place	Name	Project (10%)	Pro-gram	Ongoing Activity Site (10%)**	Monitor LMP Consistency	Monitor Effectiveness	Documentation reviews, field reviews and/or comments
MTRD	Many	Rec OHV Restoration (Route Designation)	X			X	X	Field Review 6/25/2010
MTRD	Desert Rim	OMYA/Claudia Burn Area Rehabilitation	X			X	X	Field Review 6/25/2010
MTRD	Big Bear Back Country	Big Pine Flat Campground			X-BMP	X	X	Field Review 6/25/2010
MTRD	Arrowhead	Green Valley Campground			X-BMP	X	X	Field Review 6/25/2010
MTRD	San Gorgonio	Grayback Amphitheater			X-BMP	X	X	Field Review 6/28/2010
MTRD	Arrowhead	Pinnacles OHV Trailhead			X-BMP	X	X	Field Review 7/7/2010
MTRD	San Gorgonio	University Camps, Inc – UCLA Unicamp Organizational Camp			X	X	X	Field Review 6/28/2010
MTRD	Big Bear	Lazer Broadcasting Corporation 816			X	X	X	Field Review 6/28/2010
Forest	Many	OHV Grant Monitoring Requirements		X	Recreation	X	X	Reviews of WHPP, restoration site monitoring, and results. Discussion of methods and results of Soils Monitoring Program Adopt-A-Trail and SBNFA Volunteer Monitoring Programs
Forest	Several	Heritage Program Monitoring		X	Heritage	X	X	Discussion with Heritage Program Manger
Forest	Many	Grazing Allotments		X	Range	X	X	Not monitored due to schedule conflicts. Will be coordinated with BMP monitoring and addressed in FY 2010 Report.
Forest	All	FY 09 Annual Species Monitoring per Biological Opinion		X			X	Review of T&E Species monitoring report to Fish and Wildlife Service.
Forest	Many	Roads Monitoring		X				Field reviews of each site
Forest	All	BMPEP Review per State Agreement		X	X	X	X	BMPEP sampling and documentation as required by Regional Agreement w/State Water Resources Control Board.

\* FCRD = Front Country Ranger District; SJRD = San Jacinto Ranger District; MTRD = Mountaintop Ranger District

\*\* BMP = Also part of Calendar Year 2010 Best Management Practice Monitoring.