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# 2006 Monitoring and Evaluation Report

## Inyo National Forest



Above Ediza Meadows, Ansel Adams Wilderness

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## Introduction

The Regional Forester approved the Inyo National Forest Land and Resource Management Plan (LRMP or Plan) and Environmental Impact Statement (EIS) on August 12, 1988 (USDA 1988). Chapter V of the Forest Plan includes a monitoring program. As stated in the Forest Plan (pg. V-1) the purpose of monitoring is to assess the success of Plan implementation and determine whether the Plan needs to be amended or whether management activities need to be revised.

In addition to monitoring, the LRMP requires evaluation of results. Evaluation is the analysis and interpretation of monitoring data to determine whether changes in the LRMP or in project implementation are necessary. Together, monitoring and evaluation ensure that the Plan remains a dynamic and responsible tool for managing the Forest's land and resources in a changing social and economic climate.

This report, prepared by an Interdisciplinary Team (see List of Preparers) for the Forest Supervisor, documents the results of monitoring and evaluation activities accomplished on the Inyo National Forest during federal fiscal year 2006 (October 1, 2005 to September 30, 2006).

## Land Management Plan Monitoring Activities

The LRMP, as amended, includes monitoring of 20 broad resource categories ranging from air quality to wilderness (Table 1). As shown, many of the resource categories identified in the 1988 LRMP are also identified as part of the monitoring strategy for the Sierra Nevada Forest Plan Amendment (SNFPA), which amended the 1988 LRMP in 2004. The Monitoring Strategy for the 2004 SNFPA is described in Appendix E of the 2001 SNFPA FEIS (USDA 2004a; USDA 2001).

There is considerable overlap in monitoring direction. In some cases, the monitoring objectives for the 2004 SNFPA are very similar to those of the 1988 LRMP. In others, however, monitoring is focused on answering different questions about different resources.

**Table 1. Summary of monitoring direction by resource category, 1988 Inyo National Forest LRMP, as amended**

Resource Category	Source of Monitoring Direction
Air Quality	1988 LRMP/2004 SNFPA
All Resource Elements	1988 LRMP
Diversity (of Vegetation)	1988 LRMP
Fish/Aquatic, Riparian, and Meadow Ecosystems	1988 LRMP/2004 SNFPA
Heritage/Cultural and Fire and Fuels	1988 LRMP/2004 SNFPA
Noxious Weeds	2004 SNFPA
Pest Management	1988 LRMP
Protection (Fire Suppression)/Fire and Fuels	1988 LRMP/2004 SNFPA
Range	1988 LRMP
Rare Plants/ Aquatic, Riparian, and Meadow Ecosystems	1988 LRMP/2004 SNFPA
Recreation	1988 LRMP
Riparian/Aquatic, Riparian, and Meadow Ecosystems	1988 LRMP/2004 SNFPA
Socioeconomic Effects	2004 SNFPA
Soils/Soil Productivity and Fire and Fuels	1988 LRMP/2004 SNFPA

Resource Category	Source of Monitoring Direction
Timber/Fire and Fuels and Old Forests and Associated Species	1988 LRMP/2004 SNFPA
Visuals	1988 LRMP
Water/Aquatic, Riparian, and Meadow Ecosystems	1988 LRMP/2004 SNFPA
Wild and Scenic Rivers	1994 North and South Forks of the Kern Wild and Scenic River Plan (Amendment #4)
Wildlife/Old Forests and Associated Species; Aquatic, Riparian, and Meadow Ecosystems	1988 LRMP, Deer Herd Management Direction Amendment #5/2004 SNFPA
Wilderness/Old Forests and Associated Species	1988 LRMP, 2001 Wilderness Plan (Amendment #7), and 2005 Trail and Commercial Pack Stock Management (Amend. #10)/2004 SNFPA

Note: Soils and water are presented as one resource category in the 1988 LRMP Monitoring Plan

This report presents a subset of the fiscal year 2006 monitoring and evaluation efforts related to six of the resource categories: air quality, pest management, visitor recreation, sensitive plant species, water quality, wilderness, and wildlife. This report is not intended to document all monitoring activities conducted on the Forest during 2006. Additional monitoring for various resource categories may have been completed and documented as part of reporting requirements for specific program area.

Each monitoring overview begins with a summary of relevant goals, objectives, and monitoring established in the 1988 LRMP for that resource category. Monitoring action items called for in the 2004 Sierra Nevada Forest Plan Amendment are also presented as they relate to the resource in question.

A summary of some of the monitoring activities completed in 2006 are presented after the summary of LRMP direction, followed by the results of those activities and a brief evaluation. The summary of air quality monitoring does not include discussion of results or evaluation because this information is fed into national or regional databases for analysis and distribution.

## ***Air Quality***

### **Goals and Objectives**

The 1988 LRMP includes the following goal for air quality:

National Forest System lands are managed to maintain air quality that complies with all applicable regulations. The conduct of Forest management activities is carried out in a manner consistent and compatible with the attainment of state and federal air quality objectives.

The LRMP did not identify any objectives related to air quality.

### **Monitoring Actions**

As shown in the table below, the 1988 LRMP calls for continued monitoring of air quality compliance in Class I and II airsheds. Overlapping monitoring direction from the 2004 Sierra Nevada Forest Plan Amendment is also displayed.

**Table 2. Summary of Air Quality monitoring direction**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Air Quality	Evaluate compliance with state and federal standards in Class 1 and II airsheds	Monitor AQRV indicators by: photography, measurement, analysis, and recordation	<p>Implementation Monitoring:</p> <ol style="list-style-type: none"> <li>1. Were dust abatement techniques used during timber harvest and road building activities?</li> <li>2. Are conformity determinations made for projects occurring in federal nonattainment areas?</li> <li>3. Are activities with the potential to affect AQRVs addressed during the NEPA process?</li> </ol> <p>Status and Change Monitoring:</p> <ol style="list-style-type: none"> <li>1. Ambient air quality and atmospheric deposition in the Sierra Nevada?</li> <li>2. Biotic and physical air quality indicators?</li> </ol>

The Inyo National Forest participates in the following national and regional air quality monitoring programs:

**1) Interagency Monitoring of Protected Visual Environments (IMPROVE)**

The IMPROVE program is a cooperative air quality monitoring effort between federal land managers; regional, state, and tribal air agencies; and the Environmental Protection Agency (EPA). The IMPROVE program was established in 1985 to aid in the implementation of the 1977 Clean Air Act goal of preventing future and remedying existing visibility impairment in 156 Class I areas (national parks, wilderness areas, and wildlife refuges). The network began operating in 1988 and currently includes 175 monitoring sites, one of which is administered by the Inyo NF. This site, located near the northern boundary of the Inyo NF at Conway Summit, is representative of the Hoover Wilderness Class I airshed.

The program monitors visibility by measuring fine particle mass, sulfur, soil elements, nitrate, carbon, chloride, and coarse mass. Data from the Conway Summit monitoring site is fed into a national visibility database archive coordinated by EPA for all historical and future visibility monitoring information. IMPROVE monitoring information is shared by Federal land managers, states, tribes, and other monitoring entities.

**2) Project LAKES**

The Project LAKES protocol is part of the Monitoring and Adaptive Management Strategy of the 2004 Sierra Nevada Forest Plan Amendment. The primary objective is to obtain information on status and change of lake water quality related to the effects of air pollution. Monitoring is focused on lakes with low acid neutralizing capacity (ANC). ANC is an indicator of sensitivity to potential acidification.



Long term lake sampling is planned for all Class I Wildernesses<sup>1</sup> in the Sierra Nevada. Currently, long term sampling has been initiated at six lakes on the Inyo NF (Ansel Adams and John Muir Wildernesses). Inyo NF hydrologists also conduct the sampling at one lake in the John Muir Wilderness on the Sierra NF, and one in the Hoover Wilderness on the Humboldt-Toiyabe.

Data collection follows the procedures outlined in the Project LAKES protocol (June 2004; revised May 2006). The three primary components of the water quality field procedures are water chemistry sample collection, transparency measurements, and zooplankton collection.

Samples collected during the 2006 season were submitted to the LAKES monitoring program coordinator for processing and evaluation. Water chemistry analyses are completed by the Fort Collins Science Center in Colorado. Data are then interpreted by hydrologists at the Region 5 Pacific Southwest Research Station in Albany, California. Data are evaluated to help determine whether changes in lake and stream chemistry are due to changes in air quality, certain sources of air pollution, changes in weather, climate or land use, or other factors. This information is used to make informed decisions related to land management planning.

## ***Pest Management***

### **Goals and Objectives**

The 1988 LRMP includes the following goal related to pest management:

Pest-related damage is maintained at levels that do not unacceptably impact land and resource management goals and objectives.

Objectives for pest management were not established.

### **Monitoring Actions**

The LRMP includes the following pest management monitoring actions. Related monitoring to be conducted under the 2004 Sierra Nevada Forest Plan Amendment (from Appendix E of the 2001 SNFPA) is also shown.

**Table 3. Summary of monitoring direction for pest management**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Pest Management: Damage and Population	Early detection and evaluation of pest related problems on commercial timber lands and other Forest lands.	Aerial and ground surveys, surveillance, timber stand examinations and other resource-specific examinations	Indirect monitoring as part of Cause and Effect monitoring for old forest ecosystems (p. E-70): How are natural disturbances (insects, fungal infections, etc.) influencing the amount and condition of old forests?

### **1. Bristlecone Pine Health Assessment**

The manager of the Schulman Grove of Bristlecone Pine initially identified pockets of bristlecone pine mortality in the vicinity of the Schulman Grove Visitor Center. Regional insect and disease

<sup>1</sup> Lands designated as Class I Areas under the Clean Air Act Amendments of 1977 are afforded the highest level of protection from air pollutants in the nation. These lands consist of national wildernesses (Forest Service), parks (National Park Service) and wildlife refuges (U.S. Fish & Wildlife Service) in existence at the time the amendment was passed. All other lands in the nation are designated as Class II.



experts were consulted, and subsequently examined the area with the Forest botanist and Schulman Grove manager in August, 2006. The purpose of the review was to determine potential insect and disease pathogens affecting the bristlecone pine and to identify necessary actions, if any, to prevent larger scale die-offs. Very little is known about native bristlecone pathogens.

### ***Results***

Numerous pathogens were identified during the review. It was determined that these pathogens appear to be moving very slowly at this point, and are possibly at endemic levels. No immediate corrective actions were identified. Insect and disease specialists involved in the review identified an opportunity to inventory all of the White Mountain bristlecone to further assess the extent and severity of mortality. This inventory would help specialists determine what mortality is occurring above and beyond expected (endemic) levels.

### ***Evaluation***

Insect and disease specialists conducted a follow-up trip, and in cooperation with the Forest are currently pursuing funding to conduct further surveys to determine the specific cause(s) of the mortality.

### ***Recreation***

#### **Goals and Objectives**

The 1988 LRMP includes the following goal for recreation on the forest:

A broad range of developed and dispersed recreation opportunities in balance with identified existing and future needs is provided.

Related annual objectives are:

- 1,914,000 recreation visitor days of developed private use
- 1,578,000 recreation visitor days of developed public use
- 1,191,000 recreation visitor days of dispersed use
- 644,000 recreation visitor days of designated Wilderness use

A recreation visitor day (RVD) is defined as 12 hours of recreation use in any combination of persons and hours, such as one person for 12 hours or three persons for four hours.

#### **Monitoring Actions**

As shown in the table below, the 1988 LRMP calls for continued monitoring of recreation use levels and the effects of OHV use on land and other resources. Overlapping monitoring direction from the 2004 Sierra Nevada Forest Plan Amendment is also displayed.

**Table 4. Summary of monitoring direction for recreation.**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Recreation use	Determine total recreation use	RIM system and other sampling techniques	NA
OHV use on land and other resources	Determine if adverse effects are occurring or likely to occur	Photograph and/or field measurements	Key Old Forest Information Gaps (p. E-70 and 71): What are the effects of OHV use on the abundance and distribution of fishers? What are the effects of OHV use on the abundance and distribution of martens?

### 1) National Visitor Use Monitoring (NVUM)

The National Visitor Use Monitoring (NVUM) program provides information about recreation visitors to national forest system managed lands at the national, regional, and forest level. Information about the quantity and quality of recreation visits is required for national forest plans, Executive Order 12862 (Setting Customer Service Standards), and implementation of the National Recreation Agenda. The Inyo National Forest participated in the National Visitor Use Monitoring (NVUM) project from October 2005 through September 2006.

#### Results

The NVUM methodology measures visitor use with two basic use measurements: *national forest visits*<sup>2</sup> and *site visits*. A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits to recreation sites on the forest such as developed day use areas, developed overnight use areas, undeveloped areas, and designated Wilderness.

There were approximately 3.4 million national forest visits<sup>3</sup> and 4.3 million site visits (Table 5) on the Inyo National Forest during fiscal year 2006. Included in the site visit estimate are approximately 120,000 Wilderness site visits. Table 5 displays the average visitor use estimates for national forest visits, site visits, and special events and organizational camp use.

**Table 5. Inyo National Forest visit estimate (draft NVUM FY2006 data<sup>3</sup>)**

Visit Type	Approximate Number of Visits (thousands)
Total National Forest Visits	3400
Total Site Visits	4300
Designated Wilderness Visits <sup>a</sup>	120
Special Events and Organizational Camp Use <sup>b</sup>	4

<sup>a</sup> Designated Wilderness visits are included in the Site Visits estimate.

<sup>b</sup> Special events and organizational camp use are not included in the Site Visit estimate, only in the National Forest Visits estimate. Forests reported the total number of participants and observers so this number is not estimated; it is treated as 100% accurate.

<sup>2</sup> National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits. In comparison, a recreation visitor day (RVD) is defined as 12 hours of recreation use in any combination of persons and hours, such as one person for 12 hours or three persons for four hours.

<sup>3</sup> NVUM data collected in 2006 is still undergoing review. Figures presented in this report have been approximated and may be subject to change.

The average national forest visit length of stay on the forest was approximately 30 hours. The average site visit was about 15 hours, but time spent varied considerably by type of site (Table 6) with visits to Day Use Developed sites lasting an average of about 3 hours and Overnight Use Developed site visits lasting an average of about 60 hours.

**Table 6. Visit duration on the Inyo National Forest (draft NVUM FY 2006 data<sup>3</sup>)**

Visit Type	Average Duration (hours)
Site Visit	15
Day Use Developed	3
Overnight Use Developed	60
Undeveloped Areas	15
Designated Wilderness	35
National Forest Visit	30

An important element of outdoor recreation program delivery is evaluating customer satisfaction with the outdoor recreation setting, facilities, and services provided. Satisfaction information helps managers decide where to invest in resources and to allocate resources more efficiently toward improving customer satisfaction. Satisfaction is a core piece of data for national and forest level performance measures.

All respondents were asked to rate their overall satisfaction with their current visit to this national forest using the Likert scale of 1 (very dissatisfied) to 5 (very satisfied). The results for this forest are displayed in Table 7. Ninety-six percent of national forest visits were rated as somewhat or very satisfied.

**Table 7. Percent of Inyo National Forest Visits by satisfaction category (draft NVUM FY 2006 data)**

Satisfaction Rating	National Forest Visits (%)
Very dissatisfied	0.1
Somewhat dissatisfied	1.1
Neither satisfied nor dissatisfied	2.9
Somewhat satisfied	16.1
Very Satisfied	79.9

Visitors were asked to rate the specific site or area at which they were interviewed. Visitors rated both the importance and performance (satisfaction with) each of these elements using a 5 point Likert scale. The Likert scale for importance ranged from not important to very important. The Likert scale for performance ranged from very dissatisfied to very satisfied.

**Table 8. Overall Satisfaction and Importance ratings for all sites types combined on the Inyo National Forest (draft NVUM FY 2006 data)**

ITEM	Avg. Rating	Mean Importance
Restroom cleanliness	4.5	4.4
Developed facility condition	4.5	4.3
Condition of environment	4.6	4.8
Employee helpfulness	4.7	4.4
Interpretive displays	3.9	4.0
Parking availability	4.4	4.2
Parking lot condition	4.5	3.9
Rec. info. availability	4.5	4.3
Road condition	4.4	4.3
Feeling of safety	4.8	4.7
Scenery	4.9	4.7
Signage adequacy	4.4	4.3
Trail condition	4.6	4.5
Value for fee paid	4.4	4.6

### *Evaluation*

Recreation sampling techniques have changed since the Forest Plan was developed in 1988, making direct comparison of early visitor use data with 2006 monitoring results difficult. Prior to implementation of the NVUM methodology, recreation use on the Inyo National Forest was measured in *recreation visitor days*<sup>2</sup> as defined in the 1988 LRMP. The NVUM recreation sampling system was developed in 1998 as a cost effective means of providing statistical recreation use information at the forest, regional, and national level. The two NVUM basic use measurements are *national forest visits*<sup>4</sup> and *site visits*.

Following national protocol, the Inyo National Forest collected data using the NVUM methodology in 2001 and 2006. The following table compares visitor use results from the 2001 NVUM report with the draft results of the 2006 monitoring effort.

**Table 9. Comparison of visitor use information using 2001 NVUM and 2006 draft NVUM data**

Visit Type	Approximate Number of Visits in 2001 (thousands)	Approximate Number of Visits in 2006 (thousands)
Total National Forest Visits	4200	3400
Total Site Visits	5700	4300
Designated Wilderness Visits <sup>a</sup>	246	120
Special Events and Organizational Camp Use <sup>b</sup>	2.2	4

<sup>a</sup> Designated Wilderness visits are included in the Site Visits estimate.

<sup>b</sup> Special events and organizational camp use are not included in the Site Visit estimate, only in the National Forest Visits estimate. Forests reported the total number of participants and observers so this number is not estimated; it is treated as 100% accurate.

<sup>4</sup> National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits. In comparison, a recreation visitor day (RVD) is defined as 12 hours of recreation use in any combination of persons and hours, such as one person for 12 hours or three persons for four hours.

The Inyo experienced snow pack that was 140 percent of normal in 2006. As a result, most sites, especially those above 7,500 feet, were not open or accessible to the public until four or five weeks later than usual. This may explain the apparent reduction in national forest and site visits from 2001 to 2006.

## Status of Sensitive Plants

### Goals and Objectives

The 1988 LRMP includes the following goal:

Sensitive plant species are protected to ensure that they will not become threatened or endangered.

There are no objectives related to sensitive plants.

### Monitoring Actions

The LRMP includes the following sensitive plant monitoring actions. The table includes related monitoring to be conducted under the 2004 Sierra Nevada Forest Plan Amendment (from Appendix E of the 2001 SNFPA).

**Table 10. Summary of monitoring direction for Forest Service sensitive plant species**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Sensitive Plant Species Habitat	Detect changes in key populations of each species and assess impacts on selected populations of occupied habitats	Population trend censuses; baseline and past-project surveys for input into EAs. Use applicable techniques identified in Interim or Species Management Guides	Aquatic, Riparian, and Meadow ecosystem Status and Change Monitoring (p. E-104): Populations of nonvascular plant and fungi species at risk?

### 1) Kern Plateau Moonwort Survey

In August, 2006, surveys were conducted to confirm the existence of and gather additional population and habitat data for historical and recently reported populations of moonwort (*Botrychium*) species in the Olancha Peak area. The primary objective was to relocate a 1950 reported population of *Botrychium lineare*, a US Fish and Wildlife Candidate Species. The survey was also intended to confirm occurrences of *Botrychium crenulatum*, a Forest Service sensitive species.

*Botrychium lineare* (slender moonwort) is perhaps the rarest species of moonwort, known from only approximately 32 sites globally with a total of less than 500 individuals, and only 14 of those occurrences known to be extant. The US Fish and Wildlife Service is currently reviewing a petition for federally listing this species (US Fish & Wildlife, 2004). Habitat is generally described as meadows with deep grass and forbs, under trees in woods, and on limestone cliff shelves mostly at higher elevations.

Scalloped moonwort (*Botrychium crenulatum*) occurs in most western states, but is reported as scattered throughout California, and nowhere common (Farrar, 2004). This species' habitat is described as bogs, fens, marshes, swamps, meadows and seeps in montane coniferous forests.

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## ***Results***

The population of *Botrychium lineare* reported in 1950 was successfully located, as were two previously reported occurrences of *Botrychium crenulatum*. Individual plants were counted and habitat information was recorded for each occurrence.

## ***Evaluation***

Data gathered during this survey has been incorporated into the draft Botrychium Conservation Assessment, which is being prepared to address the status of moonwort species region-wide. This information will be used to develop appropriate management strategies for these species. It will also help to determine the suitability of federal listing for *Botrychium lineare*.

## **2) Ramshaw abronia Monitoring**

*Abronia alpina* (Ramshaw abronia), a Forest Service sensitive species, is known only from Ramshaw and Templeton Meadows in the Golden Trout Wilderness of the Inyo National Forest. One population of the species (previously considered two populations) is spread along the sandy margins of those meadows. Thirty-four subpopulations have been mapped within that population. In 2006, Forest botanists and volunteers conducted population monitoring on all 34 subpopulations, re-read long term permanent plots, and repeated photographs of selected subpopulations to assess lodgepole pine encroachment. Surveyors recorded plant density and age class in multiple 5 meter x 6 decimeter plots within each subpopulation, as well as 5 meter x 5 meter permanent plots in three selected subpopulations.

## ***Results***

The number of plants has been monitored closely since 1982, but numbers vary widely from year to year and no obvious trend has been found. Population size, as estimated during the 2006 field season, appears to be lower than previous years, however, the estimate is not significantly different from previous years, statistically.

## ***Evaluation***

Data have been incorporated into a draft Conservation Agreement with US Fish and Wildlife Service to provide for the long term conservation of this species. The Conservation Agreement is currently awaiting approval by US Fish and Wildlife.

## **3) Subalpine fireweed conservation assessment**

*Epilobium howellii* (subalpine fireweed) is known from moist mossy openings near meadow or montane forest edges at elevations from 6,000-8850 ft. (2000-2700 m.). This diminutive fireweed may be easily overlooked, and is often found growing sympatrically with other similar fireweed species. Subalpine fireweed is currently listed as a Forest Service sensitive species.

In 2006, Forest botanists surveyed potential habitat areas on the Inyo, Tahoe, Eldorado, Lake Tahoe Basin Management Unit, Sierra, and Stanislaus National Forests. Dr. Peter Hoch, *Onagraceae* expert from the Missouri Botanical Garden, assisted with the surveys.

## ***Results***

Approximately 400 acres were surveyed across the known range of the species, approximately 75 acres of this on the Inyo NF. New populations of subalpine fireweed were located on the west

slope of the Sierra Nevada range, and its occurrence on the eastern slope of the Sierra was confirmed. Habitat parameters were narrowed with information obtained through the surveys.

### ***Evaluation***

The range extension onto the east side of the Sierra, and the additional information on suitable habitat acquired through these surveys will help to focus future survey efforts, and will be incorporated into a conservation assessment, to be completed in FY2008.

## **4) Fen Conservation Assessment**

The Fen Conservation Assessment Project was conducted in 2006. The objective was to conduct surveys for fens on the Inyo National Forest, using the indicator species of *Meesia triquetra* and *M. uliginosa*, and to assist in the coordination of a Regional fen conservation assessment. Aerial photographs were used in the initial assessment of fen potential. Potential fen sites were then field-verified using established protocols.

*Meesia triquetra* and *M. uliginosa* (hump moss) are listed as Forest Service Sensitive Species. Both are fen indicator species with wide distributions outside of California, which grow in “rich” fens characterized by pH values ranging from approximately 5.5 to 7.5. One population of *M. uliginosa* is known from the southern region of the John Muir Wilderness on the Inyo National Forest, near Crown Valley. No populations of *M. triquetra* are known from the Inyo National Forest, but extensive unsurveyed habitat exists.

### ***Results***

More than 4,700 acres were reviewed for potential to support fens as a result of this effort. The Assistant Forest Botanist developed an initial outline for a conservation strategy and worked with other botanists in the region to develop survey protocols and a Regional fen database.

### ***Evaluation***

Information from the surveys has been incorporated into a draft fen conservation assessment, which is scheduled for completion in FY2008.

## ***Water Quality Management***

### **Goals and Objectives**

The 1988 LRMP established the following goal related to watershed management:

National Forest management activities are conducted to maintain or improve soil productivity, to maintain favorable conditions of waterflow, and to comply with water quality goals as specified in state and federal clean water legislation for the sustained benefit of consumptive and nonconsumptive users of water.

The LRMP includes the following annual watershed objectives:

- Improvement of 350 acres annually, compared to the base year (1982) output of 100 acres.
- Water Quality yield at standard of 1,050,000 acre-feet annually, and
- Increased quantity of 7,000 acre-feet annually



## Monitoring Actions

The 1988 LRMP includes direction to monitor water quality management and watershed improvement. Objectives of the LRMP program, along with monitoring techniques and a summary of related monitoring elements from the 2004 Sierra Nevada Forest Plan Amendment, are displayed in the table below.

**Table 11. Summary of monitoring direction for water quality management.**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Water Quality Management	Assess compliance with BMP direction and continue to evaluate the effectiveness of BMPs	Review of prepared EAs, review of contract provisions, field activity reviews, water quality analysis field observations	Status and Change and Cause/Effect Monitoring for Aquatic, Riparian, and Meadow ecosystems (p. E-102): Water quality in streams? (Goal 1) Water quality and community composition in lakes? (Goal 1,3)
Watershed Improvement	Evaluate effectiveness of watershed improvement measures	Observations and measurements	Cause and Effect Monitoring, p. E-113: Does implementation of the recommendations in a landscape/watershed analysis result in maintenance and or restoration of watersheds and soil health/productivity?  Status and Change and Cause/Effect Monitoring for Aquatic, Riparian, and Meadow ecosystems (p. E-102): Watershed condition? (Goal 7)

### 1) Best Management Practices

Best Management Practices (BMPs) are an integral component of all management activities conducted on National Forests in Region 5. Monitoring of BMP implementation and effectiveness through the BMP Evaluation Program (EP) is necessary to meet the requirements of a Management Agency Agreement with the State of California. The Inyo National Forest documented the results of its 2006 BMP monitoring program in a Best Management Practices Evaluation Report dated June 1, 2007.

Onsite Evaluations are used to assess both BMP implementation and effectiveness. Implementation evaluations determine the extent to which planned, prescribed and/or required water quality protection measures were actually put in place on project sites. Effectiveness evaluations gauge the extent to which the practices met their water quality protection objectives.

In 2006, the Inyo National Forest completed 25 BMPEP onsite evaluations (Table 12). The Regional Office assigned 47 targets to the Inyo, but sample pools were only available for 39 (83%) of the target Evaluation Types. The Forest did not have a sample pool for six targeted Evaluation Types: T01, T07, E16, E18, E19, and V28.

Of the 39 targets with a sample pool, evaluations were completed on 25 (64%). Target Evaluation Types not met in 2006 include T05, E08, E09, E11, E17 (partial), F25 and M26.

**Table 12. Best Management Practices targets assigned and targets met, fiscal year 2006**

Activity Code	Evaluation Type	Targets Assigned	Number with Sample Pool	Targets Met
T01	Streamside Management Zones	1	0	0
T02	Skid Trails	1	1	1
T03	Suspended Yarding	0	0	0
T04	Landings	1	1	1
T05	Timber Sale Administration	1	1	0
T06	Special Erosion Control & Revegetation	0	0	0
T07	Meadow Protection	1	0	0
E08	Road Surface & Slope Protection	3	3	0
E09	Stream Crossings	2	2	0
E10	Road Decommissioning	2	2	2
E11	Control of Sidecast Material	2	2	0
E12	Servicing and Refueling	0	0	0
E13	In-channel Construction Practices	2	2	2
E14	Temporary Roads	0	0	0
E15	Rip Rap Composition	1	1	1
E16	Water Source Development	2	0	0
E17	Snow Removal	3	3	0
E18	Pioneer Road Construction	1	0	0
E19	Restoration of Borrow Pits and Quarries	2	0	0
E20	Management of Roads during Wet Periods	0	0	0
R22	Developed Recreation Sites	3	3	3
R23	Location of Stock Facilities in Wilderness	6	6	6
R30	Dispersed Recreation Sites	1	1	1
G24	Range Management	3	3	3
F25	Prescribed Fire	3	3	0
M26	Mining Operations	1	1	0
M27	Common Variety Minerals	1	1	1
V28	Vegetation Manipulation	1	0	0
V29	Revegetation of Surface Disturbed Areas	3	3	3
<b>TOTALS</b>		<b>47</b>	<b>39</b>	<b>25</b>

### ***Results and Evaluation***

Table 13 summarizes the results of the 25 evaluations to analyze BMP implementation and effectiveness. Below are the results:

- Implemented and effective (IE): 16 sites (64%).
- Not implemented, but effective (NIE): 3 sites (12%).
- Implemented but not effective (INE): 3 sites (12%).
- Not implemented and not effective (NINE): 3 sites (12%).

**Table 13. 2006 BMPEP Implementation and Effectiveness Matrix**

Form	Targets assigned	Targets completed	IE	NIE	INE	NINE
T02	1	1	1	0	0	0
T04	1	1	1	0	0	0
E10	2	2	1	0	1	0
E13	2	2	1	0	1	0
E15	1	1	1	0	0	0
E17	3	1	1	0	0	0
R22	3	3	1	1	0	1
R23	6	6	3	2	0	1
G24	3	3	2	0	1	0
M27	1	1	1	0	0	0
V29	3	3	3	0	0	0
R30	1	1	0	0	0	1
<b>Total</b>		<b>25</b>	<b>16</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Percent</b>			<b>64%</b>	<b>12%</b>	<b>12%</b>	<b>12%</b>

**Implemented and effective**

In 2006, 64% of the sites evaluated were both implemented and effective. Sites that were both implemented and effective include timber related BMPs (T02 and T04); one road decommissioning (E10); one stream crossing BMP (E13), the rip-rap related BMP (E15), one snow removal BMP (E17); one developed recreation site (R22); three of the commercial pack stock in wilderness evaluations (R23), two range management evaluations (G24); and all three Vegetation Manipulation evaluations (V29) (Table 13). Because these sites met both implementation and effectiveness criteria, no further action was taken.

**Not implemented, but effective**

Three sites (Pumice Flat Campground, Davis Lake stock camp, and Gladys Lake stock camp) did not have BMPs implemented, but corrective actions were not taken because there was little to no evidence of sedimentation or runoff at the sites.

- Pumice Flat Campground near Mammoth Lakes is a developed recreation site (R22). This is a user-created road that leads down into the channel and should be eliminated.
- In Hilton Creek, the Davis Lake stock camp is approximately 75 feet from the lakeshore. This site was not designated as a stock camp in the 2005 Pack Stock FEIS and so will not be used by commercial pack stock beginning in the 2007 season. In addition, there is very little private pack stock use in this area. Because the site should receive little to no pack stock use in the future, there are no concerns about the potential for future water quality impacts given the camp's current location.
- The Gladys Lake designated stock camp is also less than 100 feet from water. Campsites in the stock camp are within about 60 feet of water. The stock holding site, however, is more than 100 feet from water. Although close to water, the campsites are in good locations that have little to no potential to allow sediment or other substances to enter water. The campsites could not be moved much further from the lakeshore and should remain in place because they are not affecting water quality.

**Implemented but not effective**

Three (or 12%) of evaluations had BMPs implemented, but they are not effective.

For one Road Decommissioning (E10) evaluation, at Sawmill Sandflat (ID#E1005040062006), BMP implementation did not effectively prevent unintended vehicle use. This problem was addressed soon after the time of evaluation, with additional barricading to reduce access to the closed roads. Further, the site is closely monitored by OHV patrols.

For one In-Channel Construction (E13) evaluation, at the South Fork Deadman Creek Crossing hardening, BMP implementation did not effectively prevent a turbidity plume more than 20 channel widths below the crossing site during construction. The plume was of short duration, persisting just 1-2 hours, and resulted from the use of fill containing some sediment. The amount of turbidity was not significant, and corrective actions were not needed post-project to treat the area. Upon revisiting the site in May, 2007, it was found that there was minor failure of the treatment, with some loss of fill. The treatment was repaired soon after.

One range management evaluation (G24) in the Monache Allotment met implementation standards, but the management prescription was not effective in creating a stabilized stream bank. The Monache Allotment has been grazed for 150 years. The stream in the allotment has been destabilized since the early 1980s, likely due to higher grazing pressure in the past. However, current grazing also may contribute to the stream's condition and may slow or prevent recovery.

### **Not implemented and not effective**

Three of the 25 evaluated sites did not have BMPs implemented, and did not have effective protection of water quality. All are recreation-related sites.

At one developed recreation site (R22), Pumice Flat Group Camp, there are three individual campsites that are less than 30 feet from a small perennial stream. Sediment is reaching the Streamside Management Zone (SMZ) through a rut, but it seems to be dispersed before entering the stream. These sites should be considered for removal and restoration. Such an evaluation would likely involve several years of planning and implementation effort.

One stock camp in wilderness (R23) is located less than 100 feet from water, and sediment from the camp appears to be entering Rosalie Lake. This is a designated stock camp, with stock held more than 100 feet from water. Some of the campsites in the stock camp will be relocated to more than 100 feet from water as part of the stock camp designation process that was initiated in summer 2006 (implementation of the 2005 Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses project). This BMP evaluation will inform that process.

Finally, BMPs were found to be not implemented or effective at Sage Hen Meadow camp, a dispersed recreation site (R30). Some campsites were less than 20 feet from the stream and there was evidence of minor amounts of sediment reaching the stream. Later in 2006, the sites that were found to be too close to water were removed and barricades were placed to minimize campsite expansion. Restoration has been completed and the campsites are now inaccessible.

## ***Wilderness***

### **Goals and Objectives**

The 1988 LRMP includes the following goal related to wilderness:

Classified wilderness is managed to protect and perpetuate the wilderness character of the area; to provide opportunities for primitive recreation; to maintain wildlife and fish, scenic, and watershed values; and to maintain or enhance the quality of wilderness experiences.

The wilderness recreation objective established by the LRMP is measured in recreation visitor days (RVD). The LRMP identified a base year (1982) output of 540,000 RVDs, and an annual objective of 644,000 RVDs.

## Monitoring Actions

The 1988 LRMP includes direction to compare actual wilderness use to planned use. The 2004 SNFPA did not include monitoring elements specific to designated wilderness.

**Table 14. Summary of monitoring direction for designated Wilderness**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Actual use compared to Planned (established) desired conditions	Measure changes and compare with limits of acceptable change and evaluate associated environmental effects	Remeasure campsite condition class; record changes according to FSM 2323.1 R-5 supp. #145	Not Applicable

LRMP monitoring direction for wilderness was amended in 2001, with the Management Direction for the John Muir, Ansel Adams, and Dinkey Lakes Wildernesses EIS and Plan, and again in 2005 with the Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses EIS.

The 2001 Plan supplements the wilderness monitoring requirements on page 257 of the LRMP with the Inventory and Monitoring Strategy in Appendix H of the Management Direction for the John Muir, Ansel Adams, and Dinkey Lakes Wildernesses FEIS. This monitoring applies to the portions of the Ansel Adams and John Muir Wildernesses on the Inyo National Forest only. The strategy includes monitoring of variables such as campsite condition and density, visitor experience, user trail density and condition, bighorn sheep disturbance, meadow ecological state and function, and water quality. Monitoring frequency varies from annual to periodic.

The monitoring plan for the 2005 Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses FEIS/ROD includes direction to collect: 1) baseline information for grazing, designated stock camps, use trails, and destinations at various locations across the Wildernesses; 2) conduct annual or biannual monitoring at identified areas to evaluate designated campsites, use trails, range readiness, destinations, fens, wildlife habitat, and impacts to heritage resources; 3a) complete monitoring of locations and/or resources when triggered by certain events or activity; 3b) acquire information in areas of low use, low risk areas, or areas of single resource concerns with a prediction that use levels will not cause further degradation; and 3c) some of the Single Resource Monitoring locations have been identified as representative of other locations in the planning area

### 1. Comparison of Actual Visitor Use to LRMP Objective

The Forest gathered information about visitor use of designated Wilderness areas during 2006 as part of the National Visitor Use Monitoring project. For more information please see the Recreation section of this report.

## **2. Integrated Monitoring Protocol, 2005 Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses EIS/ROD**

The 2005 Record of Decision describes a three-tiered approach to monitoring and evaluation of commercial pack stock activities in the Ansel Adams and John Muir Wildernesses: 1) baseline data collection, 2) integrated monitoring of destinations, and 3) single resource monitoring.

Integrated monitoring is intended to monitor and provide evaluation of management actions where multiple resource concerns or risks have been identified and pack stock use is authorized. The Record of Decision (pp. 47-48) includes a list of locations with the highest need for regular monitoring for effectiveness and implementation of the decision.

In 2006, wilderness managers and resource specialists draft and tested an integrated monitoring protocol adapted from the Record of Decision and a Draft Study Plan for Evaluation of Commercial Pack Stock Operations in the Ansel Adams and John Muir Wildernesses (USDA 2004b). The draft protocol included evaluation of designated stock campsites for BMP compliance, resource impacts associated with use trails, overall destination attributes, and pack stock-associated effects on meadows (grazing), fens, wildlife habitat, and heritage resources.

### ***Results***

Internal review of the integrated monitoring protocol found that the information obtained did not provide sufficient information to answer the two main study questions for this monitoring effort: 1) Are the desired conditions being met? 2) How effective are the management actions in either moving the wilderness resource towards or maintaining desired conditions?

### ***Evaluation***

The 2005 Record of Decision will not be fully implemented until either new special use authorizations are issued to commercial pack stock operators or the 2001 Court Order is no longer in effect. Because many elements of the direction in the 2005 Record of Decision were not implemented during the 2006 season, full monitoring results and evaluation were not completed.

## ***Wildlife***

### **Goals and Objectives**

The 1988 LRMP established the following goals related to wildlife:

Wildlife habitat is maintained to provide species diversity, to ensure that viable populations of existing native vertebrates and invertebrates are maintained, and that the habitats of management emphasis species are maintained or improved.

The habitats of threatened or endangered animals are protected or improved to assist the recovery of the species in cooperation with State and other Federal agencies.

## **Monitoring Actions**

### **1988 LRMP**

The LRMP identifies numerous monitoring activities for wildlife. It includes species-specific monitoring direction for goshawk, mule deer, peregrine falcon, bald eagle, and Sierra Nevada and Desert bighorn sheep (LRMP, pp. 254-255). The LRMP also calls for monitoring related to habitat capability for Management Indicator Species (MIS), sensitive species, snags and downed

logs, and validation of relationships between MIS and the species they represent (pp. 256-257). Because this report presents monitoring results for willow flycatcher, a Forest Service sensitive species, the following table presents LRMP monitoring direction related that species rather than attempting to summarize all wildlife monitoring direction in the LRMP.

### **Sierra Nevada Forest Plan Amendment Adaptive Management Strategy**

Recognizing that certain wildlife species are integral components of forest ecosystems and are essential to their function, the 2004 Sierra Nevada Forest Plan Amendment (SNFPA) Adaptive Management Strategy presents wildlife monitoring under the broader ecosystem topic areas of “Old Forests and Associated Species”, “Lower Westside Hardwood Forests”, and “Aquatic, Riparian, and Meadow Ecosystems” (2001 SNFPA, Appendix E, p. E-16). Species were assigned to one of the three ecosystems based on their habitat associations.

The SNFPA Adaptive Management Strategy calls for monitoring of Management Indicator Species (MIS) identified in each Forest’s LRMP as well as each of the ten species-at-risk for which the SNFPA EIS determined the need for a full viability analysis. The ten species-at-risk (California spotted owl, Northern goshawk, American marten, Pacific fisher, Sierra Nevada red fox, wolverine, foothill and mountain yellow-legged frogs, Yosemite toad, and willow flycatcher) receive individual issue treatments under the ecosystem topic areas. The type of monitoring proposed for MIS is listed under the “MIS and Species-at-Risk” issue in each of the ecosystem topic areas. Management standards and guidelines for the ten species-at-risk, which include direction for surveys for specific aspects of project planning and analysis, are presented in Appendix A, Part D, of the 2004 SNFPA ROD.

Table 15 summarizes monitoring direction for the willow flycatcher. It shows the overlap in direction between the 1988 LRMP and the 2004 SNFPA Adaptive Management Strategy described in Appendix E of the 2001 SNFPA. As shown, the LRMP focuses on monitoring of habitat capability, while the SNFPA emphasizes both population and habitat monitoring.

**Table 15. Summary of monitoring direction for willow flycatcher, a Forest Service sensitive wildlife species.**

Activity to be Measured (LRMP)	Summary of LRMP Objective	LRMP Monitoring Technique	Related 2001/2004 Framework Monitoring
Other State-listed or sensitive species as affected by specific projects	Ensure protection is provided by S&G and Habitat Capability models	Appropriate survey methods. Application and development of Habitat Capability to delineate habitats on project areas	<u>For willow flycatcher</u> : Population monitoring (distribution and abundance) and habitat trends (p. E-94). Approach uses a combination of status and change, cause and effect, and implementation monitoring
Threatened, endangered, and sensitive species management	Ensure that management activities afford protection of these species as prescribed in the Plan	Sample EAs and conduct field surveys of completed project.	NA

### **1. Mono Basin Willow Flycatcher Project**

In 2006, Point Reyes Bird Observatory (PRBO) Conservation Science completed the fourth season of the Mono Basin Willow Flycatcher Project (MBWFP; McCreedy 2006). The project is designed as a long term study to investigate the apparent reoccupation of Inyo National Forest (Inyo NF) and Los Angeles Department of Water and Power (LADWP) holdings on lower Rush



Creek by a population of Willow Flycatchers (*Empidonax traillii*). Willow Flycatchers are a Forest Service Sensitive Species and California State Endangered species (CDFG 1993).

Surveys began June 6, 2006, and ended August 29, 2006. Initial surveys consisted of territory spot mapping in accordance with International Bird Conservation Committee recommendations (IBCC 1970) and following Ralph et al. (1993). Lower Rush Creek was divided into four sections of roughly equal size, which were each covered roughly once every four days. All Willow Flycatcher detections were marked with a Garmin GPS V receiver and added to GIS coverage to maximize spot-mapping accuracy. Sex and age of detected adults were noted when possible, and color-band identifications were recorded whenever possible.

### ***Results***

From June through August 2006, PRBO documented seven territorial males on lower Rush Creek, and five nesting females (McCreedy 2006). Two males were unmated. A total of eleven nests were located on five territories. Three of these eleven nests fledged young. Nest building began on June 11, 2006.

Ten out of fourteen of color-banded adults present in 2005 returned to Rush Creek in 2006. In addition, one of three fledglings banded in 2005 returned in 2006. Only one of the 12 adults present in 2005 was born and banded on Rush Creek, and this adult, a third-year male, did not secure a mate.

To monitor future juvenile recruitment and population dispersal, all seven fledged nestlings were color-banded in 2006. In addition, two new immigrant adults were mist-netted and color-banded. The entire Willow Flycatcher population at Rush Creek has been color-banded since 2004, enabling PRBO the rare opportunity to fully assess immigration to Rush Creek and emigration to surrounding riparian areas in 2006 and beyond.

### ***Evaluation***

The twelve territorial adults detected in 2006 represent a decrease from 14 territorial adults detected in 2005 and 16 territorial adults observed in 2004 (McCreedy 2005). Seven fledglings were raised by five females, a fecundity of 1.4. This is the highest fecundity observed on Rush Creek since 2003, and seven nestlings were the most produced in any season since 2003.

Of the eight nest failures in 2006, seven were caused by Brown-headed Cowbird (*Molothrus ater*) activity. Brown-headed Cowbirds significantly and negatively impacted Willow Flycatcher nest success at Rush Creek in 2006, as in 2005. Sixty-four percent of the 2006 nests were parasitized, and cowbirds directly caused the failure of seven out of eleven nests. Sixty-four percent of the 2005 Willow Flycatcher nests were parasitized as well (McCreedy 2005).

In *Research and Management of the Brown-headed Cowbird in Western Landscapes* (1999), a guide to research and management action on cowbirds in the western United States, Smith recommends that managers consider initiating cowbird management programs when the frequency of parasitism consistently exceeds 60% (107).

However, only one of 31 Brown-headed Cowbird eggs laid in Willow Flycatcher nests from 2001 to 2006 has survived to fledge, and none of the seven nests that were parasitized in 2006 fledged cowbird young. Though Willow Flycatchers are frequent cowbird hosts on Rush Creek, and though cowbird parasitism almost always results in host nest failure, Willow Flycatchers very rarely raise cowbird eggs to fledge on Rush Creek.

Though Brown-headed Cowbirds parasitized the same proportion of Willow Flycatcher nests in 2006 as in 2005, the population held a higher fecundity in 2006. This difference resulted from a decrease in nest failure due to other predators besides cowbirds. Less than ten percent of Willow Flycatcher eggs were lost to non-cowbird predation in 2006, while roughly one out of three Willow Flycatcher eggs were lost to non-cowbird predation in 2005 (McCreedy 2005).

The lower Rush Creek population has expressed nest site and territory habitat attributes anomalous to other Willow Flycatcher populations in California. These attributes include use of Woods' Rose (*Rosa woodsii*) for 100% of detected nest sites from 2001 through 2006, and a lack of territory and nest site correlation to surface water (McCreedy and Heath 2004). Research into the use of these anomalous habitats will identify alternatives to typically surveyed habitats, which will assist the US Forest Service and California Department of Fish and Game in the conservation of this species.

## Forest Plan Amendments and Corrections

There was one non-significant amendment to the forest plan in fiscal year 2006. LRMP Amendment #10 was completed contemporaneously with the *Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses* EIS and Record of Decision. The project documentation serves as the evaluation report for the plan amendment (36 CFR 219.6 (a)(2)). The rationale for the plan amendment is included on pages 37-40 of the Record of Decision, which was signed by Forest Supervisors Jeff Bailey and Edward Cole on November 10, 2005.

Amendment #10 supplements the monitoring direction for the Ansel Adams and John Muir Wildernesses contained on p. 257 of the 1988 LRMP. Amendment #10 includes direction to collect: 1) baseline information for grazing, designated stock camps, use trails, and destinations at various locations across the Wildernesses; 2) conduct annual or biannual monitoring at identified areas to evaluate designated campsites, use trails, range readiness, destinations, fens, wildlife habitat, and impacts to heritage resources; 3a) monitoring of locations and/or resources when triggered by certain events or activity; 3b) acquire information in areas of low use, low risk areas, or areas of single resource concerns with a prediction that use levels will not cause further degradation; and 3c) some of the Single Resource Monitoring locations have been identified as representative of other locations in the planning area.

## Action Plan or Recommendations

The following recommendations are focused on improving Forest-wide programs, projects, and activities by making changes in the way individual projects or activities are planned and documented.

- Ensure an appropriate interdisciplinary team is assigned to each project. Document roles and responsibilities in a Project Initiation Letter. The level of detail in the Project Initiation Letter should be commensurate with the scale and intensity of the proposed action.
- Clarify key points of line officer engagement in the planning process. Consider establishing a "briefing" process to ensure line officer approval of purpose and need, proposed action, scoping results (issues), alternatives, NEPA documents, and decision documents.

- Clarify public involvement requirements with all project leaders to ensure the proper tools are used to engage the public in the planning process at the appropriate time (e.g., use of news releases for scoping vs. legal notices to announce legal comment periods).
- Standardize project record documentation. Work with project leaders to develop a better understanding of the supporting documentation behind a decision, as well as how that documentation should be organized in the project record.
- Work with project leaders, line officers, and other specialists to develop monitoring “tracking sheets” to ensure project-level monitoring is completed as described in the decision document.
- Emphasize need for project leaders to keep their project information and accomplishments up to date in the PALS, INFRA, and FACTS databases. This is necessary in order to provide the public with notice about upcoming projects, allow us to efficiently track and monitor projects, and to get proper credit for accomplished projects.
- Consider annual collection of visitor use data using a simplified version of NVUM protocol. Collecting data every five years as prescribed by the NVUM protocol may make it difficult to detect trends in visitor use that should be addressed through management actions.

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## Public Participation/Disclosure Plan

The Fiscal Year 2006 Monitoring and Evaluation Report will be posted to the Inyo National Forest website. Copies will be provided to interested individuals upon request.

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