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Land Management Plan

Part 2 Angeles National Forest Strategy



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Tables and Figures

Note: Tables were managed in a database environment, and were assigned unique numbers as their need was identified. During the lifetime of the analysis, over 500 tables were created for potential use. Some tables were later determined to be redundant or unnecessary. The planning team decided not to renumber the tables for publication due to the amount of work required to locate and update every reference to every table. Thus, the table numbers are not consecutive, and all table numbers were not used in the final documents.

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Document Format Protocols

The following format protocols (font type, size, and strength, as well as indentation) are used throughout the Land Management Plan.

All headings are Arial bold, in varying font sizes and indentation.

Text is generally Times New Roman, 12 point regular.

Table Titles are Arial, bold, 11 point.

Table column headings are in Arial Narrow, 10 pt, with a shaded background.
Table cell contents are Times New Roman, 12 point.



Photograph captions have a top and bottom border to separate them from regular text, and are 12 point Arial font. For example, this is a clip-art butterfly.

References to websites (URLs) are in OCR B MT, 10 point in the printed version. In the electronic version, these are live links. The electronic version is posted at:

<http://www.fs.fed.us/r5/angeles/projects/lmp>

Land Management Plan Strategy

This document is Part 2 of the three-part (vision, strategy and design criteria) land and resource management plan (forest plan) for the Angeles National Forest. The strategic direction and program emphasis objectives that are expected to result in the sustainability (social, economic and ecological) of the national forest and, over the long-term, the maintenance of a healthy forest are described in this document. The legislative mandate for the management of national forests requires that public lands be conservatively used and managed in order to ensure their sustainability and to guarantee that future generations will continue to benefit from their many values.¹ Forest plans are founded on the concept of sustainable use of the national forests. In its simplest terms, sustainability means to maintain or prolong. In order to foster the concept of sustainability, this section describes the program emphasis and strategies that may be employed to enable multiple uses to occur in ways that promote long-term sustainability. The program emphasis and management strategies are continuously projected over a three to five year period (over the life of the plan) in order to describe the projects or activities that may be employed as we move along the pathways toward the realization of the desired conditions described in Part 1 of the revised forest plan.

Part 1 describes the national forest in the future, the niche it occupies in the community framework, the desired conditions the Forest Service is striving to realize, as well as the challenges the national forest will resolve in getting there. Part 2 supplements Part 1 of the forest plan. Part 2 also



Mountain vista, Angeles NF

constitutes the ‘tools’ resource staff will use to accomplish the objectives that contribute to the realization of the desired conditions. Part 2 defines and describes each of the land use zones. The land use zones are an on-the-ground manifestation of the desired conditions and are the primary tools used to describe the strategic direction, including the management intent and suitable uses for areas of the national forest where the zone is used. Part 2 also includes a prospectus describing the past performance history of the national forest and the anticipated performance in three to five year increments over the life of the forest plan. Place-Based Program Emphasis is also described so that people will have a better understanding of what types of management is expected in specific areas of the national forest. Finally, Part 2 addresses the monitoring to be done to assess the effective implementation of the strategies used.

¹ Committee of Scientists issued a final report on March 15, 1999, entitled *Sustaining the People’s Lands*.

Part 3 of the forest plan is the design criteria and constitutes the ‘rules’ that the Forest Service will follow as the national forest implements projects and activities over time. The rules include the laws, agency policy, standards, and the associated guidance that is referenced for use at the project level.

Suitable Land Uses

Land Use Zones

Land use zones (CFR 219.11(c)) were used to map the Angeles National Forest (ANF) for the purpose of identifying appropriate management types of ‘uses’ that are consistent with the achievement of the desired conditions described in Part 1 of the revised forest plan. These land use zones are used to help demonstrate clearly management’s intent and to indicate the anticipated level of public land use in any area (Place) of the national forest. The activities that are allowed in each zone are expected to result in progress along the pathway toward the realization of the desired conditions. National forest land use zoning is similar in concept to the zoning models that are being used by counties or municipalities throughout southern California. Tables 2.1.1 through 2.1.4 display the suitability of specific uses by land use zone (note: Recommended wilderness and existing wilderness zones are combined into the wilderness zone column on the tables).

Specific uses are allowed on national forests except when identified as not suitable, because of law, national or regional policy, or the revised forest plan. What this means is that the forest plans are permissive. That is, activities may occur unless the forest plan says that they cannot. However, activities are not authorized based solely on the land use zoning for this forest plan. The suitable uses identified in tables 2.1.1 through 2.1.4 are intended as guidance for consideration of future activities and do not affect existing authorized occupancy and uses or the administrative procedures used to manage them. Most ground disturbing activities require further project or site-specific analysis before a decision is made. The uses that are identified as suitable in each of the land use zones are subject to the design criteria, as well as the other guidance described in Part 3 (Appendix A) of this forest plan. The standards (along with applicable guidance) are typically used during project or site-specific planning. Applicable guidance includes the body of information encompassed by the Forest Service Manual and Handbooks, Species Accounts, Best Management Practices, Soil and Water Conservation Handbooks, the Built Environment Image Guide, or other documents with guidance that is identified for use based on site-specific project analysis.

Several activities are described in the suitable use tables as being permitted in designated areas only. What this means, for example, is that motorized uses are restricted to designated roads, trails and limited open areas and may be restricted or expanded further in order to achieve the desired condition for the land use zones. Vehicular traffic traveling cross-country or on non-designated routes is not allowed in any zone.

Table 2.1.1. Suitable Uses Resource Management, ANF:

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W	EF
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness	Experimental Forest
Rangeland Type Conversion for Forage production	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Restoration of Vegetation Condition	Suitable	Suitable	Suitable	Suitable	By Exception	Suitable	By Exception
Disposal of National Forest System lands	By Exception	By Exception	By Exception	By Exception	By Exception	Not Suitable	By Exception

*By Exception = Conditions which are not generally compatible with the land use zone but may be appropriate under certain circumstances.

Table 2.1.2. Suitable Uses Public Use and Enjoyment, ANF

	DAI	BC	BCMUR	BCNM	CB	W	EF
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness	Experimental Forest
Recreation Residence Tracts	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Designated Areas
Organization Camps	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Designated Areas
Lodges, Resorts and Clubs	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Designated Areas
Developed Winter Sports Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Hunting and Fishing	Regulated by the State (CDF&G)	Regulated by the State (CDF&G)	Regulated by the State (CDF&G)	Regulated by the State (CDF&G)	Regulated by the State (CDF&G)	Regulated by the State (CDF&G)	Regulated by the State (CDF&G)
Target Shooting Areas	By Exception	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable
Public Motorized Use on Forest System Roads	Suitable	Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Authorized Motorized Use	Suitable	Suitable	Suitable	By Exception	By Exception	By Exception	Suitable

	DAI	BC	BCMUR	BCNM	CB	W	EF
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness	Experimental Forest
Off-Highway Vehicle Use on Forest System Roads and Trails	Designated Roads and Trails	Designated Roads and Trails	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Public Motorized Use off Forest System Roads and Trails	Suitable in Designated Open Areas	Suitable in Designated Open Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Mountain Bikes Forest System Roads and Trails	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Not Suitable	Not Suitable
Dispersed Area Camping	Suitable Unless Otherwise Restricted	Suitable Unless Otherwise Restricted	Suitable Unless Otherwise Restricted	Suitable Unless Otherwise Restricted	Not Suitable	Suitable Unless Otherwise Restricted	Not Suitable

*By Exception = Conditions which are not generally compatible with the land use zone but may be appropriate under certain circumstances.

CDF&G: California Department of Fish and Game

Table 2.1.3. Suitable Uses Commodity and Commercial Uses, ANF:

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W	EF
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness	Experimental Forest
(Non-Rec) Special Uses: Low Intensity Land Use	Suitable	Suitable	Suitable	By Exception	By Exception	By Exception	For Research
Communication Sites	Designated Areas	Designated Areas	Designated Areas	By Exception	By Exception	Not Suitable	By Exception
Livestock Grazing	Designated Areas	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Designated Areas	Not Suitable
Major Transportation Corridors	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Major Utility Corridors	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Road construction or re-construction	Suitable	Suitable	Suitable for authorized use	Not Suitable	Not Suitable	Not Suitable	By Exception

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W	EF
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness	Experimental Forest
Developed Facilities	Suitable	Suitable	By Exception	Not Suitable	Not Suitable	Not Suitable	For Research
Oil and Gas Exploration and Development Areas	Suitable	Suitable	By Exception	By Exception	Not Suitable	Not Suitable	Not Suitable
Minerals Resources Exploration and Development	Suitable	Suitable	By Exception	By Exception	By Exception	Not Suitable	Not Suitable
Renewable Energy Resources	Suitable	Suitable	By Exception	By Exception	Not Suitable	Not Suitable	Not Suitable
Wood Products, including fuelwood harvesting	Suitable	Suitable	Suitable	Suitable	By Exception	Not Suitable	By Exception
Special Forest Products	Suitable	Suitable	Suitable	Suitable	By Exception	By Exception	Not Suitable

*By Exception = Conditions which are not generally compatible with the land use zone but may be appropriate under certain circumstances.

Table 2.1.4. Suitable Uses Fire and Fuels Management, ANF:

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W	EF
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness	Experimental Forest
Community Protection Areas	Suitable	Suitable	Suitable	Suitable	By Exception	By Exception	Suitable
Fuelbreak Construction including type conversion	Suitable	Suitable	Suitable	By Exception	By Exception	By Exception	For Research
Wildland Fire Use Strategy	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable

*By Exception = Conditions which are not generally compatible with the land use zone but may be appropriate under certain circumstances.

Seven land use zones have been identified for the Angeles National Forest (see Appendix C, Land Use Zone maps). In addition, the San Dimas Experimental Forest is classified as a separate zone due to the specific research mission of this area. These zones, including overlays described in the following section are applicable only to the National Forest System (NFS) lands and in no

way modify zoning applied to other ownerships by local government agencies. When other lands are acquired and become National Forest System lands, then the adjacent land use zones are applied unless changed through a Forest Plan Amendment. The land use zone descriptions in this section help to paint a picture of the anticipated level or intensity of public use or administrative activities. The existing character of each zone is included, along with the characteristic Recreation Opportunity Spectrum (ROS) objective (see Appendix C, Recreation Opportunity Spectrum Maps). The zones, in order of decreasing land use intensity are:

- Developed Area Interface (DAI)
- Back Country (BC)
- Back Country Motorized Use Restricted (BCMUR)
- Back Country Non-Motorized (BCNM)
- Critical Biological (CB)
- Recommended Wilderness (RW)
- Existing Wilderness (EW)
- Experimental Forest (EF)

Developed Area Interface (85,828 acres or 13 percent of the national forest): This zone includes areas adjacent to communities or concentrated use areas and developed sites with more scattered or isolated community infrastructure. The level of human use and infrastructure is typically higher than in other zones.

The characteristic ROS objectives are Rural and Roaded Natural. A number of highly popular developed recreation facilities, recreation and non-recreation special-uses facilities and national forest administrative facilities may be included in this zone. The level of development within this zone varies between areas that are highly developed to areas where no development has occurred.

The DAI zone is managed for motorized public access. Approximately 23.6 percent of the National Forest System and non-system user created routes are found in this zone including about 30 miles of unclassified road. The national forest road system is generally managed and maintained to a high standard, facilitating public access to developed recreation opportunities and authorized infrastructure. A designated off-highway vehicle (OHV) system may be included in some locations, often including trailheads or staging areas leading to Back Country areas.

Most direct community protection Wildland/Urban Interface Defense Zones (see Appendix K in Part 3 of the forest plan) and some Threat Zones are anticipated to be located within the DAI land use zone.

Although this zone may have a broad range of higher intensity uses, the management intent is to limit development to a slow increase of carefully designed facilities to help direct use into the most suitable areas and concentrating on improving facilities before developing new ones. National Forest staff expect that there will be some road construction, but anticipate no more than a 5 percent net-increase in road mileage.

Back Country (161,392 acres or 24 percent of the national forest): This zone includes areas of the national forest that are generally undeveloped with few roads. The characteristic ROS objectives are Semi-Primitive Motorized with limited areas of Roaded Natural. Most of the

national forest's remote recreation and administrative facilities are found in this zone. The level of human use and infrastructure is generally low to moderate.

The zone is managed for motorized public access on designated roads and trails. Approximately 45.5 percent of the National Forest System and non-system roads are found in this zone including 44 miles of unclassified road. Some roads within this zone may be closed to public access. The majority of National Forest System roads and other road systems that interconnect areas of concentrated development are found in this zone. A network of low standard Back Country roads provide access for a wide variety of dispersed recreation opportunities in remote areas such as camping and access to trailhead facilities for hiking or biking. Some new trails may be constructed to improve opportunities between trails on the existing system. The majority of the designated OHV system is found here including limited areas that are designated for OHV use (Angeles and Cleveland National Forests).

Wildland/Urban Interface Threat Zones (see Appendix K in Part 3 of the forest plan) are characteristic in this zone. Managers anticipate locating community protection vegetation treatments that require permanent roaded access (such as fuelbreaks) within the Back Country land use zone.

Although this zone generally allows a broad range of uses, the management intent is to retain the natural character inherent in this zone and limit the level and type of development. National Forest staff expect to manage the zone for no increase or a very low level of increase in the national forest road system. Managers expect to limit development to a slow increase of carefully designed facilities to help direct use into the most suitable areas and remove temporary facilities when they are no longer needed.

Back Country (Motorized Use Restricted) (52,791 acres or 8 percent of the national forest):

This zone includes areas of the national forest that are generally undeveloped with few roads. Few facilities are found in this zone, but some may occur in remote locations. The characteristic ROS objectives are Semi-Primitive Motorized and Semi-Primitive Non-Motorized. The level of human use and infrastructure is low to moderate.

The zone will be managed for non-motorized (mechanized, equestrian, and pedestrian) public access. Motorized use is restricted to administrative purposes only that includes Forest Service, other agency, or tribal government needs, as well as access needed to private land or authorized special-uses. Administrative access is intermittent and generally limited to existing roads or to temporary roads needed for resource management purposes. The intent is to use temporary roads or gated permanent roads while management is occurring and then gate the permanent roads or remove the temporary routes when done.

Approximately 22.8 percent of the National Forest System and non-system roads are found in this zone including 16 miles of unclassified road. A limited number of National Forest System roads and other road systems that access administrative and authorized facilities and private land are found here. A network of low standard Back Country roads provides access for a wide variety of non-motorized dispersed recreation opportunities including camping, hiking, biking, hunting and fishing. Designated OHV use is not suitable in this zone.

Wildland/Urban Interface Threat Zones (see Appendix K in part 3 of the forest plan) are characteristic in this zone. Managers anticipate locating community protection vegetation treatments that require permanent roaded access (such as fuelbreaks) within the Back Country Motorized Use Restricted land use zone.

Although this zone allows a range of low intensity land uses, the management intent is to retain the natural character of the zone and limit the level and type of development. Some roads will be constructed and maintained, but the intent is to manage the zone for no increase or a very low level of increase in system development. Managers will consider expanding the ability of existing facilities to meet demand before proposing new facilities and removing temporary facilities when they are no longer needed.

Back Country Non-Motorized (248,399 acres or 37 percent of the national forest): This zone generally includes areas of the national forest that are undeveloped with few, if any roads. The characteristic ROS objective is Semi-Primitive Non-Motorized. Developed facilities supporting dispersed recreation activities are minimal and generally limited to trails and signage. The level of human use and infrastructure is low.

The zone is managed for a range of non-motorized uses that include mechanized, equestrian and pedestrian public access. Administrative access (usually for community protection) is allowed by exception for emergency situations and for short duration management purposes (such as fuel treatment). The intent is to use temporary routes while management is occurring and then close or remove the route. Access to authorized facilities and to private land is not anticipated but may occur by exception when there are existing rights to such access.

Approximately 3.1 percent of the National Forest System and non-system roads are found in this zone including about 11 miles of unclassified road. A network of low standard Back Country trails provide public access for a wide variety of non-motorized dispersed recreation opportunities including remote area camping, hiking, mountain biking, hunting and fishing. Designated OHV use is not suitable in this zone, and no designated OHV routes are located in this zone.

Wildland/Urban Interface Threat Zones (see Appendix K in Part 3 of the forest plan) may occur in this zone. Managers anticipate locating community protection vegetation treatments that require only temporary roaded access (such as mechanical thinning of trees or prescribed burning) within the Back Country Non-Motorized land use zone.

While a range of non-motorized public uses are generally allowed, the management intent is to typically retain the undeveloped character and natural appearance (fuelbreaks that contrast with the natural character may be present) of this zone and to limit the level of development to a low level of increase. Facility construction (except trails) is generally not allowed, but may occur in remote locations where roaded access is not needed for maintenance. Managers are expected to remove temporary facilities when they are no longer needed.

Critical Biological (3,920 acres or less than 1 percent of the national forest): This zone includes the most important areas on the national forest to manage for the protection of species-at-risk. Facilities are minimal to discourage human use. The level of human use and infrastructure is low to moderate.

Wildland/Urban Interface Threat Zones (see Appendix K in Part 3 of the forest plan) may occur in this zone. Community protection vegetation treatments within the Critical Biological land use zone may occur by exception. In these cases, managers will consider species and habitat needs.

The management intent is to retain the natural character and habitat characteristics in this zone and limit the level of human development to manage for protection of species-at-risk. Activities and modification to existing infrastructure are allowed if they are beneficial or neutral to the species for which the zone was primarily designated (see table 524: Angeles NF Critical

Biological Land Use Zones). Human uses are more restricted in this zone than in Back Country Non-Motorized zones in order to protect species needs, but are not excluded. Low impact uses, such as hiking, mountain biking and hunting are generally allowed. Motorized use of existing National Forest System roads is allowed. Approximately 1.3 percent of the National Forest System and non-system roads are found in this zone including one mile of unclassified road. Road density will not be increased and may be decreased as a result of species protection requirements.

Table 524. Angeles NF Critical Biological Land Use Zones

Primary Species Protected and Primary Uses			
CBLUZ	Primary Species Protected	Place	Primary Uses**
South Fork Big Rock Creek	Mountain yellow-legged frog	Angeles High Country	Existing use of Sycamore Flats, South Fork and Little Jimmy Campgrounds is retained
South Fork Little Rock Creek	Mountain yellow-legged frog	Angeles High Country	Existing use of the Williamson Rock climbing area is retained
Lower Little Rock Creek	Arroyo toad	Mojave Front Country	Ongoing activities at Little Rock Reservoir and associated developed areas to include the boat ramp, Fisherman’s Point, Juniper, Rock Point and Sage Picnic Areas are retained. Use of Little Rock Road 5N04 is retained. Little Rock OHV Area is closed above Rock Point Day Use Area; however a small segment is retained. Little Rock OHV route adjacent to CBLUZ is retained for opportunities to define an improved system while relocating established routes outside of sensitive areas. Joshua Tree and Basin Campgrounds and Santiago OHV route are currently closed due to potential impacts to the arroyo toad. Site specific analysis of these areas will determine if they are a suitable use within the CBLUZ.
West Fork San Gabriel River	Santa Ana sucker	San Gabriel Canyon	CBLUZ location is Cogswell Dam downstream to the beginning of the wild trout area (2 nd bridge). This area is currently managed as a wild trout stream and this designation is retained. Management of the Cogswell Dam for flood control and water conservation including water release is not in conflict with the CBLUZ designation and is retained. Installation of toilets can be considered neutral or beneficial use. Administrative use and use of Forest Service Road 2N25 as a hiking and bicycle path will be retained.

Primary Species Protected and Primary Uses			
CBLUZ	Primary Species Protected	Place	Primary Uses**
Upper Big Tujunga	Arroyo toad, California red-legged frog	Angeles Uplands (West)	Access on county road 3N19 and associated maintenance, access to private property in section 35, existing Special Use Permits, and proposed OHV corridor across Alder Creek area are retained. Dispersed recreation use will continue to be limited by limiting parking areas.
Soledad Canyon	Arroyo toad, unarmored three-spine stickleback	Soledad Front Country	The Wildlife Viewing site at this location will be retained. Soledad Campground will continue to be closed and facilities removed. Private lands surrounding the CBLUZ are not affected.
San Francisquito Canyon	California red-legged frog, unarmored three-spine stickleback, <i>Berberis nevinii</i>	Santa Clara Canyons	Access to the old Saint Francis dam site is retained. Because of its historical context, and to avoid use conflicts associated with visitor use at the dam site, the CBLUZ is disconnected at this location for a short distance.
Castaic	Arroyo toad	Santa Clara Canyons	Administrative access on FS Road 6N13 will be retained with restrictions on night-time use. Grazing has been discontinued.
Fish Canyon	Arroyo toad	Santa Clara Canyons	Administrative access on FS road 6N32 will be retained with restrictions on night-time use. Grazing has been discontinued. Cienega Campground will remain closed and facilities removed.

**This is a partial list of activities associated with these CBLUZ's. See Suitable Use Tables (Part 2) for full description of all suitable uses.

Existing Wilderness (81,924 acres or 12 percent of the national forest): This zone includes Congressionally designated wildernesses. Only uses consistent with all applicable wilderness legislation and with the primitive character are allowed in existing and recommended wilderness. Road access is limited to uses identified in the specific legislation designating the wilderness (see wilderness in the forest-specific design criteria of Part 2 of the forest plan), approximately .7 percent of the National Forest System and non-system roads are found in this zone including 1.4 miles of unclassified road. The characteristic Recreation Opportunity Spectrum objective is Primitive with limited areas of Semi-Primitive Non-Motorized.

Wildland/Urban Interface Threat Zones (see Appendix K in Part 3 of the forest plan) may occur in this zone. Community Protection vegetation treatments within the existing wilderness zone may occur by exception. In these cases, managers will consider wilderness needs.

The management intent is to administer this zone for the use and enjoyment of people while preserving its wilderness character and natural conditions. Non-conforming uses will be removed to preserve wilderness character. Designated wilderness includes:

- Sheep Mountain Wilderness
- San Gabriel Wilderness
- Cucamonga

Recommended Wilderness (13,231 acres or 2 percent of the national forest): This zone includes land that the Forest Service is recommending to Congress for wilderness designation and will be managed in the same manner as existing wilderness so that the wilderness attributes of the area are retained until Congress passes legislation, or the area is released from consideration. If Congress elects to not designate an area, the area would be zoned as Back Country Non-Motorized until modified by a subsequent plan amendment, no inventoried roads are found in this zone.

Wildland/Urban Interface Threat Zones (see Appendix K in Part 3 of the forest plan) may occur in this zone. Community protection vegetation treatments within the recommended wilderness land use zone may occur by exception. In these cases, managers will consider wilderness needs.

The management intent is to administer this zone for the use and enjoyment of people while preserving its wilderness character and natural conditions. Wilderness recommendations include:

- Cucamonga A (Cucamonga Wilderness)
- Sheep Mountain (Sheep Mountain Wilderness)

Experimental Forest (15,498 acres or 2 percent of the national forest): This zone serves as a research and demonstration area, and is generally closed to the public except by permit. This zone occurs only on the San Dimas Experimental Forest. While the Pacific Southwest Research Station manages the Experimental Forest, the Forest Supervisor for the Angeles National Forest is authorized to administer all recreation residence special use permits within the San Dimas Experimental Forest boundary.

Special Designation Overlays

The following land use classifications act as overlays to the primary land use zones. In other words, suitable uses identified in the land use zone tables are generally suitable in these overlay classifications unless specifically excluded. When differences occur in suitable uses between the land use zone and special designation overlay, the more restrictive set of allowable uses apply.

Wild and Scenic Rivers

Wild and Scenic River *eligibility* (an inventory and evaluation of whether a river is free-flowing and possesses one or more outstandingly remarkable values (ORVs) including scenery, recreation, geology, fish and wildlife, history, cultural (prehistoric), or similar values) was completed for the four southern California national forests. If found eligible, a river segment was then analyzed as to its current level of development (water resources projects, shoreline development, and accessibility) and a recommendation was made that it be placed into one of three classes—wild, scenic or recreational. The final procedural step (*suitability*) provides the basis for determining whether to recommend to Congress an eligible river as part of the National System.

The suitability study phase will be initiated at a later date for the five eligible rivers on the Angeles National Forest.

Suitable uses are those compatible with protecting and enhancing the outstandingly remarkable values for which the river was designated or found eligible.

Eligible Wild and Scenic Rivers Include:

- Little Rock Creek
- Piru
- San Antonio Canyon Creek
- San Francisquito Canyon
- San Gabriel River (East, West and North Forks)

All existing facilities, management actions, and approved uses will be allowed to continue in eligible river corridors until a decision is made on inclusion into the National Wild and Scenic River System, provided these facilities, actions, and uses do not interfere with the protection and enhancement of the rivers' outstandingly remarkable values.

New proposals include facilities, management actions, or uses on National Forest System land and are not allowed if they have the potential to affect the eligibility or potential classification of the river segment.

Uses comply with Forest Service Handbook 1909.12, chapter 8.2, which includes a description of developments and activities that are permitted, restricted or prohibited within the designated river corridor for each of the three classifications (wild, scenic and recreation).

Inventoried Roadless Areas

Inventoried Roadless Areas (IRAs) were originally mapped as a result of the second Roadless Area Review (RARE II), which was documented in a final environmental impact statement dated January of 1979, and refined during development of the national forest land management plans. These maps were identified in a set of inventoried roadless area maps, contained in the Forest Service Roadless Area Conservation, Final Environmental Impact Statement, Volume 2, dated November 2000. A final Roadless Area Conservation Rule was published in May of 2005, allowing optional State government involvement through a petition process. Alternatively the 1982 NFMA planning rule allows for the analysis and evaluation of roadless areas, including boundary adjustments, in the forest plan revision process. An updated inventory has been prepared to reflect changes in the roadless inventory due to analysis and evaluation made in this forest plan revision. Adjustments to the inventory include correction of mapping errors including boundary roads mistakenly included within an IRA, removal of those areas that congress has designated as wilderness, addition of undeveloped areas that were not part of the original inventory but were recommended as wilderness in this forest plan, and implementation of the following classification to reflect the land use zoning decisions in the revised forest plan (see Appendix C, Inventoried Roadless Area maps):

- 1a - IRAs allocated to a prescription that does not allow road construction and the forest plan recommends as wilderness.
- 1b - IRAs allocated to a prescription that does not allow road construction or reconstruction.
- 1c - IRAs allocated to a prescription that allows road construction or reconstruction.

Research Natural Areas

Research Natural Areas include relatively undisturbed areas of the national forest that form a long-term network of ecological reserves designated for research, education, and the maintenance of biodiversity. This designation applies to both established and proposed Research Natural Areas.

Research Natural Areas are selected to preserve a spectrum of relatively pristine areas that represent a wide range of natural variability within important natural ecosystems and environments, and areas that have unique characteristics of scientific importance. Research Natural Areas are also selected for one or more of the following reasons:

- To serve as reference areas for evaluating the range of natural variability and the impacts of management in similar environments.
- To protect and maintain representative or key elements of biological diversity at the genetic, species, population, community, or ecosystem levels.
- To serve as areas for the study of ecosystems and ecological processes including succession.
- To provide onsite and extension educational activities.
- To serve as baseline areas for measuring ecological change.

Uses that retain the research values for which the site is designated are appropriate.

Established Research Natural Areas Include:

- Falls Canyon
- Fern Canyon

There are no proposed Research Natural Areas for the Angeles National Forest.

Special Interest Areas

Special Interest Areas protect and, where appropriate, foster public use and enjoyment of areas with scenic, historical, geological, botanical, zoological, paleontological, or other special characteristics. Uses that are compatible with maintaining the target of the areas designation are appropriate.

Special Interest Areas include:

- Devil's Punchbowl
- Mt. Baden-Powell
- Mt. San Antonio
- Aliso - Arrastre Middle and North
- Liebre Mountain

Other Designations

- Designated Communication Sites, table 474
- Designated Utility Corridors, table 484
- Designated Transportation Corridors, table 482
- Recreation Residence Tracts, table 478
- Designated Shooting Areas, table 488
- Designated Sediment Disposal Sites, table 535

Table 474. Designated Communication Sites, Angeles National Forest

Communications Site Name	Existing Uses	Approximate Location	Restrictions
Mount Wilson	Broadcast/ High-power	Sec. 30, T2N, R11W, SBM	
Contractors Point	Microwave/ Amateur/ Low-power	Sec. 13, T3N, R15W, SBM	
Loop Canyon	Microwave/ Amateur/ Low-power	Sec.13, T3N, R15W, SBM	
Los Pinetos	Microwave/ Two-way Radio/ Low-power	Sec 9, T3N, R15W, SBM	Government Only
Magic Mountain	Microwave/ Cellular/ Two-way Radio/ Low-power	Sec 34, T4N, R14W, SBM	
Little Gleason	Microwave/ Local Exchange/ Low-power	Sec 34, T4N, R12W, SBM	
Mount Gleason	Microwave/ Two-way Radio / Low-power	Sec. 6, T3N, R12W, SBM	
Mount Disappointment	Microwave/ Two-way Radio / Low-power	Sec. 23, T2N, R12W, SBM	Government Only
Mount Lukens	Microwave/ Cellular/ Two-way Radio / Non-Broadcast/ Low-power	Sec 10, T2N, R13W, SBM	
Santa Anita	Microwave/ Amateur/ Two-way Radio / Low-power	Sec. 9, T1N, R11W, SBM	
Arcadia	Microwave/ Amateur/ FM Radiobroadcast/ Two-way Radio / Low-power	Sec. 10, T1N, R11W, SBM	
Barley Flats	Microwave Relay	Sec. 7, T2N, R11W, SBM	Single Facility Site
Chilao	PMRS Microwave/ Single User Microwave/	Sec. 26, T3N, R11W, SBM	Government Only
Johnstone Peak	Two-way Radio/ Broadcast/ Low-power	Sec. 23, T1N, R9W, SBM	
Pine Mountain	Microwave/ PMRS/ Low-power	Sec. 26, T2N, R10W, SBM	Government Only

Communications Site Name	Existing Uses	Approximate Location	Restrictions
Sunset Ridge	Broadcast/ Non-Broadcast/	Sec. 10, T1N, R8W, SBM	
Crystal Lake	Microwave Relay	Sec. 28, T3N, R9W, SBM	Single Facility Site
East Fork	Microwave Relay	Sec. 21, T2N, R9W, SBM	Single Facility Site
Blue Ridge	Non-Broadcast/ Low-power	Sec 13, T3N, R8W, SBM	
Inspiration Point	Microwave/ Two-way Radio / Low-power	Sec 3, T3N, R8W, SBM	
East Table Mountain	Non-Broadcast/ Low-power	Sec 1, T3N, R8W, SBM	
Grass Hollow	Local Exchange Telephone	Sec 4, T3N, R8W, SBM	Government Only
Burnt Peak	FAA VORTAK Microwave/ Amateur/ Non-broadcast/ Two-way Radio / Low-power	Sec. 21, T7N, R16W, SBM	
Portal Ridge	Microwave/ Non-broadcast/ Two-way Radio / Low-power	Sec. 24, T7N, R15W, SBM	
Whitaker Ridge	Non-broadcast/ Low-power	Sec. 3 & 36, T6N, R18W, SBM	
Emigrant Landing	Public safety radio base stations	Sec 22, T7N, R18W, SBM	Government Only
Castaic Communications	Microwave Relay	Sec 4, T5N, R16W, SBM	Single Facility Site

Table 478. Recreation Residence Tracts, Angeles National Forest

Barrett Canyon	Glacier	Roberts Canyon
Bear Canyon	Icehouse	San Antonio Falls
Big Rock Creek	Lake Hughes	San Francisquito
Big Santa Anita	Main San Dimas	Upper San Antonio
Big Tujunga (Includes Trail Canyon, Stoneyvale, Big Tujunga, Vogel, Trailunga La Paloma)	Manker Flat	West Fork
Bouquet Canyon	McClellan Flats	West Fork San Gabriel
	Millard	Westfork San Dimas
	North Fork San Gabriel	

Table 482. Designated Transportation Corridors, Angeles National Forest

Transportation Corridor Name	Approximate Land Area (acres)	Transportation Corridor Name	Approximate Land Area (acres)
Aliso Canyon Road	108	Big Pines Highway	184
Angeles Crest Highway	1030	Big Rock Canyon Road	90
Angeles Forest Highway	383	Big Tujunga Canyon Road	175

Transportation Corridor Name	Approximate Land Area (acres)	Transportation Corridor Name	Approximate Land Area (acres)
Bouquet Canyon Road	288	Mount Emma Road	77
Chantry Flats Road	27	Mount Wilson Road	81
East Fork Road	84	Old Ridge Road	308
Glendora Mountain Road	232	Pine Canyon Road	288
Glendora Ridge Road	192	Placerita Canyon Road	81
Golden State Highway	118	San Francisquito Road	292
State Highway 39	481	Sand Canyon Road	98
Interstate Highway 5	6793	Sierra Highway	195
Lake Hughes Road	364	Soledad Canyon Road	299
Little Tujunga Canyon Road	164	Spunky Canyon Road	86
Mount Baldy Road	184	Templin Highway	78
		Upper Big Tujunga Road	145

Table 484. Designated Utility Corridors - Angeles National Forest

Utility Corridor Name	Approximate Land Area		Existing Uses
	Acres	Miles	
Interstate 5 (Tejon Pass)	9,544	27.1	500KV (2), 220KV (3), Oil & Gas pipelines (7), Fiber Optic line (4), Interstate Highway 5, Aqueduct
Old Ridge Route	3,543	10.7	2 500KV, 4 Oil & 2 Gas Pipelines, Fiber Optic, Aqueduct.
Saugus/Mesa	185	1.4	500KV.
Saugus/Del Sur	1,697	13.8	500KV, 66KV
Ranaldi Dept Water Power	1,207	9.6	500KV
Gorge Ranaldi	629	5.0	500KV
BPL	3,025	24.7	500KV
Vincent Gould	2,259	18.5	500KV
Vincent Rio Hondo	3,090	25.3	500KV
3-P Line	353	2.8	500KV
Midway Vincent	3,442	43.4	500KV
Vincent Pardee	191	1.4	500KV

Table 488. Designated Shooting Areas - Angeles National Forest

Component	Angeles
Concession-Operated Sites	A Place to Shoot Burro Canyon
Permitted Gun Clubs: Limited or No Public Access	Desert Marksmen Burbank
Designated Shooting Sites by Forest Order (Other Shooting Restrictions May Apply)	3 sites temporarily closed since 1993.
Remainder of Forest	Closed to shooting.

Table 535. Designated Sediment Disposal Sites - Angeles National Forest

Lower Pacoima Canyon	Maple Canyon (Sawpit Reservoir)
Maple Canyon (Pacoima Reservoir)	Lodi Canyon
Limekiln Canyon	Mystic Canyon
Burro Canyon	Spanish Canyon
Cogswell	Keril Canyon
Sycamore Canyon	



Scenery Management System

The Scenery Management System (SMS) is a tool for integrating the benefits, values, desires, and preferences regarding aesthetics and scenery for all levels of land and resource management planning. People are concerned about the quality of their environment and the aesthetic values of landscapes, particularly the scenery and spiritual values. Scenic integrity objectives have been designated for all areas of the national forest. At the project level, all national forest activities are subject to review of the scenic integrity objectives (see Appendix C, Scenic Integrity Objective maps).

Public Uses Regulated by Other Agencies

The California Department of Fish and Game (CDF&G) manages California's fish and wildlife populations for their ecological values and for their use and enjoyment by the public.

Hunting is permitted throughout the national forests of southern California during hunting seasons designated by CDF&G. Hunting is not permitted in those areas where the discharge of firearms is prohibited by county ordinance, California State law, or federal regulations. For safety, hunters must follow all laws including no hunting within 150 yards of a residence, building, campsite, developed recreation site or occupied area. Except as permitted by CDF&G, it is unlawful to use a dog to pursue/take animals or to train a dog for hunting. The CDF&G may issue dog training and organizational field trial permits authorizing releasing and taking domestically reared game birds, bobwhite quail, or coturnix quail. Such organized events require a special-use permit from the appropriate Forest Service office.

Angling is encouraged in most areas of the national forests during fishing seasons designated by CDF&G. Some locations have special regulations and a few are closed to fishing in order to protect the steelhead trout and other aquatic species that depend on high quality habitat.



Prospectus

The prospectus describes recent trends and expectations regarding the levels of experiences, goods and services, or other outcomes that are supplied by the national forest, as well as anticipated resource improvements planned over the next three to five years. Past performance is generally a good indicator of what is expected in the near future. Performance expectations under two budget levels are projected into the future and strategic program emphasis is described through specific objectives that the national forest will focus on under current budget expectations (see Program Emphasis and Objectives). Annual monitoring and evaluation of trends in performance indicators determine if there is a need to shift program emphasis to more effectively move toward the desired conditions (see Monitoring Trends and Performance Indicators). The Forest Supervisor will plan and implement projects that contribute to achieving desired conditions described in Part 1, while meeting the standards described in Part 3. Information in this prospectus will be updated on a regular basis to reflect changes in management emphasis or budget fluctuations. Specific strategies and tactics that are linked to program objectives are found in Appendix B. These are referenced from each of the applicable program objectives discussed in this section. The final section describes examples of performance risks that could cause a need for change in management emphasis (see Performance Risks).

Program Emphasis and Objectives

A methodology common to the four southern California national forests was applied during the development of the Forest Business Plan (<http://www.fs.fed.us/r5/business-plans/>), in order to describe the activities and programs for the Angeles National Forest. Activities were organized into six functional areas, which include all areas of business for which the national forest is responsible. The functional areas collectively include 35 programs. National Forest management uses the results to clearly communicate program capability both internally and externally.

The six functional areas are:

- **Management & Administration:** Forest leadership, management and administrative support activities, communications, external affairs, community outreach, planning, human resources, information technology, and financial management.
- **Resource Management:** Activities related to managing, preserving, and protecting the national forest's cultural and natural resources.
- **Public Use & Enjoyment:** Activities which provide visitors with safe, enjoyable and educational experiences while on the national forest and accommodate changing trends in visitor use and community participation and outreach.
- **Facility Operations & Maintenance:** Activities required to manage and operate the national forest's infrastructure (i.e., roads, facilities, trails, and structures).
- **Commodity & Commercial Uses:** Grazing management, forest special product development, and activities related to managing non-recreation special-uses such as national forest access, telecommunications sites, and utility corridors.
- **Fire & Aviation Management:** Wildland fire prevention through education, hazardous fuels reduction, and proactive preparation. This program also includes on-forest wildland

fire suppression, and national or international wildland fire and emergency incident response.

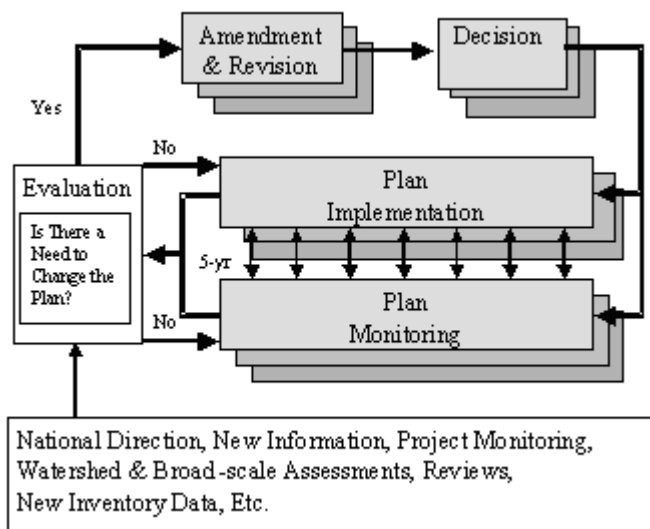
Monitoring Trends and Performance Indicators

Monitoring in Part 2 of the forest plan is focused on program implementation including inventory. The national forest currently uses performance indicators for tracking program accomplishments. The current system is expected to be replaced by a performance accountability system integrating annual budgets with programs of work and linking these to tracking of strategic plan performance indicators.

Each of the key performance indicators are estimated for two budget levels in the performance history section; one based on the current budget trend and the other an estimate of the total capability and need for the program activity on the national forest assuming an unconstrained budget. Performance indicators are shown at the end of each management function section for:

- Resource Management Performance Indicators, ANF, table 2.1.5, page 28
- Public Use and Enjoyment Performance Indicators, ANF, table 2.1.6, page 31
- Facilities Operations and Maintenance Performance Indicators, ANF, table 2.1.7, page 32
- Commodities and Commercial Uses Performance Indicators, ANF, table 2.1.8, page 34
- Fire and Aviation Management Performance Indicators, ANF 4, table 2.1.9, page 36

Figure 2.1 The Three Parts of a Plan in the Adaptive Management Cycle



Actual performance is tracked over time through annual documentation of accomplishment and these trends are evaluated periodically to determine if the national forest needs to shift program strategies (see figure 2.1, The Three Parts of a Plan in the Adaptive Management Cycle). This data is reported in the annual Monitoring and Evaluation Report as part of the national forest's implementation monitoring efforts.

Inventory is a continuous effort (see AM 2 - Forest-wide Inventory Program Strategies and Tactics section). As funding is available, priority inventories are implemented and reported through various resource information systems including interagency systems. Periodic evaluation of inventory data is used to explore trends in resource conditions over time. Annual monitoring and evaluation reports (see AM 1 - Land Management Plan Monitoring and Evaluation) will document when there is a need to change the forest plan in response to declining trends in resource conditions.

General Budget History

In 2002, Angeles National Forest's appropriations reached to \$25.9M, which is their highest level ever. Of this amount, 64 percent or \$16.6M was budgeted for wildland fire preparedness, with the remaining 36 percent or \$9.3M covering all other operations. Funding growth rates in these two segments show similar disparities: between 1995 and 2002 wildland fire preparedness budgets grew at a rate of 30 percent per year, while growth in all other program budgets was at a much lower level of 2 percent. These differences have been particularly dramatic since 2000; appropriated fire budgets grew by almost 75 percent between 2000 and 2002, from \$9.5M to \$16.6M. Over the same time period, all other program budgets increased by only 15 percent (from \$8.1M to \$9.3M).

Management and Administration

The current complex web of federal, state, county, local, tribal, partnership, not-for-profit, and private relationships require broad and deep skills and experience to effectively manage the national forest. The challenge of proactively organizing the transformation of a healthy forest requires more than just management, it requires the leadership of everyone who might be affected by that change, including the communities of the urban areas in which the national forest conducts business.

The Forest Business Plan divides the Management & Administration category into General Management, Financial Management, General Administration, District Management, Planning, Public Affairs, and Information Technology programs. The forest plan addresses two of these programs: general and district management.

Vision, leadership, performance reporting, legislative contacts and priority setting are the tasks of the Forest Supervisor, Deputy Forest Supervisor, and their immediate support staff. From the Forest Supervisor's Office in Arcadia, human resources, engineering, recreation, resources, public relations, information technology and other staff functions provide technical and administrative support to the Ranger Districts.

The Angeles National Forest is divided into three Ranger Districts oriented around watershed boundaries: the San Gabriel River Ranger District, the Los Angeles River Ranger District, and the Santa Clara/Mojave Rivers Ranger District. A District Ranger oversees all of the programs and staff specific to that district, and maintains relationships with local communities and organizations. This program only covers the management-related activities of the District Rangers and their direct support.

The national forest will complete effective community outreach, enlisting the support of local communities, partners, and volunteers to promote land stewardship by jointly developing and implementing a broad range of conservation activities (see Forest Business Plan for the Angeles National Forest 2003). Emphasis will be placed on further developing relationships with tribal governments; working together to resolve issues; and to facilitate the continued traditional and cultural tribal use of the national forest (see Tribal 1 - Traditional and Contemporary Uses; and Tribal 2 - Government to Government Relations).

One of a number of public open houses hosted by the Angeles NF for the forest plan revision.



Resource Management

The mission of the Forest Service is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." The resource management function manages the health of the vegetation on the land, the quality of wilderness areas, the boundaries and ownership of the land, the cultural heritage that resides on the land, the quality of the water running on and under the land, the air quality above the land, and the habitat for the wildlife roaming the land. These programs include the data management that allows national forest personnel to analyze and store all data collected as part of program activities.

Wildlife management staff at the Angeles National Forest carry out projects associated with monitoring and preserving key species, provide National Environmental Policy Act (NEPA) and other environmental permitting support to non-wildlife national forest projects, and complete wildlife monitoring activities associated with legal requirements and forest plan implementation.

Program emphasis for wildlife management is on minimizing the effects of urbanization. The Angeles National Forest will emphasize protecting core areas from the threat that urbanization poses such that these areas will continue to conserve biodiversity in an interconnected regional open space network. Habitat loss and fragmentation will be reduced through conserving and managing habitat linkages within, and where possible between, the national forests and other public and privately conserved lands. Declining trends in threatened, endangered, proposed, candidate, and sensitive species populations will be neutralized or reversed by maintaining or improving habitat capability, removing invasive species, and by reducing conflicts with other activities such as recreation, resource or community development. National Forest staff plan: to implement 10 percent of recovery tasks and conservation measures identified in recovery plans and species and habitat conservation strategies; continue the emphasis on improving our knowledge base regarding riparian dependent threatened and endangered species through basic inventory of suitable habitat; and prioritize completion of the inventory of nonwilderness areas in the next five years (see tables: WL 1 - Threatened, Endangered, Proposed, Candidate, and Sensitive Species Management; WL 2 - Management of Species of Concern; IS 1 - Invasive Species Prevention and Control; Link 1 - Habitat Linkage Planning; Lands 1 - Land Ownership Adjustment; Lands 2 - Non-Recreation Special Use Authorizations; AM 2 - Forest-wide Inventory).

The national forest places a high priority on controlling nonnative species that prey on or compete with threatened, endangered, proposed, candidate, and sensitive species. National Forest staff plan to implement control measures on approximately 20 percent of the known areas where invasive species are conflicting with threatened, endangered, proposed, candidate, and sensitive species (see table: IS 1 - Invasive Species Prevention and Control).

Vegetation management protects critical habitats, reduces fire and erosion risks, and replants burned or otherwise damaged vegetation. The national forest has identified the following vegetation management project categories related to community protection and forest health:

- **Mortality Removal - Annual Need: 1,000 acres.** The removal of dead vegetation to reduce fire hazard. Timber sales to remove merchantable trees and contract removal of non-merchantable trees and shrubs, slash treatments. Projects will move forested areas from Condition Class three towards Condition Class one. In chaparral areas, mortality removal is planned to reduce the fire hazard from high to low.

Chipping dead trees burned in the Curve Fire (Sept. 2002) at Crystal Lake Recreation Area. A contractor from northern CA is performing the work. November, 2004



- **Thinning - Annual Need: 600 acres.** The removal of living trees from overstocked stands, in most cases trees of 24 inches in diameter or less. These projects include the treatment of all slash and are expected to move forested areas from Condition Class two or three towards Condition Class one. Thinning is required prior to the reintroduction of fire in most cases.
- **Reforestation And Restoration Of Forest Vegetation - Annual Need: 100 acres.** Restoration projects are either designed to facilitate natural recovery following disturbance (fire, drought related mortality, insect and disease) or to implement planting projects as needed when natural processes are not likely to achieve desired results.
- **Fuelbreak Maintenance - Annual Need: 500 acres.** Existing fuelbreaks are generally maintained using prescribed fire, masticating machines, or grazing. Most of the fuelbreaks are in high hazard chaparral areas and are designed to limit wildland fire size, as well as provide firefighter access and improved firefighter safety. A few of the fuelbreaks are in coniferous forest and serve to limit fire spread from or towards communities or timber stands in poor condition. Most of the existing fuelbreaks are on ridgetops or along roads.
- **Fuelbreak Construction - Annual Need: 50 acres.** Most of the planned fuelbreaks are also along roads and ridgetops and are proposed for limiting wildland fire patch size. While most fuelbreaks are constructed with machinery, some are built by hand or by using prescribed fire. Herbicides may be used to kill resprouting chaparral and then fire is used to maintain the fuelbreak over time. Fuelbreaks are sometimes constructed near communities to provide some level of future protection in cases where land ownership patterns or topography limit the applicability of the Wildland/Urban Interface Defense and Threat Zones concept.
- **Wildland/Urban Interface (WUI) Defense and Threat Zones- Annual Need: 1,500 acres.** A WUI Defense Zone is a relatively narrow area in width (see standards S7 and S8 in Part 3), directly adjoining structures, that is converted to a less-flammable state to increase defensible space and firefighter safety. The WUI Threat Zone (see standard S7) is an additional strip of vegetation modified to reduce flame heights and radiant heat. The two zones together are designed to make most structures defensible. These zones are applicable to national forest land and all structures upon them. In addition, they apply where national forest boundaries are directly adjacent to communities on private lands.

Techniques may include hand or machine removal of vegetation and herbicides in the WUI Defense Zone. Treatments in the threat zone are less intensive and can generally be maintained with prescribed fire over the long-term. In forested areas, extensive tree thinning is planned as part of installing WUI Threat Zones.

- **Rx Fire - Annual Need: 5,000 acres.** Projects in this category are generally large burns in chaparral to reduce fire hazard near communities, or as part of an overall landscape mosaic designed to limit wildland fire patch size. Prescribed fire is also used to help restore and maintain land in the coniferous forest areas, currently categorized as Condition Class one or two. Some prescribed burns are conducted to enhance wildlife browse conditions.

Projects often incorporate a combination of these activities designed to most effectively meet site-specific objectives.

Forest health will improve through using the Community Protection Program. Vegetative treatments target restoration of desired fire regimes; the improvement of water quantity, quality and flow in order to maintain or improve riparian habitats; and improvement of watershed conditions will be concurrent with community protection projects that are implemented. National Forest staff plan to implement approximately 5 percent of identified Forest Health projects (see tables: Fire 2 - Direct Community Protection; FH 2 - Prevention of Fire Induced Type Conversion; FH 3 - Restoration of Forest Health).

Watershed, soil and air management personnel work to protect and monitor air, water, and soil resources throughout the national forest and surrounding area. Special designation areas and land ownership and adjustment staff work on programs to protect and enhance the geographic integrity of forest land.

Emphasize gaining control of groundwater and surface water resources in order to benefit ecosystem health and national forest administrative needs. To address the increased demand for groundwater and surface water resources, program emphasis will be on balancing the needs of water users with resource needs for the maintenance or improvement of stream, riparian, springs and wetland habitat by procuring water rights and instream flow agreements. National Forest staff plan to complete approximately 20 percent of the water diversion permit reauthorizations backlog, including acquiring available water rights or relocating diversions to the national forest perimeter if possible (see WAT 1 - Watershed Function; and WAT 2 - Water Management; Lands 2 - Non-Recreation Special Use Authorizations).

The Lands Program is responsible for maintaining the national forest's property records, completing land transactions, and surveying and protecting national forest boundaries. The national forest has 600 miles of boundary, only 100 of which have been resurveyed and marked since the late 1800s. In this program area, the current staffing level of two people is insufficient

Fisheries project on
Angeles NF



to deal with the backlog of survey needs and an ever-increasing number of national forest boundary encroachments by private landowners. Today, there are an estimated 5,000 such encroachments. These encroachments degrade the quality of national forest land and possibly remove it from the public domain. In addition, many opportunities exist to purchase private lands to further protect critical forest resources. At current funding levels, national forest staff cannot pursue all opportunities that would benefit the national forest.

The national forest will work collaboratively with others to acquire land that contains unique resources; is needed for continued public access; enhances public use; or improves habitat linkage. National Forest staff plan to implement land adjustment strategies on approximately 5 percent of the areas identified on land adjustment maps.

The national forest will emphasize retaining and restoring clear title to National Forest System land by posting boundaries in undeveloped areas to prevent trespass and encroachment. Forest staff plan to resolve approximately 10 percent of the backlog of trespass and encroaching uses cases (see tables: Lands 1 - Land Ownership Adjustment; Lands 3 - Boundary Management).

Heritage Resource Management strives to protect significant heritage resources present on national forest land; to share their values with the American people; and to contribute relevant information and perspectives to natural resource management. Under various agreements with the California State Historic Preservation Office and the Advisory Council on Historic Preservation, the Angeles National Forest has agreed to both provide heritage support to other resource-related projects on the national forest (Section 106), and also to develop a sound overall program for the management of the national forest's heritage resources (Section 110). The majority of national forest staff time is currently occupied in the former capacity.

The Heritage Program emphasis includes identifying all activities that have the potential to adversely affect or do not complement significant cultural properties. National Forest staff expect to document 40 percent of all known significant cultural properties to identify any such activity, and develop measures to mitigate the adverse effects or impacts on approximately 40 percent of the sites (see tables: Her 1 - Heritage Resource Protection; and Her 3 - Forest-wide Heritage Inventory; Her 4 - Heritage Research). Program emphasis will also focus on public participation programs such as Passport in Time (see: Her 2 - Public Involvement Program).

Table 2.1.5. Resource Management Performance Indicators, ANF

Performance Indicators for Resource Management	Current Level	Estimated Forest Capability and Need
Acres of Terrestrial Habitat Enhanced	464	620
Miles of Aquatic Habitat Enhanced	31	50
Acres of Noxious Weeds Treated	13	50
Acres of Vegetation Improved (also see Hazardous Fuels Reduction)	562	1,000
Acres of Watershed Improved	172	375
Acres of Land Ownership Adjusted	45	300
Number of Heritage Resources Managed to Standard	75	130

Public Use and Enjoyment

Public Use & Enjoyment in the Angeles National Forest includes all activities related to providing visitors with a safe and educational experience. The functional area includes all interpretive services, visitor center management, interpretive media, in-forest concessions management, fee collection, community outreach, visitor safety and law enforcement services.

The overall mission of the interpretive services, visitor centers and education program is to forge intellectual and emotional connections between people and their natural and cultural heritage. The primary focus of the Interpretive Services and Education Program is on public service communication. The Angeles National Forest uses a variety of media to deliver information on recreation opportunities, on stewardship responsibilities such as heritage and wilderness protection, and on in-depth topics of public interest.

Community outreach includes activities that encourage the stewardship of national forest lands through the participation of people from local areas. These efforts lead to sustainable recreation within the national forest.

Partnerships and volunteers will be emphasized to improve visitor services and increase opportunities for interpretation and environmental education (see tables: REC 4 - Conservation Education; Her 2 - Public Involvement Program).

The Angeles National Forest manages approximately 500 recreation special-use

authorizations, including four concession campground complexes, two concession target shooting areas, five ski areas, a marina, 26 organization camps, and over 450 summer homes. The national forest also issues and administers numerous recreation events, such as mountain bike events and car rallies.

The Angeles National Forest operates 63 campgrounds with over 1,100 individual campsites and an additional 36 picnic areas. Activities include trash collection, cleaning, maintenance of infrastructure, monitoring of water systems, and others associated with keeping the facilities clean, safe, and in good repair.

Concentrated Use Areas are locations throughout the national forest where large groups of people recreate outside of established recreation facilities. These locations are often along rivers and streams with easy road access, and lack the trash collection, restroom, and other facilities found at traditional developed sites. This lack of facilities, combined with heavy use, results in significant degradation of these sites from litter, vegetation loss, erosion, and graffiti.



Conservation education at Mt. Baldy Visitor Center includes heritage resources

The national forest will emphasize providing balanced, environmentally sustainable recreation opportunities to meet the needs of a growing, urban, culturally diverse population, particularly for day use. National Forest staff plan to use adaptive management measures to be implemented on approximately 75 percent of Concentrated Use Areas and developed sites that have threatened, endangered, proposed, candidate, and sensitive species conflicts identified. The national forest will also focus on community outreach, education and collaboration.

Recreation special-uses are an important program component. The national forest will complete re-issuance of recreation residence permits by 2008. (See REC 1 - Recreation Opportunity; REC 2 - Sustainable Use and Environmental Design; REC 3 - Recreation Participation; and Fac 1 - Facilities Maintenance Backlog.)

Scenic resources will emphasize conserving or restoring aesthetic, recreation, and open space values, especially those of high-valued scenery such as scenic backdrops for local communities



Crystal Lake Recreation
Area facilities

and increasingly rare values such as solitude. (See REC 1 - Recreation Opportunity; LM 1 - Landscape Aesthetics; LM 2 - Landscape Restoration; LM 3 - Landscape Character).

Law enforcement services are an integral part of the Forest Service's day-to-day management. These services include the administration of permits and contracts, the dissemination of visitor information regarding the use of National Forest System lands, and the enforcement of the rules and regulations that govern the management of the national forest. The authority for providing law enforcement services is described at 16 USC 551 and 559. The means to implement these authorities are found in 36 CFR 261 and Title 18 of the United States Code. Visitor safety and resource protection activities are accomplished using law enforcement officers working at three different levels. These are:

- (1) Forest Protection Officers are primarily responsible for public contact in the field, public information and education efforts and they have the authority to write citations. This level of enforcement focuses on the prevention of violations when in the field;

- (2) Law Enforcement Officers are responsible for the prevention of crimes and the enforcement of federal laws and regulations on national forest and adjacent land. These officers carry firearms and can make arrests; and
- (3) Special Agents are the investigative arm of the agency and are responsible for the staff work related to the arrest and prosecution of criminals and for the development of reports that address claims made for and against the government.

The Jackson Lake area offers recreation opportunities that include recreation facilities and organization camps.



Table 2.1.6. Public Use and Enjoyment Performance Indicators, ANF

Performance Indicators for Public Use and Enjoyment	Current Level	Estimated Forest Capability and Need
Products Provided to Standard (Interpretation and Education)	490	659
Recreation Special Use Authorizations Administered to Standard	504	715
PAOT Days Managed to Standard (Developed Sites)	222	1,295
Recreation Days Managed to Standard (General Forest Areas)	445	2,205

PAOT: Persons at One Time

Facility Operations and Maintenance

The Angeles National Forest operates over 350 buildings throughout the national forest. These range from restroom facilities, fire stations and administrative offices. Spending for these facilities falls into two categories: maintenance (annual and deferred) and capital improvements.

Grounds maintenance includes ongoing exterior upkeep. All walkways, steps, and lawn areas are cleaned by the grounds operation. Snow removal is performed when needed. Grounds operation also includes maintaining sprinkler systems, the mowing, edging, and fertilization of all lawn area, as well as tree pruning and flower bed maintenance. Work also involves repair and improvement of hardscape elements such as retaining walls, curbs, and sidewalks.

Several agencies maintain a large road network in the national forest, including bridges, culverts, low-water crossings and tunnels. The California Department of Transportation is responsible for three major highways: California State Route 2; California Interstate 5; and California State Route 39. Los Angeles and San Bernardino Counties also maintain a portion of the network. Still, the Forest Service maintains 1,000 miles of roads.

Investment emphasis will focus on Forest Service recreation facilities and administrative maintenance needs. Opportunities will be developed through partnerships and special funding to reduce the backlog of facility maintenance. National Forest staff plan to reduce the facilities maintenance backlog by approximately 10 percent.

The Roads and Trails Program will emphasize managing the transportation system to address user demand, national forest and community protection needs, and resource considerations. Roads and trails will be maintained to minimize the level of effects to species and watersheds while safely accommodating use. National Forest staff plan to maintain approximately 10 percent of National Forest System roads to their objective maintenance level. Decommissioning of unneeded or unauthorized roads and trails will be emphasized. National Forest staff plan to complete site-specific road analysis on approximately 30 percent of the unclassified roads and make appropriate designations (National Forest System Road, decommission or National Forest System Trail, either motorized or non-motorized).

Road and San
 Gabriel Canyon
 OHV staging area



Roads accommodating high levels of use will be candidates for improvement, including parking in appropriate locations for popular destinations. National Forest staff plan to enhance parking opportunities on approximately 10 percent of identified potential sites.

Access to the national forests, will be acquired where needed for administrative and public use through purchase, exchange, easements, and rights-of-way. Program emphasis will be on developing and maintaining National Forest System roads and trails that address access issues and minimize conflicts with private landowners.

(See Trans 1 - Transportation System; Trans 2 - Unnecessary Roads; Trans 3 - Improve Trails; Trans 4 - Off-Highway Vehicle Opportunities; and REC 3 - Recreation Participation; Lands 1 - Land Ownership Adjustment.)

Table 2.1.7. Facilities Operations and Maintenance Performance Indicators, ANF

Performance Indicators for Facility Operations and Maintenance	Current Level	Estimated Forest Capability and Need
Miles of Passenger Car Roads Maintained to Objective Maintenance Level	9	72
Miles of High Clearance & Back Country Roads Maintained to Objective Maintenance Level	154	400
Miles of Road Decommissioned	3	10
Miles of Trail Operated and Maintained to Standard	78	360

Commodity and Commercial Uses

Non-Recreation Special-Uses: This program receives the majority of funding in this functional area. Given the Angeles National Forest's proximity to Los Angeles' 10 million people, National Forest System land is in high demand for electronic sites, transmission lines, pipelines, roads, reservoirs, sediment disposal sites, apiaries and film shoots.

Demand for the infrastructure to provide water, energy, transportation and other needs to support communities will continue to receive focus with program emphasis on managing these uses while preserving open space and natural settings. Special-uses are authorized only when they cannot be reasonably accommodated on non-National Forest System land. Maintaining open space is given priority over accommodating urban needs. National Forest staff plan to reduce the backlog of permit re-issuance by approximately 20 percent (see Lands 2 - Non-Recreation Special Use Authorizations).



Mt. Wilson Telecommunications Site

Minerals and Non-Renewable Energy Resources: The Angeles National Forest maintains its role in a viable, healthy and environmentally sound minerals industry by administering its Mineral Program to facilitate the orderly exploration, development, and production of mineral and energy resources. The minerals staff administers activities related to mining, leasing, identifying and closing abandoned mines, and reclaiming mined lands while protecting resources. The Minerals and Energy Program will emphasize processing and administration of exploration and development

proposals and operations while providing adequate protection of surface resources, wildlife habitat, scenery and recreation settings (see ME 1 - Minerals Management). Permits, leases, and Plans of Operation will require that adverse environmental effects are minimized, or mitigated, and that mined lands are reclaimed in a timely manner to regain surface production and use. Portions of the national forest have been identified as having a high potential for oil and gas reserves; however, no requests for exploration have been received for exploration in the last ten years.

Timber and Grazing: While many national forests in the National Forest System have large timber and grazing activities, the Angeles National Forest focuses more on recreation and commercial land use. There are no large-scale timber or grazing operations on the Angeles National Forest.

Table 2.1.8. Commodities and Commercial Uses Performance Indicators, ANF

Performance Indicators for Commodity and Commercial Uses	Current Level	Estimated Forest Capability and Need
Land Use Authorizations Administered to Standard	225	780
Number of Mineral Operations Administered	50	100
Manage Grazing Allotments	200	200

Fire Management

Fire Management includes all activities involved with pre-fire preparation, fire hazard reduction such as brush removal, and public education concerning fire prevention and safety.

The Fire Management and Administration group formulates and administers fire management and safety plans, and oversees all fire management operations including budget and planning, general supervision, scheduling, and other administrative activities.

Wildland fire suppression encompasses all activities included in containing and mitigating the damages of wildland fires caused by either natural or human means. This program also includes national support of fire and disaster teams in other areas of the country. The primary responsibility is in supporting large suppression operations nationally; however, other types of assignments include assisting the Federal Emergency Management Agency (FEMA). Past assignments have included earthquakes, floods, hurricanes, 9/11 disaster support, and supervision of the Columbia Space Shuttle debris recovery.

Prevention is based on three primary categories: education, engineering and enforcement. Education includes Smokey Bear programs to instill a fire prevention ethic in school children and Firewise community programs that target civic and homeowner groups. Engineering includes abatement of fire hazard along roadways and in high-use areas using fire retardants and removal of flammable vegetation. Enforcement includes executing state fire law regarding hazard abatement around structures, for both public and private land in the national forest. This is also done along all electrical transmission and distribution systems, (placed by public utility agencies), across the national forest.



Angeles NF Deputy Fire Chief Don Garwood speaks at the Loop Fire Tragedy (1966) Staff Ride. The staff ride is part of the "Lessons Learned" safety program. January, 2005

Smokey Bear at Wrightwood Fire Safe Council Wildfire Awareness Day, May 15, 2005



Hazardous fuel reduction is the set of activities associated with removing brush and vegetation from areas where they pose a significant threat to human life, property, and national forest resources, and where they interfere with the health of natural fire-adapted ecosystems. Fuel reduction involves direct management of vegetation using prescribed fire, mechanical, manual, or chemical methods. This is accomplished by a multidisciplinary planning approach using resource specialists, local governments, communities and contractors. The national forest Fuels Officer provides overall leadership for this program, which is then carried out

by Fire Management personnel and local government.

Suppression of wildland fires is the first priority for program managers. All wildland fires on southern California national forests are considered to be a threat to communities. Aggressive fire suppression and prevention strategies will be implemented near communities to achieve the objectives to protect life and property from wildland fire, subsequent floods and debris flows. National Forest staff plan to maintain the suppression organization at 90 percent of the most efficient level or higher.

WUI Defense and Threat Zones around structures, fuelbreaks, and vegetation treatments to maintain or restore forest health within community protection areas are the next priority. Over the next three to five years, vegetative treatments will be strategically integrated to maximize community protection efforts and minimize wildland fire size, while considering habitat needs. Mortality removal will be integrated with thinning within the community protection areas. National Forest staff plan to complete approximately 40 percent of identified treatment needs (see Fire 1 - Fire



Prevention; Fire 2 - Direct Community Protection; Fire 3 - Fire Suppression Emphasis; Fire 4 - Firefighter and Public Safety; Fire 5 - Fuelbreaks and Indirect Community Protection; and FH 3 - Restoration of Forest Health).

Table 2.1.9. Fire and Aviation Management Performance Indicators, ANF

Performance Indicator for Aviation and Fire Management	Current Level	Estimated Forest Capability and Need
Acres of Hazardous Fuel Reduction	927	10,050

2005 Rose Parade, Pasadena CA

Forest Service Honor Guard marches along Sierra Madre Blvd.



Forest Supervisor Jody Noiron (center) poses in front of a flower-decked ladder wagon with Angeles NF firefighters



Place-Based Program Emphasis

The national forest has been divided into a series of geographical units called 'Places.' Each Place has its own 'landscape character.' Landscape character has been described as an overall visual and cultural impression of landscape attributes, the physical appearance and cultural context of a landscape that gives it an identity and 'sense of place.'

Each Place has a theme, setting, desired condition and program emphasis section.

- Theme - refers to images of the landscape that can be defined with a brief set of physical, visual or cultural attributes that encapsulate the sense of place.
- Setting - provides a description of the landscape character of the Place. The approximate number of acres of special designation overlays that are found in each place are listed in this section.
- Desired Condition - paints a picture of what the Place could be as the national forest implements activities to move toward the overall forest-wide desired conditions.
- Program Emphasis - identifies priority activities the national forest will emphasize in the next three to five years.

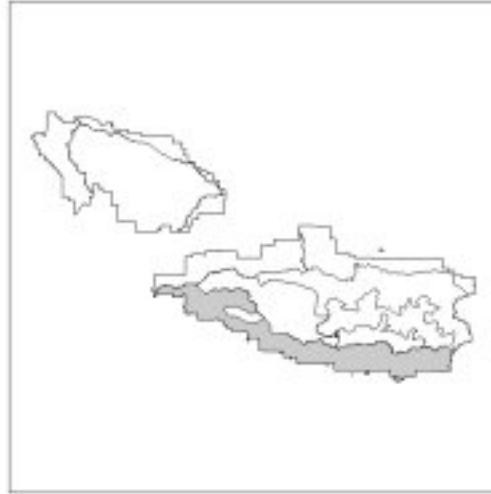
These are the Places identified for the Angeles National Forest:

- The Front Country within Angeles National Forest (101,232 acres)
- Angeles High Country (100,560 acres)
- Angeles Uplands East (56,049 acres)
- Angeles Uplands West (68,792 acres)
- Big Tujunga Canyon (5,495 acres)
- I-5 Corridor (37,701 acres)
- Liebre-Sawmill (17,094 acres)
- San Gabriel Canyon (23,288 acres)
- Santa Clara Canyons (140,824 acres)
- Soledad Front Country (59,338 acres)
- Mojave Front Country within Angeles National Forest (52,610 acres)

The Front Country

Theme: The scenic mountain backdrop for the greater Los Angeles area. This Place provides portals from the Los Angeles Basin, (with its 15 million plus population), to the national forest. This 'backyard' landscape is extensive and includes the 60 miles from Lytle Creek to Newhall Pass. It is one of the "Key Places" representing the most picturesque national forest locations, containing its own landscape character.

Setting: The Front Country Place rises dramatically from the Los Angeles Basin from an elevation of approximately 300 feet to an elevation of approximately 6,000 feet. The communities that make up the urban interface of the San Bernardino, San Fernando, and San Gabriel Valleys define the lower elevation edge of the Place. The area is easily accessible from various points along the Interstate 5, 15, and 210 travel corridors. The trails through the Place offer national forest visitors dramatic urban panoramas and views to rugged mountain backdrops. This Place includes a variety of special designations, including the San Dimas Experimental Forest and the 1,400-acre Fern Canyon Research Natural Area (RNA), which offers opportunity for study of mixed chaparral and live oak woodland communities. Five Inventoried Roadless Areas are located in the Front Country, some of which may be recommended as wilderness.



The southern aspect of the Place includes steep slopes with sharp to rounded summits and deep narrow canyons. The steeper reaches of the slopes are typically barren and highly eroded. Canyons characteristically have steep, rocky sides and are often strewn with large distinctive boulders.



The Mediterranean climate of southern California affects vegetation types and water availability. Perennial water is present only in the largest creeks and rivers. Chaparral is the most dominant plant community. Canyon and coast live oaks grow along the shaded slopes of the canyons.

Deciduous trees and shrubs occupy riparian areas. Degradation of air quality (in surrounding communities) is a factor that is affecting forest health in a variety of ways including stressed plant communities, lower water productivity and lower water quality. Human use has resulted in the presence of invasive exotic weed infestations in many areas.

There is a rich diversity of plant and animal species found in the Place, as well as habitat for four federally listed plants and several other rare plants. Riparian areas along the streams include habitat for numerous riparian dependant species, and serve as valuable linkages between the national forest and adjacent habitat on private land. Potential threats to habitat for riparian dependent species and other sensitive habitat include recreation uses, wildland fire, flood control and other water conservation activities and practices.

The cultural landscape of the Place is generally characterized by urban influences resulting in a modified character in many areas. The modified setting is often inconsistent with the types of recreation opportunities visitors are seeking. In other areas, steep slopes limit access (protecting resources) resulting in feelings of remoteness and solitude while enjoying hidden treasures that include, springs, waterfalls, a variety of landscapes, and many recreation experiences including hunting and fishing. Access is limited by a trail system that some think is not meeting the needs of the recreating public. Some trails are located in poor locations (steep, unstable areas) requiring high maintenance. There is also a network of user created trails that are the cause of resource problems in many areas. The developed sites in the Place are aging and do not meet the needs of the modern recreation user. Many facilities cannot accommodate modern vehicles and at a fundamental level do not meet the requirements of the Americans with Disabilities Act (ADA) or the National Forests and Grasslands Built Environmental Image Guide (BEIG). In many areas within the Place, managers feel that the levels of recreation use are exceeding the capacity of the facilities.



The Place has numerous electronic and communication sites located on ridgelines and mountain tops. Many of the utility corridors that support the Los Angeles Basin are located in the Place, as well as flood control structures and dam facilities. Finally, there are many unauthorized activities occurring in the Place resulting in resource problems.

Fire safe conditions along the urban interface within the Place are inconsistent. Private landowners look to the Forest Service to accomplish the vegetative treatments required for community defense. Traditionally, fuel treatments have been focused on Front Country watershed protection, concentrating on age class mosaics and fuelbreaks designed to reduce the threat of downstream flooding that often occurs after wildland fire. Wildland fires have resulted in significant property and resource losses. The numbers of fire starts are not consistent with natural disturbance cycles and are moving some plant communities toward type conversions that are out of character in the Place.

The proximity of the Place to the cities along the urban interface emphasizes the need to continue to develop and maintain good working relationships with other agencies and community government. Inconsistent management strategies have led to problems and emphasize the need to work together and effectively manage the national forests to support common goals in an era of intense urbanization. Habitat linkages, access, water, and urban infrastructure are just a few of the problems requiring a more common solution.

The Place is viewed by the residents of adjacent communities as their backyard. The area might be characterized as being loved to death. The area is intensively used resulting in user conflicts, trash, non-permitted uses, parties, car dumping, graffiti, and other activities that compromise national forest resources.

Existing Wilderness in the Place includes:

- Cucamonga 216 acres

Recommended Wilderness

- Cucamonga "A" (southernmost section) 448 acres

Established Research Natural Areas:

- Fern Canyon 1,400 acres

Total Angeles National Forest acres--Front Country Place: 101,232

Desired Condition: The Front Country Place is maintained as a natural appearing landscape that functions as a 'first impression' scenic backdrop for the Los Angeles/San Bernardino metropolitan area, and a national forest portal for its 15 million residents. The valued landscape attributes to be preserved over time are the rugged and wild appearing mountain silhouettes, dramatic undisturbed views to urban and mountain landscapes especially from trails and roads, coast live oaks along the shaded slopes of the canyons, and a well-defined age-class mosaic in chaparral. Wildlife linkages connecting the southern San Gabriel Mountains to the Santa Ana, Santa Susana and Verdugo Mountains are established and functioning. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: Management emphasis is on protecting communities from the threat of fire, managing for high recreation use levels, and maintaining urban and national forest infrastructure (facilities) consistent with the natural setting. An extensive trail network is managed to provide opportunities for hiking, biking, and equestrian trips of short duration and to provide linkages to the national forest trail network and the Pacific Crest Trail. Picnic areas and campgrounds along the Front Country Place provide close to home "first visit" opportunities. Mount Wilson is managed as a major trail destination, vista point and astronomical research site. The national forest will focus on open space protection along the urban interface. Local communities and the national forest cooperate to develop environmental education and conservation stewardship programs relevant to urban students and families especially for the San Gabriel Canyon entry point. The national forest is active in regional planning efforts to establish wildlife linkages connecting the San Gabriel Mountains to the Santa Ana, Santa Susana and Verdugo Mountains. Uses and activities are managed to provide opportunities for establishment of a regional wildlife linkage in the Place.

Angeles High Country

Theme: The Angeles High Country Place is characterized by the highest elevations in Los Angeles County including the tallest peak in the county, Mt. Baldy (10,064 feet). The Place functions as a year-round mountain recreation landscape for the greater Los Angeles Area and is associated with winter snowplay, opportunities for solitude, hiking through spectacular big tree-cover vistas and includes historic and scenic mountain resorts. The Pacific Crest National Scenic Trail is located here and traverses the entire width of the Place. It is one of the "Key Places" representing the most picturesque national forest locations, containing its own landscape character.

Setting: The Angeles High Country Place is located at the top of the Angeles National Forest and is regarded by many as the core area of the national forest. Elevations within the Place range from approximately 5,000 feet to approximately 10,060 feet. The area is characterized by steep slopes with sharp to rounded summits surrounding small alpine valleys. The Place exhibits a forested (tree-covered) environment offering community linkages between the national forest and the surrounding urban areas. The area is a truly unique setting where, on a clear day, visitors are offered panoramic views including the urban center of Los Angeles and the Pacific Ocean to the west and the Mojave Desert to the north. Numerous special designations are found within this Place, including eligible Wild and Scenic River segments, Congressionally-designated wilderness, recommended wilderness, and National Inventoried Roadless Areas (IRAs). Three Special Interest Areas (SIAs) are also found here. The Devil's Punchbowl SIA exhibits unique geological values, including folds, faults, plate tectonics,



cuestas, and hogbacks. The Mt. Baden-Powell and Mt. San Antonio SIAs boast unique botanical elements, including ancient limber pine, and alpine and subalpine plants. The area is accessed from major highways, scenic byways, and a trail system that includes routes with state or national designations such as the Pacific Crest Trail. The community of Wrightwood is the 'gateway' to the Place. The high elevation of the Place (above the inversion layer) and the more remote locations offer an ideal setting for 'dark-sky' research facilities and communication sites.

The Angeles High Country Place is one of the 'resource jewels' of the Angeles National Forest. The higher reaches of its slopes are typically barren and show evidence of distinctive fractured rock formations and numerous landslides. The area is geologically unique in that it includes the point of highest elevation in the State for the San Andreas Fault. Watersheds in the Place include streams that flow into the Mojave Basin and the Pacific Ocean. The ground and surface water supply is an important resource that many feel has been over extended or alternately under utilized depending on location. There is concern for the northeastern portion of the Place where there is visible evidence of stress on riparian and aquatic ecosystems. Crystal Lake, a landslide feature, is the only natural lake on the Angeles National Forest. Snowmelt constitutes the majority of available surface water.

View from Vincent Gulch, Angeles High Country Place



The cooler and wetter mountain climate affects vegetation types within the Place. The trees are seen as tight clumps or scattered individuals. Historically, the presence of large conifers has resulted in the Place being known as the Place where the big trees are. The predominant plant communities include Coulter pine and mixed conifer on the south facing slopes and bigcone Douglas-fir and Jeffrey pine on the north facing slopes. Oaks are present in dense woodlands along the shaded slopes of the canyons. Deciduous trees and shrubs are typical in riparian areas.

There is a rich diversity of animal communities living in the Place including the endangered mountain yellow-legged frog. The Place includes habitat for the Nelson's bighorn sheep. This species viability is a significant concern for managers due to a dramatic drop in population since the 1980s. The East Fork of the San Gabriel River includes important habitat linkages and sensitive resource areas for riparian dependent species and other wildlife between adjacent Places.

The cultural landscape of the Angeles High Country Place includes a diverse range of recreation opportunities in areas with settings that are more primitive or natural appearing. Human development has occurred ranging from historic sites, recreation sites, observatories, visitor centers, ski areas, organization camps and private resorts. Many of these are attractions are for year-round visitors looking for a mountain getaway from the surrounding urban communities. There is a wide range of opportunities including hiking, camping, backpacking, hunting, fishing, OHV uses, mountain biking, water and snow play. The Place has established visitor centers and entrance stations. Some of the most significant historic buildings and sites are found in this Place. The Pacific Crest National Scenic Trail traverses the entire width of the Place in an east-

west direction and exits the east side of the national forest onto the San Bernardino National Forest. Similar to other areas of the national forest, the facilities in this Place are aging and out of date.

There is a history of fire in the Place; however, only a portion of this Place is within the normal fire regime. The village of Wrightwood requires community protection strategies. Fuel treatments to date have been limited, but are expected to increase due to the build up of fuels over the past decades.

A variety of special-use authorizations exist in the Place, ranging from organization camps to recreation residence tracts to ski areas. There are some unique potential user conflicts in the area such as the need for dark skies at the Table Mountain site and the need for lights at a nearby ski resort for night skiing and operational maintenance.

Eligible Wild and Scenic Rivers:

- Little Rock Creek 7.5 miles
- San Antonio Canyon Creek 2.2 miles

Existing Wilderness:

- Cucamonga 3,585 acres
- San Gabriel Wilderness 5,928 acres
- Sheep Mountain Wilderness 23,290 acres

Recommended Wilderness:

Sheep Mountain (Sheep Mountain Wilderness) 1,897 acres

Existing Special Interest Areas:

- Devil's Punchbowl 89 acres
- Mt. Baden-Powell 252 acres
- Mt. San Antonio 164 acres

Critical Biological Zones (see table 524: Angeles NF Critical Biological Land Use Zones, page 10):

- South Fork Big Rock Creek
- Upper Little Rock Creek

Total national forest acres--Angeles High Country Place: 100,560

Desired Condition: The Angeles High Country Place is a key place that is valued for its scenic quality and is maintained as a naturally evolving and natural appearing landscape that functions as a year-round forested mountain recreation area. The valued landscape attributes to be preserved over time are large conifer trees in groups and as scattered individual specimens, views of distant landscapes, and oak woodlands along the shaded slopes of the canyons. The built environment portrays a rustic, historic image. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: Management emphasis is focused on forest health particularly relative to community protection from fire around Wrightwood and large recreation complexes while

maintaining the big tree character, vistas and natural appearing landscapes. Additional emphasis will be placed on the use by recreationists and urban and national forest infrastructure that is sustainable such that it has minimal effects to species (mountain yellow-legged frog) and their habitat. Bighorn sheep habitat will be enhanced and wilderness implementation schedules will be developed. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the mountain yellow-legged frog, California spotted owl, San Diego horned lizard, and a wide array of rare and sensitive plants will be emphasized in all activities. Exotic species eradication will be emphasized. The Angeles Crest Scenic Byway Corridor Management Plan is implemented; rural routes showcase key destinations off the Scenic Byway, and the Interforest Transportation Route linking the Scenic Byways of southern California is established. An emphasis will also be placed on maintaining the historic fabric of the Big Pines Historic District. Historic lodges, resorts, etc. at Big Pines, Chilao, and Crystal Lake will be managed to maintain historic character and to provide interpretation. The national forest will emphasize large appropriate management of large recreation complexes and the winter sports activities that occur in the Place. Snowplay opportunities will be assessed. Management of special-use authorizations will occur along with resolution of water diversion issues. The focus is toward finding a balance that will result in a sustainable level of human use and the sustainability of forest health. Special emphasis on managing the Pacific Crest National Scenic Trail and other National Recreation Trails that occur here will also be given.

Angeles Uplands East

Theme: The Angeles Uplands East Place is a rugged wilderness and remote landscape that serves as a transition zone between the Front Country and the wilds of the High Country. This remote, natural appearing landscape extends from the San Antonio River drainage on the east to the western boundary of the San Gabriel Wilderness on the west.

Setting: The Angeles Uplands East Place is located between the Front and High Country Places of the Angeles National Forest. Elevations in the Place range between 2,500 feet to approximately 5,000 feet. The landscape consists of very steep terrain, with narrow deep canyons and sharp to rounded summits. Access to the area is through the San Gabriel Canyon, or from portions of the Angeles Crest Highway and the Mt. Baldy Road. There is a well developed trail system accessed from facilities located along these same routes. The majority of this Place is located within the boundaries of two designated wildernesses (Sheep Mountain and San Gabriel Wilderness). Several other areas within the Place have been evaluated for wilderness.



The narrow, rocky canyons are the dominant feature of the landscape within the Place. The upper reaches of several watersheds are located within the Place. The steeper reaches and slopes are barren and show evidence of erosion, landslides, and rapid runoff. The canyon bottoms are often filled with large boulders. Water originating from this Place is impounded downstream and is a source of municipal water for the communities in the northern Los Angeles Basin.

Looking towards Angeles Uplands (East) Place, as seen from Highway 2 near Mt. Williamson



The area is characterized by hot to temperate climates that affect the vegetation types and availability of water in the Place. Mixed chaparral is the dominant plant community on south facing slopes. Canyon and coast live oaks are found in dense woodlands on the north facing slopes and in the canyon bottoms. Deciduous trees and shrubs are typically located in the riparian areas. Year-round water is present only in the largest creeks and springs. Noxious weeds are a problem, particularly along road corridors within the Place.

There is a diversity of animal communities in the Place. These include species such as the Santa

Ana sucker and California spotted owl. Nelson's bighorn sheep are also found in the area. Riparian areas within the Place include important habitat for numerous riparian dependent species and serve as linkages and corridors between the national forest and habitat on adjacent private land. The balance between high levels of recreation use, the threat of fire and the maintenance of habitat are critically important.

Mt. Baldy Educational Center,
Angeles Uplands (East) Place



The cultural landscape consists of settings that range between modified and natural appearing. The majority of the Place is designated wilderness and accounts for its natural appearance. Human influence is most apparent in the form of developed campsites, dispersed camping and travel ways (roads and trails). Human use is most visible in the area around Mt. Baldy Village. Trails are located along drainages, on flats or on the ridgetops, offering visitors a dramatic range of views depending on location. Historically, there has been mineral exploration and development within the Place. The Place is an important source of spiritual renewal for several tribes that historically lived in the area. The opportunity for solitude and self-reliance is an important attribute drawing many visitors to the wildernesses in the Place. The focus of recreation use in the area is toward wilderness related opportunities. Recreation use tends to be concentrated in riparian areas where water play is an important activity. Dispersed camping and other forms of dispersed use are popular. The Mt. Baldy Educational Center is a popular facility. Developed recreation opportunities are less abundant and occur in areas near Mt. Baldy Village or recreation residence tracts. Vandalism, graffiti and trash dumping are problems occurring near roads and trails.

Eligible Wild and Scenic Rivers:

- San Antonio Canyon Creek 1.4 miles
- San Gabriel River (East and North Forks) 7.9 miles

Existing Wilderness:

- Cucamonga 400 acres
- San Gabriel Wilderness 25,605 acres
- Sheep Mountain Wilderness 127,636 acres

Recommended Wilderness:

Sheep Mountain (Sheep Mountain Wilderness) 6,765 acres

Total national forest acres--Angeles Uplands East Place: 56,049

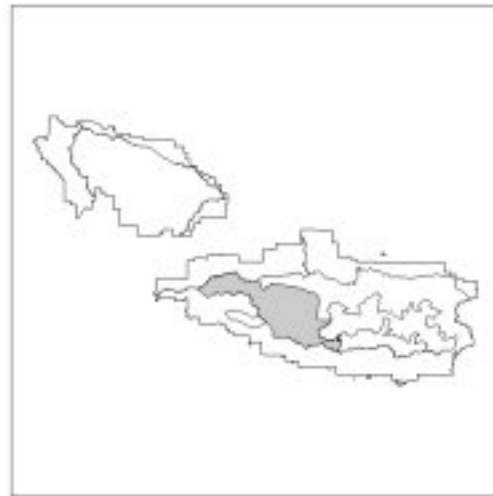
Desired Condition: The Angeles Uplands East Place is maintained as a naturally evolving and a natural appearing landscape that functions as wilderness and remote for primitive, dispersed recreation use. The valued landscape attributes to be preserved over time are open views to steep, rock slopes punctuated with bigcone Douglas-fir and associated oaks, and a well-defined age class mosaic in chaparral. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: Managers expect emphasis to focus on forest health, particularly relative to community protection from fire around Mt. Baldy Village and recreation residence tracts. Urban and national forest infrastructure will be sustainable. A Wilderness Implementation Schedule will be developed. Management emphasis is also expected to be focused on maintaining the sense of remoteness and solitude throughout the area. Maintaining water quality and quantity will have high priority. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the Santa Ana sucker, California spotted owl, Nelson's bighorn sheep, and a wide array of rare and sensitive plants will be emphasized in all activities. Exotic species eradication will also be emphasized.

Angeles Uplands West

Theme: The Angeles Uplands West Place is a popular, expansive, chaparral-covered landscape that serves as a mid-elevation gateway to the high country (Angeles High Country Place). This area provides dramatic canyon panoramas along the Angeles Crest Scenic Byway. Visitors can also find recreation experiences that provide challenge in a remote setting. It is one of the "Key Places" representing the most picturesque national forest locations, containing its own landscape character.

Setting: The Angeles Uplands West Place is located between the Front and High Country Places. Elevations in the Place range between approximately 2,500 feet to approximately 6,300 feet. The slopes are steep on the southern aspect of the Place, with sharp to rounded summits and deep narrow canyons similar to other mid-elevation Places on the Angeles National Forest. The Place is accessed from routes that pass through the Front Country Place. These routes (including the Angeles Crest Scenic Byway) lead visitors to dramatic canyon panoramas and rugged mountain background views. This Place includes portions of designated wilderness areas that have been proposed for wilderness evaluation, and Inventoried Roadless Areas. The Falls Canyon Research Natural Area is also located here, which was established in 1998 to provide study opportunities of bigcone Douglas-fir.



The steeper reaches of slopes are barren and show evidence of erosion. The canyons have steep rocky sides and are dense with upland vegetation. This Place contains the midslope portions of the major watersheds that drain into the Pacific Ocean including the Los Angeles and the San Gabriel Rivers. Water quantity and quality is a management concern since the watersheds drain

Angeles Uplands (West) Place, as seen from Clear Creek Station



into various reservoirs (Cogswell and Big Tujunga) that are used for flood control and water table replenishment.

There is a lot of diversity in the vegetation between the north and south facing slopes. Chaparral is more prevalent on the hotter and drier south facing slopes. Pines and conifers are dominant on the cooler north facing slopes. Mixed chaparral is the most

dominant plant community and is visible as dense continuous patterns of patches interrupted by openings of various sizes. Canyon and coast live oak are present in dense woodlands along the shaded slopes and in the canyons. Deciduous trees and shrubs are common in the riparian areas. Year-round water is present only in the largest creeks and springs. Air quality is compromised from the urban areas surrounding the national forest and is a factor in forest health; causing stressed plant communities and lowered water quality and quantity. Noxious weed infestations occur along travel routes and riparian areas within the Place.

The majority of the vegetation in the Place is in a relatively healthy condition. Some vegetative treatments for forest health are needed in some locations, and there are communities on private land and developments on public land that require treatment for fire protection. The fire-flood sequence is a threat to property in areas downstream from the Place.

The Place includes habitat for the arroyo toad, California red-legged frog, least Bell's vireo and southwestern willow flycatcher. The majority of the Big Tujunga Canyon is considered to be critical habitat for the California red-legged frog. There are numerous areas within the Place that offer linkages to other areas of the national forest and habitat on adjacent private land. Heavy recreation use of all kinds and fire are factors in the management of habitat for threatened and endangered wildlife and other riparian dependent species.

The cultural landscape of the Angeles Uplands West Place is generally natural or near-natural in appearance. Human influence is most apparent in the developed and dispersed recreation facilities and travel ways. Developed recreation is limited by the character of the landscape within the Place. Dispersed recreation is emphasized, including hiking, backpacking, equestrian use, bicycling, mountain biking, hang gliding, hunting, fishing, and OHV use. The condition of trails varies, and other infrastructures such as campgrounds and trailheads are aging. The intense level of recreation use generates user conflicts on roads, trails and other areas. There are a variety of special-uses authorized under permits within the Place including organization camps, communication sites, and recreation residence tracts. This area also has a high level of unauthorized uses including trash disposal, car dumping, graffiti, illegal OHV use, partying, gang activities, illegal fires, illegal parking, and entry into closed areas.



San Gabriel Peak, Angeles Uplands (West) Place

The Place supports multiple-uses that are valuable to the public. Many of the utility service infrastructures that support the greater Los Angeles urban area are present within the landscape. Several county roads and California State highways serve as major high-speed commuter routes from inland valleys and desert, which exceeds infrastructure design criteria and creates potential unsafe conflicts.

Existing Research Natural Areas:

- Falls Canyon 1,440 acres

Proposed Critical Biological Zones (see table 524: Angeles NF Critical Biological Land Use Zones, page 10):

- Upper Big Tujunga Canyon

Total national forest acres--Angeles Uplands West Place: 68,792

Desired Condition: The Angeles Uplands West Place is maintained as a natural appearing landscape that functions as a mid-elevation recreation gateway to the High Country. The valued landscape attributes to be preserved over time are dramatic canyon panoramas along the scenic byway, the presence of bigcone Douglas-fir and Coulter pine, and a well-defined age class mosaic in chaparral. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

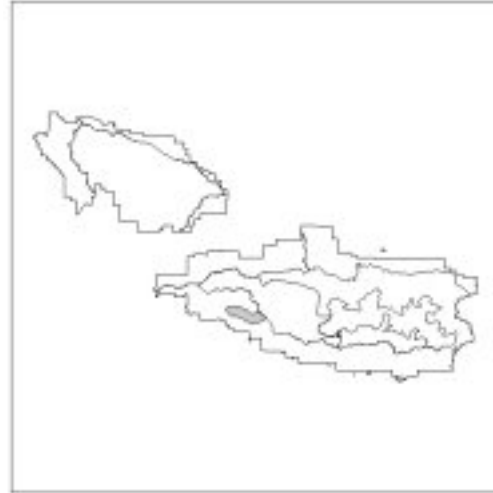
Program Emphasis: Management emphasis is focused on forest health, particularly protection of pockets of large conifers. Management is also focused on the high levels of recreation use, as well as the urban and national forest infrastructure present, in a balanced and sustainable manner

consistent with preserving the dramatic canyon panoramas. Culturally and ethnically diverse visitors are served in a relevant manner. Historic Vetter Lookout will be a focal point for interpretation and community outreach. The Angeles Crest Scenic Byway Corridor Management Plan is implemented and rural routes showcase key destinations of the Scenic Byway. Community defense from wildland fire will be emphasized. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the arroyo toad, California red-legged frog, southwestern willow flycatcher, San Diego horned lizard, two-striped garter snake, western pond turtle and rare and sensitive plants will be emphasized in all activities. Surveys will be conducted and critical habitat will be protected for the California red-legged frog. In order to restore healthy riparian systems, Arundo and other exotic species eradication efforts will be emphasized.

Big Tujunga Canyon

Theme: The Big Tujunga Canyon Place functions as a year-round day-use recreation landscape for families seeking a gathering spot in a river-based woodland setting. This major tributary of the Los Angeles River links the San Gabriel Mountains to the Pacific Ocean offering residents of the Los Angeles area a link to a natural environment. The Place's wooden riparian area serves as an important wildlife corridor, as well as a habitat for sensitive animal species.

Setting: The area of Big Tujunga Canyon is generally defined as down stream from the Big Tujunga Dam to Pipe Canyon, flanked by the steep canyon walls. This lower section of the canyon ranges in elevation from about 2,000 feet at Pipe Canyon up to 2,290 feet at the Big Tujunga spillway. Highly erosive, very steep slopes, with sharp to rounded summits and narrow canyons are the predominant landforms found in this Place. The area is generally accessed from well-maintained and highly used county roads from Mt. Gleason Ave along the California Interstate 210 corridor. This Place offers access to the Upland and High Country Places.



Big Tujunga Creek constitutes a major portion of this Place in terms of human use and scenic associations.

The main canyon runs east to west, and is fed by a series of small intermittent streams. The river has created pools and extensive floodplains along its course creating stream fishing opportunities. The channel terminates in a wide wash in the Front Country Place.

The riparian woodlands of the Big Tujunga Canyon Place provide a contrast to the contiguous mixed chaparral of the larger landscape. These riparian woodlands consist of dense stands of sycamore, white alder and willow. Upland vegetation is seen as tight clumps and scattered

groups of canyon and coast live oaks. These shaded areas are valued for recreation uses along the length of the river.

Degradation of air quality is affecting forest health by stressing vegetation and resulting in lower water quality and productivity. Noxious weed infestations also occur within the Place.

There is a potential for flooding, especially following fires. Much of the Place is in Condition Class 1, and will require treatments to help maintain that condition. Users are

Big Tujunga Canyon Road



usually responsible for fire starts. Larger fires typically originate in other areas of the national forest.

Big Tujunga Creek provides habitat for the Santa Ana sucker, least Bell's vireo and southwestern willow flycatcher. Critical habitat for the California red-legged frog encompasses a majority of Big Tujunga Canyon. Big Tujunga Canyon is an important corridor for wildlife movement between the Front Country, adjacent Places and areas downstream and off-forest. Heavy recreation use, exotic plant species, as well as flood control and water conservation practices are currently impacting habitat for threatened and endangered wildlife and other riparian dependent species.

The cultural landscape of the Big Tujunga Canyon Place is generally modified and natural appearing. Early nineteenth century use of the area focused on recreation, recreation camps, and mining. These historical uses, along with modern modes of transportation, introduced and extended the range of invasive and exotic plants and animals. Other human influences are most apparent near recreation facilities, such as trailheads and paths along the river; however, the remainder of the landscape is subject to the effects of ecological change. Human impacts that create strong visual contrast in this landscape include: intensive recreation and special-use authorization areas, graffiti, litter, utility corridors, water, flood control and retention basins, sediment disposal areas and road cuts. Most facilities and trails are located along the canyon bottom, on flats or cut into hillsides. Human impacts are more evident on the private property within the Place.

Vogel Flats,
Big Tujunga Canyon Place



Due to the accessibility to water, this area is marked by concentrated public use, mostly family-based, and with cultures associated with recent immigration to this country. Recreation uses are varied but mostly oriented to water. It is an area that is enjoyed by many people and that enjoyment leads to chronic overuse. Recreation uses are conflicting with other resource values such as TEPS. Infrastructure supporting developed recreation is aging, and does not meet the Americans with Disabilities Act or the Built Environment Image Guide. The focus of recreation along low elevation riparian areas is reaching or exceeds capacity. The intensive use is resulting in impacts to vegetation and resources: soil compaction, loss of vegetation, pollution of riparian

environments, and erosion near the river. Currently, opportunities for environmental education are not developed to meet public and agency needs.

The remote nature of the canyon provides opportunities for illegal activities to occur undetected. User conflicts do occur. The views of the Big Tujunga County Flood and Water Conservation dam and reservoir are equally impressive, and include vistas that lend themselves to commercial and amateur filming opportunities.

Water-centered recreation in Big Tujunga Canyon is strongly influenced by the low flow releases from the dam. Surface and groundwater extraction that supports local, as well as municipal supplies occurs in and throughout the canyon and wash.

The paths through this landscape lead visitors to dramatic canyon scenery and shady areas along the river. Areas of concentrated use such as trailheads and easily accessible water areas are reaching or exceeding their carrying capacity to provide a safe and enjoyable experience to the public.

There are no special designations.

Total national forest acres--Big Tujunga Canyon Place: 5,495

Desired Condition: Big Tujunga Canyon is maintained as a natural appearing landscape that functions as a year-round, day-use recreation landscape for families seeking a gathering spot in a river-based woodland setting. The valued landscape attributes to be preserved over time are riparian woodlands along stream zones consisting of dense stands of sycamore, white alder, and willow, groupings of canyon and coast live oaks, and visitor access to free-flowing water. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: Management emphasis is focused on day-use, water oriented recreation, and urban and forest infrastructure that is sustainable, compatible with the natural setting and integrity, and has minimal effects to species of management concerns and their habitat. Recreation use carrying capacity levels will be developed. Forest health in terms of water quality and water needs will be managed to provide for forest ecosystem needs and instream flows necessary to support surface and subsurface resources. A conservation/environmental education program will be developed. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the Santa Ana sucker, California red-legged frog, arroyo toad, southwestern willow flycatcher, least Bell's vireo, San Diego horned lizard, two-striped garter snake, slender horned spineflower and other rare and sensitive plants will be emphasized in all activities. Arundo and other exotic species eradication to restore health riparian systems will continue to be emphasized.

The national forest will continue working with the Los Angeles County Department of Public Works and the City of Los Angeles to establish flow releases from Big Tujunga Dam during the critical dry summer months to maintain and improve habitat for riparian dependent species.

I-5 Corridor

Theme: The I-5 Corridor Place functions as a scenic gateway and transitional landscape for visitors to southern California. The flow of people and materials through this gateway landscape links the greater Los Angeles area, as well as southern California, to the rest of California and the nation. It also serves as an important wildlife corridor between the Angeles and Los Padres National Forests.

Setting: The I-5 Corridor Place runs north and south along both sides of Interstate 5. This landscape is commonly defined as the area between Marple Canyon at the southern end, and the intersection of California State Highway 138 at the northern end. The east and west boundaries are defined by the ridges visible from Interstate 5. The western boundary of this Place is shared with the Los Padres National Forest.

The elevations in the Place range from approximately 2,100 to 3,000 feet. The deep canyon of Pyramid Lake, along with its various lesser side canyons, dominates this landscape. Steep slopes with rounded summits and deep narrow canyons are other dominant landforms within this Place.



The mostly hot to temperate climate affects vegetation types and water availability in the I-5 Corridor. All but the larger streams are dry through the summer. The predominant plant community at lower elevations is mixed chaparral. Chaparral is continuous on most slopes. Pine and juniper are present at higher elevations. Canyon and coast live oaks are present in dense woodlands along shaded slopes and canyons. Degradation of air quality is impacting forest health by stressing vegetation and resulting in lower water quality and productivity.

Pyramid Lake, I-5 Corridor Place



Numerous fire starts originate from Interstate 5. Fire safe conditions along the interface are inconsistent and private landowners look to the national forest to create community defense zones. The urban development in the south is creating issues of community defense, as well as encroachment and unauthorized activities. Fuel treatments have been limited in the past. Most of the fire occurrence has been within the historic range of variability, but there are areas (e.g., along

the highway corridor) that have been identified with excessive fire occurrence.

Riparian areas within the I-5 Corridor provide habitat for several riparian dependent species, including the federally listed southwestern willow flycatcher, least Bell's vireo, and the California condor, which has historically nested adjacent to Pyramid Reservoir.

Piru Creek is one of two streams on the national forest being managed for wild trout by the California Department of Fish and Game. The I-5 Corridor may also provide a significant habitat linkage between the Angeles and Los Padres National Forests. Potential threats to riparian dependent species and the California condor include recreation, wildland fire, and hazardous material spills into active stream channels.



Monarchs Hand Crew working to put out hot spots on the Interstate Fire, 2004.

The Monarchs Crew is composed of students from the Fire Science program at LA Valley Community College

The cultural landscape of the I-5 Corridor is generally rural and natural appearing. Some of the most significant heritage resource sites occur within this area and are being impacted by special-use authorizations. Human influence is most apparent in developed recreation sites and along travel routes. Human influences that create strong visual contrast to the natural landscape within this Place include: intensive administrative and recreation use areas, utility corridors, road cuts, and water retention basins. Most recreation, administrative facilities, and paths are located along drainages, ridge tops, or cut into hillsides. The paths through this landscape lead visitors past dramatic canyon and rugged mountain background views.

Hiking, backpacking, equestrian use, bicycling, mountain biking, hunting, OHV use, and water-based recreation are the most popular recreation activities occurring within this Place and require a support network of trails and roads. The dramatic changes in scenery and vegetation also provide for a viewshed that promotes driving for pleasure (especially along the Old Ridge Route). Recreation is centered at Pyramid Lake, with dispersed and developed recreation opportunities located in close proximity of major travel ways. Pyramid Lake offers year-round access to water-based recreation and also creates a downstream area for catch and release fishing. OHV opportunities exist within the Back Country Discovery Trail and a portal to the Hungry Valley State OHV Area. The demand for low elevation recreation along riparian areas (especially Frenchman's Flat) is reaching or exceeding capacity. Riparian areas are overused and under

supported in terms of infrastructure (i.e., sanitation and trash facilities). Recreation and non-recreation special-use authorizations are affecting significant heritage resource sites.

Adjacent developments are creating their own social trails on National Forest System land (mainly illegal OHV trails). The Place is continually having problems due to trash, car dumping, graffiti, illegal OHV use, and partying, with minimum enforcement capability due to inadequate law enforcement coverage, especially at night.

The I-5 Corridor Place is a major utility corridor for electricity, fiber optics, natural gas, and crude oil. Many of the utility service infrastructures that support the greater Los Angeles urban area are present within the Place, and have been constructed to conform to the natural integrity of the landscape. This highly engineered infrastructure has resulted in conflicts with other national forest resources such as heritage resources, water quality, and endangered species. Past oil and gas development has occurred in or near this Place, and there may be a potential for future oil and gas exploration and development.

Existing Wilderness:

- Sespe, 934 acres (see Los Padres National Forest Strategy, Appendix A)

Eligible Wild and Scenic Rivers:

- Lower Piru 3.7 miles (also see Los Padres National Forest Strategy, Appendix A)

Total national forest acres--I-5 Corridor Place: 37,701

Desired Condition: The I-5 Corridor Place is maintained as a natural appearing landscape that functions as a scenic transportation gateway for visitors to southern California and corridor for utilities and water. The valued landscape attributes to be preserved over time are dramatic natural appearing canyon and rugged mountain views from the interstate, the presence of coast live oaks along shaded slopes and canyons, and a well-defined age class mosaic in chaparral. Wildlife linkages connecting the Castaic Mountains to the Los Padres National Forest and the Tehachapi Mountains have been established and are functioning. Habitat conditions of threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time. Heritage resources are managed to standard with significant heritage resources formally designated to the National Register of Historic Places.

Program Emphasis: Management emphasis is expected to focus on an urban and forest infrastructure that is sustainable, sympathetic to the natural setting and integrity, and mitigates effects to species of management concern and their habitat, as well as heritage resources. Heritage resources will be protected through the development of management plans designed to reduce the effect of impacting uses and authorizations. The Old Ridge Route will be managed to maintain historic integrity for future interpretation of its role in southern California history. Community protection needs, boundary management and protection of open space in the urban interface will be recognized as a growing emphasis due to the increasing development along the national forest border. Forest health (in terms of water quality and water needs) will be managed to provide for forest ecosystem needs and in-stream flows necessary to support surface and subsurface resources. Management emphasis will be on water-based recreation opportunities at Pyramid Lake and Frenchman's Flat. Carrying capacity levels for Pyramid Lake and Frenchman's Flat will be developed. Working with the appropriate agencies and partners, the backcountry route to the Los Padres National Forest will be completed. The national forest will focus open space protection of boundary management in anticipation of adjacent development.

The national forest is active in regional planning efforts to establish wildlife linkages connecting the Castaic Mountains to the Los Padres National Forest and Tehachapi Mountains. Uses and activities are managed to provide opportunities for establishment of regional wildlife linkages in the I-5 Corridor Place. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species will be emphasized in all activities. Exotic species eradication will be emphasized.

Liebre-Sawmill

Theme: The Liebre-Sawmill Place functions year-round as a low elevation open space for Los Angeles and Antelope Valley residents. It portrays a sense of remoteness due to its steepness and minimal use. Major drainages that flow into the Antelope Valley are focal points for water-based recreation and link the Mojave Desert to the Liebre Mountains. This desert interface landscape includes portals from the Antelope Valley to the Angeles National Forest as well as the northern entry point for the Pacific Crest Trail into southern California. It is one of the "Key Places" representing the most picturesque national forest locations, containing its own landscape character.

Setting: The Liebre-Sawmill Place rises up from the Mojave Desert at elevations from approximately 3,500 feet up to 5,500 feet, reflecting a transition from the desert floor to the forest. This area is generally accessed from major entries along California State Highway 138 and County Road N2. The paths through this landscape lead visitors to dramatic desert panoramas and rugged fault-zone background views. A Botanical Special Interest Area for black oak is recommended within this area.

The San Andreas Fault Zone defines the lower elevation edge. The higher elevation edge is marked by a series of peaks and ridges. Northern aspects include steep to very steep slopes with sharp to rounded summits and narrow canyons. The action of the San Andreas Fault greatly affects this landscape (including the presence of historic sag ponds, such as Lake Hughes and Elizabeth Lake). Canyons have steep rocky sides and are littered with large boulders. Year-round water is available only in the largest creeks.



Elizabeth Lake, Liebre-Sawmill Place



The climatic influence of the Mojave Desert affects vegetation types and water availability in the Liebre-Sawmill Place. The predominate plant community at lower elevations is mixed sage. Pine and juniper are present at higher elevations. Sycamore and cottonwood are present in drainages and shaded canyons. The area marks a transition from desert floor to forest, characteristically defined by rolling oak-covered hilltops. Mistletoe infestations are present on a large scale, especially in the black oaks

within the recommended Special Interest Area. Degradation of air quality is affecting forest health by stressing vegetation, resulting in lower water quality and productivity.

Conditions to protect property and resources from fire along the national forest boundary are inconsistent, and private landowners look to the Forest Service to provide community defense zones. Fuel treatments have been limited in the past. This area has not been subjected to wildland fire on a large scale for some time resulting in a buildup of hazardous fuels. Most of the existing areas are in the range of historic fire occurrence.

The Liebre-Sawmill Place includes important habitat features for the California spotted owl, which occupies a majority of the north-slope drainages. A wide array of rare and sensitive plants occupy this Place. The Liebre-Sawmill Place may also offer a habitat linkage between the Liebre and Tehachapi Mountains. Threats to wildlife and habitat include recreation activities and wildland fire.

The cultural landscape of the Liebre-Sawmill Place ranges between semi-primitive and a modified natural appearance. Heritage resources reflect a span of human use in the area from Native American inhabitation to early Forest Service and Civilian Conservation Core activities. Human influence is most apparent in the developed and dispersed recreation facilities and paths leaving the majority of the landscape subject to ecological change. Developed recreation is limited, focusing mainly on water-based



Sawmill Mountain

recreation (boating, fishing, picnicking) at the Elizabeth Lake Day-Use Facility. Dispersed Recreation is the emphasis within the Place. Hiking, backpacking, equestrian use, bicycling, mountain biking, hunting, and OHV use are the predominate activities. The Pacific Crest Trail follows an east-west course through the entire Place.

Recreation uses and water extraction authorizations constitute the majority of the special- uses for the area. Other human influences exist within the Place and can create strong visual contrasts within the landscape including road cuts, utility corridors and intensively used areas. Most facilities and trails are located along drainages, on flats or cut into hillsides. A recreation residence tract is present that is oriented to the lake.

Most of the residents adjacent to the national forest rely on water generated from the national forest to meet or supplement their needs. Surface groundwater supply in many locations is overextended, causing stress on riparian and aquatic ecosystems. Watercourses carry pollutants, including bacteria, which affect the human environment.

Encroachment across national forest boundaries has increased due to urban development adjacent to the Place. Boundary trespass is particularly occurring along the northeastern edge of

the Place. National Forest boundary lines are not consistently marked, which affects the ability to address encroachments and unauthorized activities. Residents in developments and ranches adjacent to the national forest are creating their own social trails on national forest land, and this unauthorized use is resulting in resource damage and degradation. The area within this Place also provides a variety of small forest products such as, pinecones, fuelwood, and traditional plants.

Special Interest Areas:

- Liebre Mountain - 3,357 acres

Total national forest acres--Liebre-Sawmill Place: 17,094

Desired Condition: The Liebre-Sawmill Place is valued as a desert-interface landscape and is identified as a "key place" for the attractiveness of its landscape and is maintained as a natural appearing landscape that functions as year-round open space for Los Angeles and Antelope Valley residents. The valued landscape attributes to be preserved over time are the dramatic desert panoramas and rugged fault-zone background views, the marked transition of plant communities from desert to mixed sage, black oak, pine and juniper at higher elevations, visitor access to free-flowing water in drainages, and the undeveloped appearance of the landscape showing little visible human influence on the natural setting. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: The management emphasis is expected to focus on forest health, particularly on oak mortality and spotted owl habitat protection. It will also focus on those activities that maintain and promote the sense of remoteness and minimal use. The rural routes of the southern California Scenic Byway Interforest Transportation Route showcases key locations in the Place and connects the Angeles National Forest with the Los Padres National Forest. The PCT is managed to maintain spectacular vistas and a route through semideciduous oak forest. Use by recreationists (as well as limited urban and forest infrastructure) will be that which is sustainable, sympathetic to the natural setting and integrity, and has minimal effects to species of management concerns and their habitat. Forest health in terms of water quality and water needs will be managed to provide for forest ecosystem needs and in-stream flows. Priority will be given to managing an accurate and marked boundary line to minimize encroachment and unauthorized uses. Intensive management of the Back Country Discovery Trail will be implemented. The national forest will focus on open space protection and boundary management in anticipation of adjacent development.

Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the California spotted owl and a wide array of rare and sensitive plants will be emphasized in all activities. Exotic species eradication will be emphasized.

San Gabriel Canyon

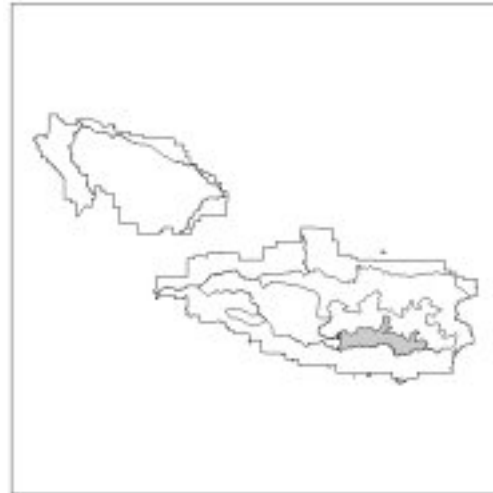
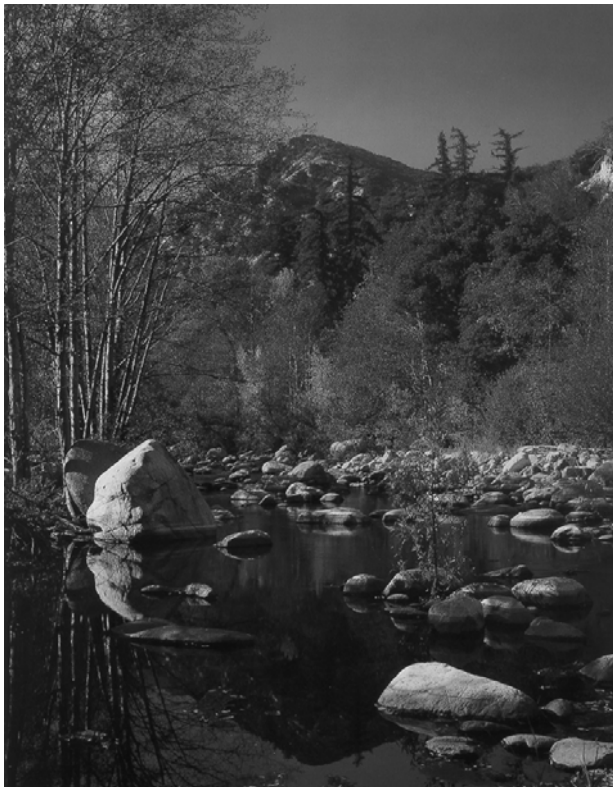
Theme: The San Gabriel Canyon Place serves as year-round day-use recreation landscape for families seeking a gathering spot, as well as for those interested in motorized recreation opportunities, in a river-based woodland setting. This major river system flows through the Los Angeles Basin and links the San Gabriel Mountains to the Pacific Ocean. This river system landscape provides residents of the Los Angeles Basin a link to a natural environment.

Setting: The area of San Gabriel Canyon Place is generally defined as north of San Gabriel Reservoir, east of Cogswell Reservoir, west of Heaton Flat and south of Smith Mountain.

It includes the San Gabriel OHV area. These higher and cooler parts of the San Gabriel River canyon range in elevation from about 2,500 up to 5,000 feet. The main canyon runs north to south. The forks of the San Gabriel River run east to west. Steep to very steep slopes with sharp to rounded summits and narrow canyons are the dominant landforms of this landscape.

The higher reaches of slopes are barren and show evidence of fractured rock and landslides, whose deposits form terraces along the north fork. Canyons have steep rocky sides and are littered with large boulders. The San Gabriel Fault runs east-west through the canyon bottom. It is a portion of the largest producing watershed on the national forest, that of the San Gabriel River. The river itself constitutes a major portion of this Place in terms of human use and visual associations.

San Gabriel Canyon West Fork.
Photo by Roy Murphy



The riparian woodlands of the San Gabriel Canyon provide contrast to the contiguous mixed chaparral of the larger landscape. These riparian woodlands consist of dense stands of sycamore, white alder, and willow. Upland vegetation is seen as tight clumps and scattered groups of canyon and coast live oaks. One of the largest contiguous stands of bigcone Douglas-fir and canyon oaks exist in the West Fork portion of this area. Areas of closed canopies are valued as shady nodes along the river course. Fall colors are also evident in this Place. The degradation of air quality is impacting forest health by stressing vegetation and resulting in lower water quality and productivity. Noxious weed infestations are also present within this Place.

There is a high potential for flooding in the

canyon, especially following fire (much of the canyon is characterized by a frequent fire regime and high reoccurrence).

A rich diversity of plant and animal species is present within the San Gabriel Canyon Place. Of significant importance is the federally threatened Santa Ana sucker. Riparian areas within the East, West, and North Forks of the San Gabriel River provide important habitat linkages between adjacent Places, and sensitive resource areas for wildlife. The West Fork of the San Gabriel River is one of two streams on the national forest being managed as a wild trout area. Potential threats to riparian dependent species and other sensitive habitat include recreation, wildland fire, flood control, and water conservation activities.

The cultural landscape of the San Gabriel Canyon is generally urban and modified to natural appearing. Human influence is most apparent in developed and dispersed recreation areas and paths along the river leaving the larger landscape to ecological change. Human impacts that create strong visual contrast in this landscape include: intensive use areas, graffiti, litter, utility corridors, reservoirs and dams, borrow sites, sediment placement sites, water retention basins and road cuts. Most areas and paths are located along the canyon bottom, on flats or cut into hillsides. Public access is limited in general and not designed to accommodate the high levels of use. This area is generally accessed from California State Highway 39. The paths through this landscape lead visitors to dramatic canyon scenery and shady areas along the river. Opportunities exist to better define the built image and create stronger links to adjacent landscape units.

Due to the accessibility to water, concentrated public use exists, mostly in the form of family-based activities, or with cultures associated with recent immigration to this country. A developed OHV open area is located within the flood plain of the San Gabriel River. Recreation uses are varied but mostly oriented to water. Many people enjoy the area, and that enjoyment leads to



Forest visitors enjoy the San Gabriel River, San Gabriel Canyon Place

chronic overuse. Recreation uses are conflicting with other resource values such as threatened, endangered, proposed, candidate and sensitive species. Infrastructure supporting developed recreation is aging, and does not meet the Americans with Disabilities Act or the Built Environment Image Guide. The focus of recreation along low elevation riparian areas is reaching or exceeds capacity. The majority of recreation facilities support riparian or other dispersed area recreation. Currently, opportunities for environmental education are not developed to meet public and agency needs.

Private lands within the Place promote a level of public use and recreation (i.e., gold panning) that is often in conflict with surrounding public lands. Also, activities exist that are not authorized.

The Place is used intensively, resulting in user conflicts (e.g., among, hikers, bikers, equestrian users), nonpermitted OHV use, or other depreciative uses (party place). The intensive use is resulting in soil compaction, loss of vegetation, and erosion near the river. The extraction of water, as well as the use of dams is affecting the riparian-dependent species. Chronic problems, such as trash, car dumping, graffiti, unauthorized OHV use, and maintaining closures exist in the Place, and there is inadequate law enforcement coverage.

Eligible Wild and Scenic Rivers:

- San Gabriel River (West Fork, Lower Portion) 7.4 miles

Existing Wilderness:

- San Gabriel Wilderness 4,182 acres
- Sheep Mountain Wilderness 147 acres

Recommended Wilderness:

- Sheep Mountain (Sheep Mountain Wilderness) 5,358 acres

Proposed Critical Biological Zones (see table 524: Angeles NF Critical Biological Land Use Zones, page 10):

- West Fork San Gabriel River

Total national forest acres--San Gabriel Canyon Place: 23,288

Desired Condition: The San Gabriel Canyon Place is maintained largely as a natural appearing landscape that functions as a location for streamside day-use, family-oriented recreation. The valued landscape attributes to be preserved over time are the majestic views of the canyon, the presence of large sycamores and alders along the riparian zone, visitor access to free-flowing water, the presence of oaks, and a well-defined age class mosaic in chaparral. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: The management emphasis is expected to focus on extremely high use by recreationists, and urban and forest infrastructure that is sustainable, sympathetic to the natural setting and integrity, and has minimal effects to species of management concern and their habitat. A key component of management will be focused on environmental education in this high-use Place. High quality and accessible opportunities for fishing are provided. Numerous trailheads are managed to provide access to the wilderness. The historic integrity of the gold mining sites will be maintained for future interpretation. A carrying capacity assessment will be developed

and implemented. Intensive management will be implemented to protect water supply and water quality as they relate to the Clean Water Act Section 303(d) impaired waterway mandate (TMDL). Forest health in terms of water quality and water needs will be managed to provide for forest ecosystem needs and in-stream flows necessary to support surface and subsurface resources while recognizing the needs for domestic water supply. The national forest will manage for 'critical habitat' designation by the U.S. Fish & Wildlife Service for the Santa Ana sucker and will implement the terms and conditions of the biological opinion. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the Santa Ana sucker, southwestern willow flycatcher, two-striped garter snake, and western pond turtle and sensitive plants will be emphasized in all activities. Exotic species eradication to restore healthy riparian systems will be emphasized.

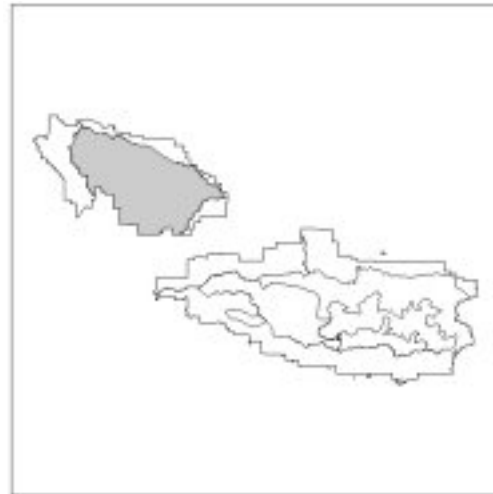
Santa Clara Canyon

Theme: The Santa Clara Canyons Place function year-round as a low elevation remote open space for the greater Los Angeles area and the Antelope Valley. Major drainages that flow into the Santa Clara River are focal points for water-based recreation. The Santa Clara River links the national forest to the Pacific Ocean. This canyon landscape offers visitors access to remote and semi-primitive experiences. The Pacific Crest National Scenic Trail is a portion of the Place. It is one of the "Key Places" representing the most picturesque national forest locations, containing its own landscape character.

Setting: The Santa Clara Canyons rise up from the Santa Clara River Basin at elevations starting at about 1,200 feet and reaching up to 5,000 feet. This area is generally accessed from major portals along the Interstate 5, Interstate 14, and California State Highway 138 travel corridors. A recommended Special Interest Area focusing on a botanical theme (large tracts of black oaks) reflects the character of this area. The paths through this landscape lead visitors to dramatic canyon panoramas and rugged mountain background views.

The southern aspect includes steep to very steep ridges with sharp to rounded summits, and deep narrow canyons. The lower elevation edge is marked by the urban interface with the community of Santa Clarita.

The higher elevation edge is marked by a series of peaks and ridges. The steeper reaches of slopes are barren and show evidence of erosion. Canyons have steep rocky sides with large boulders. There are major north-south trending drainages such as San Francisquito, Bouquet



Canyon, Elizabeth Lake, and Castaic. Two man-made lakes exist on the borders of this area (Bouquet Reservoir and Castaic Lake).

San Francisquito Canyon, Santa Clara Place



The mostly hot to temperate climate affects vegetation types and water availability in the Santa Clara Canyons. Mixed chaparral is the most dominant plant community. Canyon and coast live oaks are present in dense woodlands along shaded slopes and canyons. Black oaks

occur in dense patches at the higher elevations. Deciduous trees and shrubs occupy riparian areas. Year-round water is present only in the largest creeks and rivers. Mistletoe infestations are present on a large scale, especially in the black oaks present within the recommended Special Interest Area. Degradation of air quality is affecting forest health by stressing the vegetation and resulting in lower water quality and productivity. Noxious weed infestations also occur within this Place.

Conditions designed to promote the protection of improvements from fire are inconsistent along the urban interface of this Place, and private landowners look to the Forest Service to create community defense zones. Fuel treatments have been limited in the past. Recently, large wildland fires have occurred where there has been a buildup of fuels. Most of the existing areas are included in the historic fire occurrence; however, some areas have been identified as having excessive fire reoccurrence.

Several federally listed and Region 5 sensitive plants and animals occur in this Place. One of three populations of the California red-legged frog known to occur in southern California exists here. The Place also contains habitat for the unarmored threespine stickleback, least Bell's vireo and southwestern willow flycatcher, numerous other riparian dependent species, and the California condor. Water releases from reservoirs are important for the long-term viability of the unarmored threespined stickleback, and the maintenance of riparian systems within major creeks. Some activities are affecting riparian dependent species including dispersed recreation, wildland fire, and the spill of hazardous materials into waterways.

Heritage resources reflecting the span of human use of the national forest are present in the Place. This Place has one of the highest density and variety of heritage resource sites in the national forest, and the sites are affected by the increasing use of the Place by people.

The cultural landscape of the Santa Clara Canyons generally range between semi-primitive to a modified natural appearance. Human influence is most apparent in the developed and dispersed recreation facilities and paths, leaving the majority of the landscape subject only to ecological change. Developed recreation sites are limited, focusing mainly on remote camping and day-use facilities along the canyon bottoms. Dispersed recreation is the emphasis including hiking, backpacking, equestrian, bicycling, mountain biking, hunting, and OHV. OHV opportunities exist in designated areas. Other activities such as hunting and fishing occur. Water recreation is also present at Bouquet Canyon Creek, but there is a lack of sanitation and trash facilities along the streamside and chronic overuse is occurring. The condition of the trails varies, and infrastructure is aging, and does not meet Americans with Disabilities Act or the Built Environment Image Guide (BEIG) requirements, nor the needs and desires of the users. The magnitude of recreation use in the Place has resulted in conflicts on National Forest System roads and trails, as well as effects on other resources.

A variety of special-use authorizations exist in this Place that range from electronic sites to recreation residence tracts to shooting areas. This area of the national forest also has many existing activities that are not authorized. Problems related to human use exist in the Santa Clara Canyons including, trash disposal, car dumping, graffiti, illegal OHV use, partying, gang activities, illegal fires, illegal parking, and maintaining closures. There is inadequate law enforcement coverage, especially at night.

The Place supports multiple-uses that are valuable to the public. Historic mining has occurred in this Place. Mining operations are active in the Place, and stone quarries are present. Many of the utility service infrastructures that support the greater Los Angeles urban area (including the Los

Angeles Aqueduct) are present within the landscape. Several county roads serve as major high-speed commuter routes from inland valleys and deserts, and the use exceeds infrastructure design criteria and creates potential unsafe conflicts. Past oil and gas development has also occurred in or near this Place, and there may be the potential for future oil and gas exploration and development.

Urbanization is resulting in an increase of housing adjacent to national forest boundaries and is affecting national forest land. Adjacent developments are creating their own social trails on national forest land (including uncontrolled OHV use) and this unauthorized use is resulting in resource damage degradation. The urban development in the south is creating issues of community defense, as well as encroachment and unauthorized activities. There are multiple access points that go through the area.

Eligible Wild and Scenic Rivers:

- San Francisquito Canyon, 13 miles

Critical Biological Zones (see table 524: Angeles NF Critical Biological Land Use Zones, page 10):

- Castaic/Fish Canyon
- San Francisquito Canyon

Special Interest Areas:

- Liebre Mountain - 5,672 acres

Total national forest acres--Santa Clara Canyons Place: 140,824

Desired Condition: The Santa Clara Canyons Place is identified as a "Key Place" for its natural appearing and pastoral landscape that functions as a remote Back Country open space. The valued landscape attributes to be preserved over time are the dramatic canyon panoramas and rugged mountain background views, oak woodlands, a well-defined age class mosaic in chaparral, and the pastoral qualities of grazing activities, which is important to the interpretation to the examples of important Native American history and historic mining. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: The management emphasis is expected to focus on community protection, recreation use, and urban and forest infrastructure that is sustainable, sympathetic to the natural setting and integrity, and has minimal effects to species of management concern and their habitat, as well as heritage resources. Heritage resources will be protected through the development of management plans designed to reduce the effect of impacting uses and authorizations. The national forest will focus on protection of open space and boundary management in anticipation of future adjacent development. Forest health in terms of water quality and quantity will be managed to provide for forest ecosystem needs and in-stream flows necessary to support surface and subsurface resources. An unclassified roads/trails decommissioning plan will be developed and implemented.

Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the arroyo toad, California red-legged frog, southwestern willow flycatcher, least Bell's vireo, San Diego horned lizard, two-striped garter snake, Nevin's barberry and sensitive

plants will be emphasized in all activities. Arundo and other exotic species eradication to restore healthy riparian systems will be emphasized with special emphasis on San Francisquito Canyon.

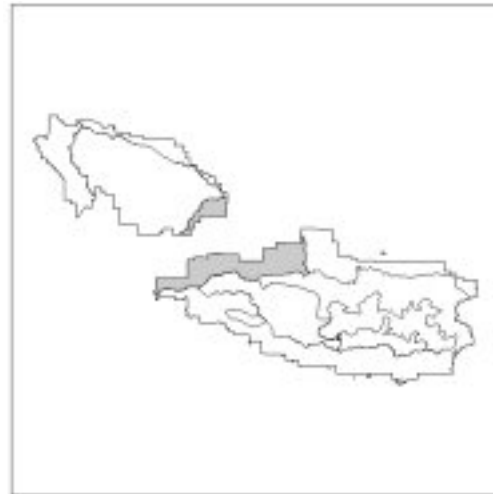
Soledad Front Country

Theme: The Soledad Front Country Place functions as a scenic backdrop and transitional landscape between the rapidly urbanizing Mojave Desert and Los Angeles Basin. The flow of people and materials through this transitional landscape link the greater Los Angeles area to the Mojave Desert. The growing communities along California Interstate 14 are transforming this area from rural to urban in character. Residents of these new communities have the scenic views of the San Gabriel Mountains from their homes and travel corridors. The Pacific Crest National Scenic Trail occurs on a portion of the Place.

Setting: The Soledad Front Country Place runs northeast to southwest along both sides of California State Highway 14 along the Santa Clara and Soledad Rivers. This landscape is commonly defined as the area between California Interstate 5 at the southern end and the intersection of California State Highway 138 at the northern end. The northwest and southeast boundaries are, in general, defined by the area visible from California Highway 14. There is a Special Interest Area that highlights the heritage resource values of the area.

Elevations in the area range from about 2,100 feet to 3,000 feet. The broad floodplain of the Soledad River (with its various side drainages) dominates this landscape. The broad floodplain (which leads to steep slopes with rounded summits) is the most prevalent landform in this Place.

The mostly hot to sometimes temperate climate affects vegetation types and water availability. The predominate plant community at the lower elevations is mixed chaparral. Pine and juniper are present at higher elevations. Chaparral is continuous on most slopes. The chaparral is seen as patterns of dense patches with large openings. Canyon and coast live oaks are present in dense woodlands along shaded slopes and in the canyons. All but the larger streams are dry through the summer. Several canyons, including Elsmere and Whitney, still exhibit pristine characteristics.



However, human influences on the viewshed include the altered vegetation composition resulting from an increase in fire starts. Degradation of air quality is affecting forest health by stressing vegetation, resulting in lower water quality and productivity.

Most of the vegetative communities within the area are in the expected fire regime; however,

there are areas that have a history of excessive fire occurrence. Safe conditions along the urban interface within this Place are inconsistent, and private landowners look to the Forest Service to create community defense zones. Fuel treatments have been limited in the past, and the focus of fire management is on property protection, concentrating on age class mosaics and fuelbreaks to reduce downstream flooding. The flood-fire sequence poses a problem to downstream housing developments. Wildland fires have resulted in high property and resources loss, and the numerous fire starts are moving vegetative communities towards type conversions.

A rich diversity of plant and animal species is present within Soledad Front Country.

Soledad Canyon includes habitat for the unarmored threespine stickleback, least Bell's vireo, southwestern willow flycatcher and numerous other riparian dependent species.

Opportunities for establishment of regional wildlife linkages to improve connectivity between the San Gabriel, Castaic and Santa Susana Mountains exist and are needed in this Place. Potential threats to sensitive habitat areas include developed and dispersed recreation, mining, wildland fire and groundwater extraction.



Soledad Canyon Wildlife Viewing Station, Soledad Front Country Place

The cultural landscape of the Soledad Front Country is rapidly converting from rural to urban due to the development of housing tracts along the national forest boundary. Human influences, such as urban development, intensive use areas, transportation corridors, utility corridors, sand and gravel mining, road cuts and flood control channels are creating strong visual contrasts and user conflicts within this Place. Most facilities and trails are located along drainages, ridge tops or cut into hillsides. Urban development is affecting access to National Forest System roads and trails, and residents of adjacent developments are creating social trails on national forest land. Encroachment has increased due to urbanization resulting in problems of trespass, fire, and resource damage.

Trailheads and travel routes offer visitors year-round access to the Angeles National Forest. The trails through the Place lead visitors by dramatic canyon and rugged mountain views. The area has a rich history and is known for a high occurrence of heritage resource sites. Recreation opportunities such as hiking the Pacific Crest National Scenic Trail and managed OHV areas occur within this Place. Recreation use is conflicting with other resources, and facilities are aging and do not meet Americans with Disabilities Act or the National Forests and Grasslands Built Environment Image Guide (BEIG). Environmental education venues (including the Placerita Nature Center) are present in the area, but there is no unifying, overview or integrated focus.

This area accommodates other human uses and needs, such as providing the backdrop for movies and television shows, mining activities, electric utility and distribution lines, and water extraction. However, the supply of both ground and surface water does not adequately provide for forest ecosystem health and other demands. A variety of special-use authorizations exist in this Place that range from electronic sites to shooting areas. Past oil and gas development has also occurred in or near this Place, and there may be the potential for future oil and gas exploration and development.

The Place has many existing activities that are not authorized. Problems in the canyons associated with human use, such as trash and car dumping, partying, graffiti, illegal OHV use, and closure maintenance are persistent. Law enforcement coverage is inadequate, especially at night.

Special Interest Areas:

- Aliso - Arrastre Middle and North 7,850 acres

Proposed Critical Biological Zones (see table 524: Angeles NF Critical Biological Land Use Zones, page 10)

- Soledad Canyon

Total national forest acres--Soledad Front Country Place: 59,338

Desired Condition: The Soledad Front Country Place is identified as a "Key Place" for its natural appearing area that functions as a scenic backdrop and transitional landscape. The valued landscape attributes to be preserved over time are the dramatic canyon and rugged mountain views, the presence of pine and juniper stands, and a well-defined age class mosaic with patches in chaparral. Heritage resources are managed to standard under a comprehensive and integrated management plan. Wildlife linkages connecting the San Gabriel Mountains to the Castaic and Santa Susana Mountains is established and functioning. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time. Private land between the two mountain ranges is acquired and the Pacific Crest National Scenic Trail is connected.

Program Emphasis: Management emphasis is expected to focus on the protection of communities from the threat of fire, the management of high levels of recreation use, and the maintenance of urban and forest infrastructures (facilities). The success of this emphasis is dependent on a sustainable level of development and the delicate balance between the needs of people and the effects of those uses on the plant and animal communities in the national forest. Uses must be balanced to promote the conservation of valuable natural resources and to sustain the needs of people. The significance of the heritage resources in the Place is recognized through the designation of special areas managed for the heritage resource value. Special emphasis will be given to acquiring private land between the San Gabriel and Sierra Pelona Mountain Ranges in order to connect the Pacific Crest National Scenic Trail. The national forest will focus on protection of open space and boundary management in anticipation of future adjacent development.

The national forest is active in regional planning efforts to establish a wildlife linkage connecting the San Gabriel Mountains to the Sierra Pelona and Santa Susana Mountains. Uses and activities are managed to provide opportunities for establishment of regional wildlife linkages in the Soledad Front Country Place. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species, such as the unarmored threespine stickleback, arroyo toad, southwestern willow flycatcher, least Bell's vireo, San Diego horned lizard, two-striped garter snake and sensitive plants will be emphasized in all activities. Arundo and other exotic species eradication to restore healthy riparian systems will continue to be emphasized.

Special emphasis will be given to acquiring private land between the San Gabriel and Castaic Mountain Ranges in order to connect the Pacific Crest National Scenic Trail.

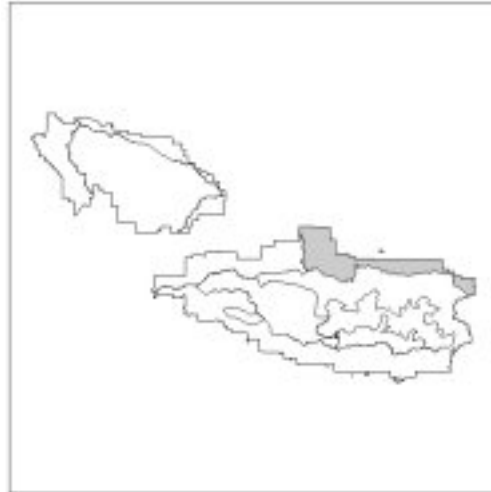
Mojave Front Country

Theme: The Mojave Front Country Place functions year-round as a low elevation open space for Mojave Basin residents, as well as the metropolitan residents of Los Angeles and San Bernardino Counties. It serves as the backdrop for the Antelope Valley, while providing breathtaking distinct desert views from within the Place. This desert interface landscape provides portals from the Mojave Basin to the Angeles and San Bernardino National Forests. It is one of the "Key Places" representing the most picturesque national forest locations, containing its own landscape character.

Setting: The Mojave Front Country Place rises up from the Mojave Desert with elevations from about 3,000 feet up to 6,000 feet. The lower elevation edge is delineated by the interface with the Mojave Desert. The higher elevation edge is marked by a series of peaks and ridges and provides winter snowplay opportunities. The northern aspect's steep to very steep slopes with sharp to rounded summits and narrow canyons are the dominant landforms of this landscape.

The steeper reaches of slopes are barren and show evidence of fractured rock and landslides. Canyons have steep rocky sides that are covered with large boulders. The area is influenced by the San Andreas Fault zone, along with other faults, that result in unique geologic formations, such as those seen at Mormon Rocks and Devil's Punchbowl Special Interest Area. The presence of faulting has resulted in the movement and exposure of mineral resources that influences human activity, (i.e., limestone mining, and clay extraction).

The rain shadow from the San Gabriel Mountains affects vegetation types and water availability in the Mojave Front Country Place. It is a transition zone from high desert to forest. Desert scrub and pines are the most dominant plant communities. In higher elevations, pines are present as scattered individuals or tight clumps. Pinyon and Joshua trees are present at the lowest elevations. Sycamore and cottonwood are present in drainages and shaded canyons. Scattered



High desert landscape and Joshua Trees, Mojave Front Country Place



large drainages provide limited perennial water play and fishing areas along this front.

The Mojave Front Country Place includes habitat for the arroyo toad, mountain yellow-legged frog, least Bell's vireo, the southwestern willow flycatcher, desert tortoise and several Region 5 sensitive plants and animals. Potentially important habitat linkages occur between the

national forest and adjacent private land. Potential threats to riparian dependent species and other sensitive habitat areas include developed and dispersed recreation, and wildland fire.

The supply (ground and surface water) does not meet the need for forest ecosystem health and other demands. Surface groundwater supply in many locations is overextended, causing stress on riparian and aquatic ecosystems. Watercourses carry pollutants, including bacteria, which affect the human environment. Abandoned mines are posing a safety hazard, and are a visual impact to the character of the area.

The cultural landscape of the Mojave Front Country is generally undeveloped. Some of the oldest and most varied heritage resource sites for the national forests exist within the Place. This area is quickly changing from a rural undeveloped landscape to an urbanized setting along the national forest boundary. Housing increases along the boundary are affecting access to national forest land. Human influence is most apparent in developed and dispersed recreation facilities and on trails, leaving the majority of the landscape subject to ecological change. Human impacts that create strong visual contrast within this landscape include road cuts, utility corridors, and intensive recreation use areas. Most facilities and trails are located along drainages, on flats, or are cut into hillsides. This area is generally accessed from portals along California State Highway 2, 14 and 138, and Big Pines Highway. The limited paths through this nearly inaccessible landscape lead visitors to dramatic desert panoramas and rugged mountain background views.



Little Rock Dam

Hiking, backpacking, equestrian use, bicycling, mountain biking, hunting, OHV use, and water-based recreation are the most popular recreation activities occurring within this Place and require a support network of trails and roads, and developed facilities. The dramatic changes in scenery and vegetation also create a viewshed that promotes driving for pleasure. Recreation is centered along Little Rock and Big Rock Creeks, in close proximity to major travel ways. OHV opportunities exist within the Back Country Discovery Trail and the Little Rock OHV Area. The

demand for low elevation recreation along riparian areas is reaching or exceeding capacity. Riparian areas are overused and under supported in terms of infrastructure (i.e., sanitation and trash facilities). Conflicts exist between recreationists and threatened, endangered, proposed, candidate and sensitive species.

The presence of urban development along the national forest boundary in this Place is not consistent with the buildup concentrated in the northwest and northeast sections of this Place. This presents a challenge to the local governments and the national forest to have a consistent management strategy along the national forest boundary, and places greater emphasis on the national forest to provide fire protection and habitat linkages in those areas of intense buildup along the boundary. Encroachment has increased due to the urban development resulting in access and trespass issues.

Adjacent developments are creating their own social trails on national forest land, primarily caused by an increase in unlawful OHV use. The Place is continually having problems due to trash, car dumping, graffiti, illegal OHV use, and partying, with enforcement capability at a minimum due to inadequate law enforcement coverage.

Establishment of a regional wildlife linkage to improve connectivity between the San Gabriel Mountains north to Saddleback Butte is needed.

Eligible Wild and Scenic Rivers:

- Little Rock Creek 10.9 miles

Existing Special Interest Areas:

- Devil's Punchbowl 1,166 acres

Proposed Critical Biological Zones (see table 524: Angeles NF Critical Biological Land Use Zones, page 10):

- Lower Little Rock Creek

Total Angeles National Forest acres--Mojave Front Country Place: 52,610

Desired Condition: The Mojave Front Country Place is maintained as a natural appearing and cultural landscape that functions as a year-round, low elevation open space for Mojave Basin residents and the residents of Los Angeles and San Bernardino Counties. It also serves as a scenic backdrop for the Antelope Valley and this desert-interface landscape is identified as a "Key Place" for the Angeles National Forest. The valued landscape attributes to be preserved over time are distinct desert views from within the Place and rugged mountain background views, desert scrub, scattered pinyon pines, Joshua trees, sycamore, and cottonwood in drainages and shaded canyons, as well as the remnants of Native American history.

A wildlife linkage connecting the San Gabriel Mountains north to Saddleback Butte has been established and is functioning. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Exotic species are reduced and controlled over time.

Program Emphasis: Management is expected to focus on community protection, recreation use, and urban and forest infrastructure that is sustainable, consistent with the natural setting and integrity, and has minimal effects to species of management concern and their habitat, as well as heritage resources. Management will also emphasize the interpretation and protection of the heritage resource sites of the Place, which are some of the oldest in the national forest. Forest health in terms of water quality and quantity will be managed to provide for forest ecosystem needs and the instream flow necessary to support surface and subsurface resources. Uses will be balanced and promote the conservation of resource qualities that sustain these uses and provide attractions for this area. The national forest will focus on open space protection and boundary management in anticipation of adjacent development.

The national forest is active in regional planning efforts to establish a wildlife linkage connecting the San Gabriel Mountains north to Saddleback Butte. Uses and activities are managed to provide opportunities for establishment of a regional wildlife linkage in the Mojave Front Country Place.

Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species such as the arroyo toad, southwestern willow flycatcher, least Bell's vireo, San Diego horned lizard, two-striped garter snake, California spotted owl, joint beavertail cactus and other sensitive plants will be emphasized in all activities. Arroyo toad surveys will be completed. In the Little Rock area, the current Monitoring and Use Assessment Plan will be evaluated and redesigned. Exotic species eradication to restore healthy riparian systems will be emphasized.

Forest-specific Design Criteria

Place-specific Standards

ANF S1 - Pacific Crest Trail - Protect scenic integrity of foreground views as well as from designated viewpoints. Where practicable, avoid establishing nonconforming land uses within the viewshed of the trail (Liebre-Sawmill, Santa Clara Canyons, Soledad Front Country and Angeles High Country).

Wilderness Standards

ANF S2 - Open campfires and glass containers are not allowed within any wilderness. Visitors must use gas, jellied petroleum, pressurized liquid fuel or other portable camp stoves that are completely enclosed.

ANF S3 - The maximum visitor group size is 25 people. Exceptions may be approved by the authorized officer.

Forest-wide Guidance

Functional management plans (both existing and anticipated) that provide more specific direction are listed below:

- Wilderness Plans and Implementation Schedules
- Wild and Scenic River Management Plans
- Forest Fire Management Plans
- Special Interest Area Plans
- Research Natural Area Establishment Reports and Implementation Plans
- Scenic Byway Plans
- Management Plan for the San Dimas Experimental Forest
- Facilities Master Plan
- Species Guidance Documents (see Appendix H in Part 3)

Performance Risks

The national forest operates in a dynamic environment, characterized by uncertainties in both internal and external operating conditions, due to fluctuations in the natural environment and the institutional environment. If events unfold in a manner that was not anticipated when this prospectus was prepared, attainment of the objectives shown above will be affected.

Risks Related to the Natural Environment

Fires, insect or disease outbreaks, and other disturbances are likely to occur, and could significantly alter current conditions.

The national forest has experienced large wildland fires in the last 10 years. Where and when future fires will burn is an inexact science. If future wildland fire disturbance events exceed historical averages, or are concentrated in areas that are particularly vulnerable (urban interface, riparian areas, or special habitats) then the extent, location, and timing of management activities could all be affected.

Risks Related to the Institutional Environment

The national forest budget could differ from projections.

The trends in accomplishment of objectives shown above are dependent on the national forest receiving an operating budget that is similar to its experienced budget over the last three years. Fluctuations in the budget (either upward or downward) would likely cause a change in the direction and/or magnitude of projected accomplishments. In addition, changes in the mix of funds between program areas also have the potential to affect the rate or magnitude of performance.

National or regional strategic initiatives may emerge in response to broad-scale issues.

This forest plan is linked to the agency's National Strategic Plan (see Part 1: Southern California National Forests Vision) that is updated every three to five years. Historically, both Congress and the Executive Branch have also instituted program initiatives outside of the forest planning process that affect much or all of the National Forest System (e.g., the Roadless Rule, the National Fire Plan, and the National Energy Policy). Such changes in national direction have the potential to add to, override, or otherwise adjust the performance objectives of the national forest.

Appendix A - Special Designation Overlays - Angeles National Forest

Wilderness

Existing Wilderness

Cucamonga	Places: The Front Country, Angeles High Country	4,201 Acres
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Located on the eastern flank of the San Gabriel Mountains near Cajon Pass, this area is adjacent to some of the most densely populated areas of southern California. It is jointly managed by the San Bernardino National Forest and may be accessed by Forest Roads 2N58 and 1N34.

Elevations in the Cucamonga Wilderness range from 4,920 to 9,008 feet (Telegraph Peak rises to 8,985 feet). Movement of the nearby San Andreas Fault has left landslides as visual reminders on the landscape. Vegetation at the lower elevations is predominantly chaparral, with conifer stands blanketing the high country. The area is characterized by extremely rough and precipitous terrain. The headwaters of Lytle, Cucamonga, Deep and Day Creeks lie immediately south of the wilderness boundary. A herd of bighorn sheep inhabits the area. There are three dispersed campsites within the wilderness (two on the San Bernardino National Forest side, and one on the Angeles National Forest side), and human use of the area is heavy (Tilton).

San Gabriel Wilderness	Places: San Gabriel Canyon, Angeles Uplands East, Angeles High Country	36,118 Acres
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This wilderness is located in the San Gabriel River Ranger District. The boundaries of the San Gabriel Wilderness are the Angeles Crest Scenic Byway, (California State Highway 2) on the west, the San Gabriel Mountains summit and the Angeles Crest Scenic Byway on the north, California State Highway 39 on the east, and the West Fork of the San Gabriel River on the south. Access is from: Bear Creek Trail, an eleven-mile trail, with trailheads near Rincon and Coldbrook Ranger Stations, both off Highway 39; the Mt. Waterman Trail, a ten mile trail, from Three Points to Buckhorn, with a one mile side trail to Twin Peaks Saddle; or Devil's Canyon Trail, a four mile trail down into Devil's Canyon.

The area encompasses some extremely rugged terrain, including steep, fractured slopes. Elevations range from 1,600 to 8,200 feet. The predominant vegetative type is chaparral, which covers about 75 percent of the wilderness in the lower elevations. Dense chaparral rapidly changes to pine and fir-covered slopes and majestic peaks, with glimpses of wildflowers and a variety of wildlife as you enter the upper elevations. The remainder of the vegetation is woodland, grasslands and mixed conifers. Wildland fires are a threat to the area, especially during periods of hot, dry Santa Ana Winds.

In 2000, the entire wilderness on the Angeles National Forest had 100,000 visits, which accounted for less than 3 percent of total national forest use. The riparian woodlands located in canyon bottoms receive the most use. Much of the use is concentrated on the few trails within the wilderness, causing some overuse and congestion. Popular recreation activities that occur in this area include hiking, fishing, waterplay and picnicking.

As one of the original wilderness areas nationally designated in 1964, the San Gabriel Wilderness is in a Class 1 air resource. There is no grazing within the wilderness.

Sheep Mountain Wilderness	Places: Angeles Uplands East, Angeles High Country, San Gabriel Canyon	39,482 Acres
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In 1984, the Sheep Mountain Wilderness was set-aside as one of the nation's truly unique wild areas. The Sheep Mountain Wilderness is located in the San Gabriel River Ranger District; however, an additional 400 acres of this wilderness lie on the adjacent San Bernadino National Forest. The Sheep Mountain Wilderness is generally bounded by: California Highway 2 (Angeles Crest Scenic Byway) on the north; California Highway 39 on the west; the East Fork of the San Gabriel River on the south; and the Mt. Baldy Village Road and Devils Backbone Trail to the east. The area can be accessed from East Fork trailhead, Coldwater Canyon, California State Highway 2 at Vincent's Gap, and from the Pacific Crest National Scenic Trail. Vegetation (consisting primarily of chaparral) offers high-quality scenery.

The wilderness land is rugged and not easily accessible, but is still highly used by Los Angeles residents. With elevations ranging from 2,400 ft. to over 10,000 ft., this area offers something for everyone. Whether you are a novice hiker, an experienced backpacker, a fisherman, or just interested in the 'great outdoors', this rugged terrain provides a variety of opportunities for all.

Mining activities that pre-date 1964 are still present within the area. Concern exists about the stockpiles of tailings next to the wilderness, and the potential raveling of these piles to the canyon bottoms. Special-use authorizations provide reasonable access to these private areas and development of mining operations.

Recommended Wilderness

Cucamonga A (Cucamonga Wilderness)	Places: The Front Country
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Acres: 448

The recommended Cucamonga A addition is composed of several segments of land adjacent to the existing Cucamonga Wilderness on the Angeles National Forest. The southern most piece is located in Angeles Front Country Place and a small area in Cedar Canyon is in the Icehouse Creek drainage. This area is within the San Antonio watershed. The steep, rocky terrain and lack of additional developed trails make this area very challenging to both novice and experienced hikers and backpackers. The Cucamonga Wilderness itself has a trail system that enables travel from the Icehouse Trailhead east to the San Bernardino National Forest, as well as north and south to a number of peaks. The ridge trail (7W06) northerly ties into the Pacific Crest Trail.

Sheep Mountain (Sheep Mountain Wilderness)	Places: San Gabriel Canyon, Angeles Uplands East, Angeles High Country, Mojave Front Country
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Acres: 12,727

The areas proposed are rugged and not easily accessible, but are still highly used by Los Angeles and San Bernardino residents. Elevations range from 2,400 feet to over 10,000 feet, offering a variety of recreation opportunities. The vegetation consists primarily of chaparral at the lower elevations and mixed conifer in the higher elevations.

The proposed addition can provide improved connectivity and expand the wildlife corridor, which is habitat for three groups of bighorn sheep: Iron Mountain, Cattle Canyon and Middle Fork.

There is one large in-holding within the Inventoried Roadless Area, the Gold Ridge Mine. A special-use authorization provides reasonable access to this private land and development of the mining operations.

Wild and Scenic Rivers

Eligible

Little Rock Creek	Places: Mojave Front Country, 10.9 miles; Angeles High Country, 7.5 miles
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The Eligibility Study for this river shows that its undisturbed and primitive condition gives it local scenic significance. This desert and high country setting attracts visitors for picnicking, waterplay and driving opportunities. A diverse array of wildlife species, including threatened, endangered, and sensitive species are found within this portion of Little Rock Creek, along with prehistoric sites valued by local Native American tribes. Little Rock Creek and its tributary (Cooper Canyon) are eligible for classification as a Wild and Scenic River.

Lower Piru	Places: I-5 Corridor, 3.7 miles
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This segment of Piru River on the Angeles National Forest starts 300 feet below Pyramid Lake Dam and continues downstream to the Sespe Wilderness boundary. Along this stretch of the river, geological values were determined to be outstandingly remarkable, including scenic tilted layers of sedimentary rocks as well as faults and rock formations with features crucial to the understanding of geological formation on the west coast of North America.

San Antonio Canyon Creek	Places: Angeles Uplands East, 1.4 miles; Angeles High Country, 2.2 miles
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The Eligibility Study for this portion of the river recognizes its recreation values, especially its year-round flowing water. Numerous dispersed recreation activities occur along this river, including waterplay, picnicking and barbequing. Manker Flats Campground, along with the Ice House Canyon Trail that enters the Cucamonga Wilderness are located near this portion of the river. The 3.7-mile upper portion of the river (which lies outside of privately owned property) is eligible to be classified as a recreational river.

San Francisquito Canyon	Places: Santa Clara Canyons, 13 miles
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The entire length of the San Francisquito Canyon flows freely into the Santa Clara River, qualifying it as outstandingly remarkable. The lower segment of the river is considered outstandingly remarkable as a result of the combination of geologic processes and historical values in the corridor. The dam site has become the archetypical example for dam design and engineering. The entire river is eligible for classification as a recreational river.

San Gabriel River (East, West and North Forks)	Places: San Gabriel Canyon, 18.9 miles; Angeles Uplands East, 7.9 miles; Angeles High Country, 0.6 miles.
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East Fork: The river-related values determined to be outstandingly remarkable in the eligibility inventory are scenery (upper segment), recreation (upper segment), fisheries (both segments), and historic values (both segments). The scenery value is considered to be regionally important due to the variety and seasonal variation of landscape elements. The recreation value is considered to be of regional importance, as the peace and solitude offered by this wilderness environment attracts visitors from outside the local areas. There is also a presence of significant historic mining sites. Finally, an assemblage of native fish and the rarity of the Santa Ana sucker lend a national significance to the fish values of the East Fork San Gabriel River. The 8.4-mile segment within the wilderness is eligible for classification as a wild river, while the free-flowing 7.3-mile segment outside of the wilderness is eligible for classification as a recreational river.

North Fork: Fisheries values on this 4.2-mile segment of the San Gabriel River are outstandingly remarkable. The North Fork supports a regionally and nationally significant assemblage of native fishes, including the presence of the Santa Ana sucker, a federally threatened species. The North Fork is eligible for classification as a recreational river.



West Fork: Recreational values in both the upper and lower segments of the West Fork San Gabriel River are considered to be outstandingly remarkable and attractive to both local and regional recreationists. There are ample recreation opportunities including three National Recreation Trails, year-round flowing water and high quality fishing opportunities, several campgrounds and group campgrounds, and access to the San Gabriel Wilderness. The assemblage of native fishes, including the presence of the Santa Ana sucker, a federally threatened species, along with the State of California Wild trout stream designation, give the lower segment of West Fork San Gabriel River a regional and national significance for fish resources. Due to the existing road that parallels the river, the West Fork is eligible for classification as a recreational river.

Research Natural Areas

Established

Falls Canyon	1,440 acres	Place: Angeles Uplands West
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Falls Canyon Research Natural Area (RNA) (1,440 acres) was established in 1998 to preserve the bigcone Douglas-fir (*Pseudotsuga macrocarpa*) and canyon live oak (*Quercus chrysolepis*) woodland target elements. Bigcone Douglas-fir grows in relatively dense stands on steep slopes in this RNA, where it has been largely protected from fire. The oldest trees have been determined to be over 350 years old and have survived several historic fires. Falls Canyon is a tributary of the west fork of the San Gabriel River on the slopes of Mount Wilson. Elevations range from about 3,400 to 5,700 feet within the RNA. Access is from the Mount Wilson road and various trails that border and traverse the area.

Fern Canyon	1,400 acres	Places: The Front Country
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Fern Canyon Research Natural Area was established to protect the target elements of chamise (*Adenostoma fasciculatum*) chaparral and canyon live oak (*Quercus chrysolepis*) woodland. A relict stand of low-elevation ponderosa pine (*Pinus ponderosa*) also occurs in the RNA at Brown's Flat, a shallow 80-acre bowl created by an ancient land slump. The RNA covers 1,400 acres and ranges in elevation from 2,592 to 5,512 feet. Fern Canyon RNA falls entirely within the San Dimas Experimental Forest, which is managed by the Pacific Southwest Research Station and is closed to general public use. Researchers can gain access via special-use authorization. The entire RNA was affected by the 2002 Williams Fire. Burned and partially burned vegetation is expected to recover naturally.

Special Interest Areas

Devil's Punchbowl	Botanical, Geological	Places: Mojave Front Country
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The Devil's Punchbowl Special Interest Area (SIA) is located in Los Angeles County (T4N, R9W Sections 19, 20, 29, 30). The 1,255-acre area is managed by both Los Angeles County Parks and the Angeles National Forest.

Prominent biological features include the chaparral to conifer transition between 4,000-6,000 feet and riparian associations along a small, permanent stream.

The area has a geologic theme, emphasizing the area's folds and faults, plate tectonics, and sculpture of the land. Devil's Punchbowl is a unique assemblage of spectacular rock formations illustrating various geologic processes. Geology of this area provides insight into the history and effects of the San Andreas Rift Zone. This SIA also contains a desert riparian plant community and provides nesting habitat for the prairie falcon. Most of the area is currently managed as a Los Angeles County Park. It is a very beautiful area of lush vegetation and striking rock formations at the base of the San Gabriel Mountains.

Mt. Baden-Powell	Botanical	Places: Angeles High Country
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The 252-acre Mt. Baden-Powell Special Interest Area is located in Los Angeles County (T3N, R8W Section 7; T3N, R9W Section 12).

The north slope of this peak supports one of the best examples of limber Pine (*Pinus flexilis*) in southern California. The peak and adjacent area contain elements of subalpine habitat, including at least three San Gabriel endemic plant species.

Mt. San Antonio	Alpine and subalpine vegetation	Places: Angeles High Country
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The 164-acre Mt. San Antonio Special Interest Area is located in both Los Angeles and San Bernardino Counties (T2N R7W, Sections 5 and 6). Elevations here range from 7,000 to 10,000 feet.

The major theme of the SIA is subalpine and alpine vegetation, especially lodgepole pine forest. Mt. San Antonio exhibits one of the best examples of subalpine habitat with a unique proximity to thousands of square miles of arid and semi-arid landscapes. Block faulting has lifted Mt. San

Antonio to 10,064 feet above sea level, almost 9,000 feet above the surrounding valley floors. It is adjacent to the Sheep Mountain Wilderness. Four endemic plant species also grow here and the area provides summer habitat for Nelson's bighorn sheep.

Aliso - Arrastre Middle and North	Cultural	Places: Soledad Front Country
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Acres: 7,850

This area is known for its heritage resource values. The Special Interest Area (SIA) includes many Native American archaeological sites ranging from long-term occupation sites, seasonal encampments and special-use resource procurement, processing, and storage sites. Of particular interest may be the numerous stone circle features so far found within the SIA, many of which are interpreted as house rings, storage caches, or religious sites. This concentration of stone circles may be unique in southern California. Also located within the SIA are several sites containing cupule rock art features. One of these sites is currently being nominated to the National Register of Historic Places.

The span of Native American habitation ranges from the historic period to the Late and Middle Prehistoric Periods, and likely even earlier. Glass trade beads show evidence of Native American habitation in the historic period, and dates from arrow points, shell bead types, and C14 from earth ovens prove habitation in the Late and Middle Prehistoric Periods. Artifacts include objects manufactured from steatite obtained from the Channel Islands and obsidian obtained from the Owens Valley. These provide strong evidence of trade networks with desert and coastal groups. The SIA contains archaeological materials that provide a unique opportunity to obtain invaluable data related to past human life-ways and environmental adaptations, as well as paleoenvironmental conditions.

The SIA encompasses Angeles National Forest administered lands within the Aliso, Arrastre, and Kentucky Springs Watersheds on the Santa Clara-Mojave Rivers Ranger District. The area of the SIA has many other national forest uses occurring, including a transmission line corridor (lines, roads), clay mining operation, National Forest System roads, Los Angeles County Roads, plantations, private in-holdings, and hiking and riding trails. Elevations range from 2,950 to 5,900 feet for the combined SIA with the elevations ranging from 2,950 to 4,000 feet for the segment of the SIA that appears in the alternative. The vegetation is primarily chaparral at the lower elevations and a montane chaparral mix with stands of Coulter pine, canyon oak, and incense cedar at the higher elevations.

The SIA is located south of the town of Acton and north of the Santa Clara Divide. Access from the north is from California State Highway 14 along Aliso Canyon Road and from the east along the Angeles Forest Highway. National Forest System roads 4N24 and 4N32 travel through the interior of the SIA, and 3N17 provides access from the south.

Liebre Mountain	Botanical	Places: Liebre-Sawmill, Santa Clara Canyons
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This 9,521 acre Special Interest Area (SIA) offers an interesting mix of several plant communities. The Liebre Mountains are noteworthy for the diversity of *Quercus* and oak-dominated vegetation. Important arborescent species of oaks include *Quercus kelloggii* (black oak), *O. douglasii* (blue oak), *Q. chrysolepis* (canyon live oak), *Q. agrifolia* (coast live oak), and *Q. lobata* (valley oak). Within the SIA, the black oak series is best developed along the crest of Liebre Mountain. This series is characterized by rather open and savanna like stands of black oak with scattered canyon live oak.

On northerly slopes, black oak woodland grades into mixed oak, canyon live oak, and bigcone Douglas-fir woodland, while on the southerly slopes it generally gives way to chaparral dominated by shrub species of *Quercus*, especially *Q. wislizeni* var. *frutescens* (interior live oak scrub). Other various dominant or codominant shrub forms of *Quercus* present on south slopes within the SIA include Brewer oak (*Quercus garryana* var. *breweri*) and canyon live oak shrub (*Q. chrysolepis*). Stands of the blue oak series are limited to the northwestern end of the SIA in the vicinity of Sandberg on the northwestern foot of Liebre Mountain.



Liebre Mountain Special Interest Area. Photo by Roy Murphy

Another unique feature of the SIA is the occurrence of the California spotted owl (*Strix occidentalis occidentalis*), a Region 5 sensitive species. This rare bird inhabits portions of the SIA. Of particular

importance is the north slope of Liebre Mountain where mixed oak, canyon live oak, and bigcone Douglas-fir woodlands intermix to provide high quality habitat for this species. Spotted owl densities within this area are possibly higher than any other location on the forest.

The SIA is approximately 75 miles north of the city of Los Angeles.

Experimental Forest

San Dimas Experimental Forest		
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Experimental forests and ranges provide lands for conducting research that serves as a basis for the management of forests and rangelands.



The San Dimas Experimental Forest (SDEF) is a protected field laboratory under the joint management of Pacific Southwest Research Station and the Angeles National Forest for studies of hydrology, fire, and other topics relating to the ecology of chaparral and related ecosystems. Located in the San Gabriel Mountains north of Glendora, it covers 17,163 acres and has been closed to the general public, except under special written permit, since establishment in January 1933.

The San Dimas Experimental Forest is also a Biosphere Reserve under UNESCO's Man and the Biosphere Program. It contains the 1,370-acre Fern Canyon Research Natural Area (RNA). The Williams Fire burned through most of the SDEF in September 2002, which destroyed several experimental plots and structures. Most of the buildings at the Tanbark Flats headquarters were saved, but the plant cover and instrumentation at the lysimeters (unique in-ground facilities originally built to measure water movement through the soil) were mostly lost. The archived soil samples taken when the lysimeters were filled in 1937 and the building that housed them were also lost. The Pacific Southwest Research Station and Angeles National Forest will implement the Joint Management Plan for the SDEF, which will be tiered to the forest plan revision.

There are a number of other uses within the SDEF, including 14 recreation residences in the Main and West Fork San Dimas tracts, several apiaries, and a communications site. These uses are authorized by special-use authorization and access is controlled.

The primary objective at the San Dimas Experimental Forest is long-term environmental monitoring. This includes the elements of:

- Climate and weather
- Stream-water discharge
- Stream-water nitrate concentration and discharge
- Remote sensing
- Avian populations
- Soil erosion
- Vegetation biomass

The San Dimas Experimental Forest will be managed to retain important scientific research values according to its Establishment Record, management plan and land management plan.

Appendix B - Program Strategies and Tactics

This section details the program strategies the national forests may choose to emphasize to progress toward achieving the desired conditions and goals described in Part 1. The national forests will prioritize which strategies they choose to bring forward in any given year using the program emphasis objectives, national and regional direction, and available funding. Lists of more specific tactics are included to help the reader understand what may be involved in implementing these strategies. Finally, each strategy that supports a Government Performance and Results Act (GPRA) goal and objective is linked to the 2004-2008 National Strategic Plan. Please note, the strategies may not be numbered consecutively. The strategies listed in Appendix B are those the Angeles National Forest managers intend to emphasize in the next three to five years (2006 through 2008-2010).

Tribal 1 - Traditional and Contemporary Uses

Allow traditional uses, access to traditionally used areas, as well as contemporary uses and needs by tribal and other Native American interests:

- Protect, conserve, and restore traditionally or contemporarily used resources. Opportunities for traditional use of the national forest and national forest resources are improved and provisions are made to offer access to sites with cultural significance. Use opportunities during project planning and implementation to identify, enhance, and protect traditionally or contemporarily used resources.
- Maintain opportunities for spiritual solitude for tribal groups and individuals. Retain the character of traditional sites in conditions consistent with traditional cultural uses.
- Establish effective partnerships to address issues of mutual concern (plant material propagation, etc).
- Work collaboratively with tribes to determine appropriate locations and levels for gathering traditional plant materials.

Tribal 2 - Government to Government Relations

Establish effective relationships with federally recognized tribes:

- Using the National Tribal Relations Strategy, develop government-to-government protocols with all recognized tribes and organized groups of local Native Americans within this planning cycle.
- Develop protocols to promote collaborative partnerships for heritage resource management, ecosystem restoration, comprehensive fire planning, and to recognize historic Native American access rights to land areas and resources.

AM 1 - Land Management Plan Monitoring and Evaluation

Report the results of land management plan monitoring and evaluation questions in the annual monitoring and evaluation report, including the actions taken to respond to new information learned through the adaptive management cycle:

- Amend the land management plan as necessary in response to monitoring and evaluation.
- Implement adaptive management measures designed to redirect activity outcomes toward improved environmental protection.
- Manage recreation opportunities to respond to changing visitor demographic profiles.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 5.

AM 2 - Forest-wide Inventory

Develop and maintain the capacity (processes and systems) to provide and analyze the scientific and technical information needed to address agency priorities including:

- Develop and use databases and monitor the results to track and display the cumulative effects of forest plan implementation.
- Conduct surveys within suitable habitat to determine presence of threatened and endangered species.
- Survey suitable habitat for federally listed and Region 5 sensitive species. Update all maps and databases as information is obtained.
- Survey wetlands, vernal pools, meadows, springs and stringer meadows for plant and wildlife species (e.g., spring snails, etc).
- Identify and map all riparian areas.
- Inventory geologic resources (fossils, caves, groundwater basins and extractions, geologic special interest areas, geologic features along scenic corridors, etc.) that are available to the public, affecting other resource areas, or needing special management or protection.
- Identify and mitigate geologic hazards (seismic activity, landslides, land subsidence, flooding and erosion) through landscape and watershed planning, sediment placement site planning, engineering design, reclamation and maintenance.
- Inventory water extractions, diversions, miles/acres of streams, acres of water bodies, acres of riparian, etc.
- Study and identify how rock types and geomorphic processes directly affect soil type development, geo-technical conditions for excavations and construction activities, vegetative type distribution and development, and variation in species habitat. Develop an improved understanding of the relationships of geologic resources and hazards to ecologic functions and patterns as they apply to the management of national forest lands and the effects of fire.
- Conduct integrated inventories of ecologic functions (ecological unit inventory) at the scale appropriate to the need.

- Complete invasive nonnative plant and animal inventories based on regional protocol methods.
- Work with the appropriate agencies and academic sources to develop protocols and survey guidelines, gathering current information and identifying additional research needs for resource management. Implement research as opportunities occur. Priority wildlife studies:
 - Ecological revegetation and restoration and mine reclamation techniques.
 - Effects of nonnative species and effects of management activities on threatened, endangered, proposed, candidate and sensitive species habitat.
 - Effects of cowbird interactions to vireos and flycatchers.
 - Best methods for removal of exotic species (bullfrog, etc.).
 - Results of the removal of nonnative species from threatened, endangered, proposed, candidate and sensitive species habitat.
 - Effects of off-highway vehicle disturbances and other recreation activities on wildlife.
 - Validation of use of habitat linkages.
 - Effects of national forest product removal on other resources.
 - Effects of management activities on oak regeneration.
 - Additional information on species specific habitat use and distribution on National Forest System land.
- Validation of watershed standards for cumulative effects (less than 20 percent manipulation/yr and less than 40 percent over five years).

Linked to National Strategic Plan

Goal 5 - Improve watershed condition, objective 3; and

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

WL 1 - Threatened, Endangered, Proposed, Candidate, and Sensitive Species Management

Manage habitat to move listed species toward recovery and de-listing. Prevent listing of proposed and sensitive species.

- Implement priority conservation strategies (see table 528 Angeles NF Conservation Strategy).
- Use vegetation management practices to reduce the intensity of fires to reduce habitat loss due to catastrophic fires.
- Work with the U.S. Fish and Wildlife Service (USFWS) to develop recovery plans for federally listed species. Implement Forest Service actions as recommended in recovery plans for federally listed species.
- Establish and maintain a working relationship with county and city governments to ensure coordination on development projects adjacent to the national forest, as well as implementation of multi-species habitat conservation plans.
- Coordinate with California Department of Fish and Game (CDF&G) regarding fish stocking and nonnative fisheries management to implement measures to resolve conflicts with threatened, endangered, proposed, candidate, and sensitive species and habitats.
- Recommend mineral withdrawal when needed to provide species protection over the long-term.

Linked to National Strategic Plan

Goal 5 - Improve watershed condition, objective 3; and

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

Table 528. Angeles NF Conservation Strategy

Conservation Strategy Emphasis – Priority tasks for next 3-5 years.

Strategy	Specific Species
Education/ Information/ Interpretation	<p>Importance of riparian and aquatic species and habitat: arroyo chub, Santa Ana speckled dace, Santa Ana sucker, unarmored threespine stickleback and other native fishes, arroyo toad, California red-legged frog, mountain yellow-legged frog, southern Pacific pond turtle, coast range newt, American dipper, least Bell's vireo, southwestern willow flycatcher, <i>Dodecahema leptoceras</i>, <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>, <i>Lilium parryi</i>, and <i>Nasturtium gambellii</i></p>
	<p>Value of vegetation management to species at risk: San Gabriel Mountains elfin butterfly, California spotted owl, flammulated owl, golden eagle, and long-eared owl</p>
	<p>Importance of keeping vehicles on roads: arroyo toad, California red-legged frog, <i>Astragalus brauntonii</i>, <i>Berberis nevini</i>, <i>Brodiaea filifolia</i>, <i>Calochortus palmeri</i> var. <i>palmeri</i>, <i>Calochortus plummerae</i>, <i>Calochortus striatus</i>, <i>Canbya candida</i>, and <i>Castilleja gleasonii</i></p>
	<p>Habitat fragmentation, species linkages and corridors and biological diversity: American badger, mountain lion, Nelson's bighorn sheep, <i>Androsace elongata</i> ssp. <i>acuta</i>, and <i>Orobanche valida</i> ssp. <i>valida</i></p>
Survey/ Inventory/Increase Knowledge Base	<p>Riparian and aquatic species: aquatic invertebrates, arroyo chub, Santa Ana speckled dace, Santa Ana sucker and other native fishes, arroyo toad, California red-legged frog, mountain yellow-legged frog, southern Pacific pond turtle, least Bell's vireo, southwestern willow flycatcher, <i>Dodecahema leptoceras</i>, <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>, <i>Lilium parryi</i>, and <i>Nasturtium gambellii</i></p>
	<p>Species with limited distribution: California diplectronan caddisfly, San Gabriel Mountains elfin butterfly, California gnatcatcher, <i>Botrichium crenulatum</i>, <i>Potentilla glandulosa</i> ssp. <i>ewanii</i>, and <i>Thelypteris puberula</i> var. <i>sonorensis</i></p>
	<p>Terrestrial species: American badger and Nelson's bighorn sheep (San Gabriel)</p>
	<p>Upland plants: <i>Arenaria macradenia</i> var. <i>kuschei</i>, <i>Aster greatae</i>, <i>Opuntia basilaris</i> var. <i>brachyclada</i>, <i>Orobanche valida</i> ssp. <i>valida</i>, <i>Packera ionophylla</i>, and <i>Sidalcea hickmanii</i> spp. <i>parishii</i></p>

Strategy	Specific Species
Habitat Restoration/ Improvement	<p>Streambank stabilization, riparian area plantings: arroyo chub, Santa Ana speckled dace, Santa Ana sucker and other native fishes, least Bell's vireo, and southwestern willow flycatcher</p>
	<p>Control of invasive, nonnative species--water loving plant species such as arundo and tamarisk, warm water fish, bullfrogs, and weeds in the upland areas: partially armored threespine stickleback, Santa Ana sucker and other native fishes, arroyo toad, California red-legged frog, coast range newt, mountain yellow-legged frog, southern Pacific pond turtle, <i>Brodiaea filifolia</i>, <i>Calochortus palmeri</i> var. <i>palmeri</i>, <i>Calochortus plummerae</i>, <i>Calochortus striatus</i>, <i>Canbya candida</i>, <i>Castilleja gleasonii</i>, <i>Dodecahema leptoceras</i>, and <i>Opuntia basilaris</i> var. <i>brachyclada</i></p>
	<p>Control of feral animals--domestic sheep and dogs : Nelson's bighorn sheep</p>
	<p>Vegetation and fuel treatments, prescribed burning: partially armored threespine stickleback, Santa Ana sucker and other native fishes, California red-legged frog, mountain yellow-legged frog, California spotted owl, flammulated owl, purple martin, Nelson's bighorn sheep, and <i>Brodiaea filifolia</i></p>
Monitor/Study	<p>Generally focus on federally listed species:</p>
	<p>Riparian or aquatic species: Santa Ana speckled dace, Santa Ana sucker, arroyo toad, California red-legged frog, mountain yellow-legged frog, least Bell's vireo, southwestern willow flycatcher, <i>Chorizanthe parryi</i> var. <i>fernandina</i>, and <i>Dodecahema leptoceras</i></p>
	<p>Species responsive to vegetation treatments: California spotted owl and Nelson's bighorn sheep</p>
	<p>Species recovery after wildfire (burned area monitoring): Santa Ana speckled dace, Santa Ana sucker, California red-legged frog, mountain yellow-legged frog, California spotted owl, <i>Astragalus brauntonii</i>, <i>Berberis nevini</i>, <i>Brodiaea filifolia</i>, and <i>Sidalcea hickmanii</i> ssp. <i>parishii</i></p>
<p>Upland plant species: <i>Astragalus brauntonii</i>, <i>Berberis nevini</i>, <i>Brodiaea filifolia</i>, <i>Castilleja gleasonii</i>, <i>Claytonia lanceolata</i> ssp. <i>piersonii</i>, <i>Dudleya densiflora</i>, and <i>Sidalcea hickmanii</i> ssp. <i>parishii</i></p>	

Strategy	Specific Species
Habitat Protection	<p>Proposed project planning (e.g. reduce type conversion, minimize additional developments, timing of projects to avoid critical life stages): all species of concern benefit from sound project planning</p>
	<p>Prescribed fire or vegetation treatment: arroyo chub, partially armored threespine stickleback, Santa Ana speckled dace, Santa Ana sucker, arroyo toad, California red-legged frog, mountain yellow-legged frog, American dipper, California spotted owl, calliope hummingbird, least Bell's vireo, long-eared owl, purple martin, and southwestern willow flycatcher</p>
	<p>Coordination with other agencies: Santa Ana sucker, California red-legged frog, mountain yellow-legged frog, California condor, California spotted owl, American badger, mountain lion, and Nelson's bighorn sheep</p>
	<p>Habitat acquisition: unarmored threespine stickleback and other aquatic species, California spotted owl, flammulated owl, least Bell's vireo, long-eared owl, southwestern willow flycatcher, American badger, mountain lion, <i>Berberis nevini</i>, <i>Brodiaea filifolia</i>, and <i>Dodecahema leptoceras</i></p>
	<p>Restrict human access during critical life stages (barriers, gates, re-routes, etc. where appropriate): arroyo toad, California red-legged frog, bald eagle, golden eagle, and prairie falcon</p>
	<p>Prevent the spread of invasive nonnative species (plant and animal): Santa Ana speckled dace, Santa Ana sucker and other native fishes, arroyo toad, California red-legged frog, mountain yellow-legged frog, southern Pacific pond turtle, least Bell's vireo, southwestern willow flycatcher, <i>Brodiaea filifolia</i>, <i>Calochortus palmeri</i> var. <i>palmeri</i>, <i>Calochortus plummerae</i>, <i>Calochortus striatus</i>, <i>Canbya candida</i>, <i>Castilleja gleasonii</i>, <i>Dodecahema leptoceras</i>, and <i>Opuntia basilaris</i> var. <i>brachyclada</i></p>
	<p>Fire prevention and suppression: arroyo toad, California red-legged frog, coast range newt, mountain yellow-legged frog, southern Pacific pond turtle, California gnatcatcher, California spotted owl, flammulated owl, least Bell's vireo, MacGillivray's warbler, southwestern willow flycatcher, mountain lion, and <i>Opuntia basilaris</i> var. <i>brachyclada</i></p>

WL 2 - Management of Species of Concern

Maintain and improve habitat for fish, wildlife, and plants, including those with the following designations: game species, harvest species, management indicator species, and watch list species.

- Manage State of California designated Wild Trout streams to maintain high quality habitat for wild trout populations.
- Coordinate and form partnerships with the CDF&G and other cooperators such as Partners in Flight to maintain and improve fish, wildlife and plant habitat.
- Monitor management indicator species (MIS).
- Monitor habitat for ecological health indicators (e.g., tamarisk, aquatic macroinvertebrates, bullfrogs).
- Develop and maintain wildlife water sources and other habitat improvement structures.
- Protect habitat during fire suppression activities where feasible.
- Cooperate with other agencies, partners, and other national forest programs to maintain and improve landscape level habitat conditions and ecological processes over the long-term for landscape linkages, wildlife movement corridors, key deer and bighorn sheep fawning, lambing, and winter ranges, and raptor nesting sites.

Linked to National Strategic Plan,

Goal 5 - Improve watershed condition, objectives 1 and 3, and

Goal 6 - Mission related work in addition to that which supports the agency goals, objectives 1, 3, and 5.

IS 1 - Invasive Species Prevention and Control

Prevent the introduction of new invaders, conduct early treatment of new infestations, and contain and control established infestations:

- Implement the Noxious Weed Management Strategy for the four southern California national forests (see Part 3, Appendix M.).
- Limit ground disturbance to the minimum area necessary during project activities. Promote conditions to enhance the recovery of vegetation in project planning, design, and implementation. Use native plant materials as needed to restore disturbed sites to prevent the introduction or reintroduction of invasive nonnative species. Conduct follow-up inspections of ground disturbing activities to monitor the effectiveness of restoration efforts in reducing or preventing the introduction or re-introduction of invasive non-native plants.
- When setting priorities for treating invasive species, consider the rate of spread, the likeliness of environmental harm resulting from the establishment and spread of the invasive non-native species; the geographical location within the watershed, and the sensitivity of the location, especially invasions occurring within occupied or potential habitat for threatened, endangered or proposed species or within special management areas, such as research natural areas, special interest areas, and wildernesses; and the probability that the treatment(s) will be successful.
- Prevent the introduction of invasive species and coordinate the treatment of invasive species across jurisdictional boundaries. Coordinate internally, as well as with local, state and federal agencies and permittees to prevent future introductions of invasive species through stocking, recreation use, special-use authorizations and all other national forest management and emergency activities or decisions that could promote additional invasions. Emphasize using weed management areas to consolidate and coordinate weed prevention and treatment efforts across jurisdictional boundaries.
- Routinely monitor noxious weed control projects to determine success and to evaluate the need for follow-up treatments or different control measures. Monitor known infestations as appropriate in order to determine changes in density and rate of spread.
- Treatments may include herbicide application if approved through environmental analysis.
- Facilitate research opportunities for invasive nonnative species management on National Forest System lands.

Linked to: National Strategic Plan

Goal 2 - Reduce the impacts from invasive species, objective 1.

FH 1 - Vegetation Restoration

Restore vegetation through reforestation or other appropriate methods after stand replacing fires, drought, or other events or activities that degrade or cause a loss of plant communities.

- Where needed, implement reforestation using native tree species grown from local seed sources. In such plantings, consider long-term sustainability of the forest vegetation by taking into account factors such as fire regime and regional climate. Consider small nursery operations to facilitate reforestation and to improve restoration success where direct seeding is ineffective. Use noxious-weed-free seed in all plantings.

Linked to National Strategic Plan

Goal 5 - Improve watershed condition, objective 3.

FH 2 - Prevention of Fire Induced Type Conversion

Minimize vegetation type conversion (permanent or long-term loss of plant communities) resulting from frequent fires:

- Promote intervals greater than 35 years between fires in all coastal sage scrub types to reduce the likelihood that they will be converted to annual grasslands or other vegetation types. Within the range of the California gnatcatcher, treat chaparral adjacent to coastal sage scrub to reduce the threat of wildland fire and/or to reduce the intensity of fires that burn into it.
- Protect subalpine forest and woodlands from stand-replacing fires.
- Protect closed-cone woodlands and forests (Coulter) with developing cone banks until they are sufficiently large to perpetuate stands after fire. In Coulter pine woodlands not growing in chaparral, or other highly flammable vegetation types, reduce the potential for high-intensity, stand-replacing fires.
- Protect desert woodlands (e.g., pinyon-juniper) and desert scrub vegetation from burning outside the desired range of variability. After fires, protect these types from disturbances and additional fires to ensure natural regeneration, except where more frequent fires have played a role in the maintenance of the vegetation type.
- Emphasize fire prevention and fuelbreak maintenance to reduce the number of fires burning at excessively short fire-return intervals (less than 25 years) that have degraded, or could degrade, low-elevation (below 2,000 feet) chaparral.

Linked to National Strategic Plan

Goal 5 - Improve watershed condition, objectives 1 and 3.

FH 3 - Restoration of Forest Health

Protect natural resource values at risk from wildland fire loss that are outside the desired range of variability, or where needed for wildlife habitat improvement:

- Implement vegetation management activities to reduce tree densities and fuel loading in yellow pine and mixed conifer forests to levels similar to those that characterized forests of the pre-suppression and early suppression eras (ca. 1880-1930). Restore species composition comparable to forests of the same era with an emphasis on increasing the relative abundance of large-diameter (greater than 24 inches diameter breast height), shade-intolerant conifer species.
- Implement vegetation treatments that improve the health of Coulter pine forests and woodlands growing in chaparral. Focus treatments on stands greater than 35 years, except where it is necessary to protect life and property. In the latter case, treatments may occur in stands greater than 20 years so long as cone-seed banks are adequate to perpetuate the stands.
- Remove ladder fuels and forest floor fuel accumulations to protect stands of bigcone Douglas-fir from stand-replacing crown fires. Reduce fuel loading in chaparral adjacent to fir stands so that future wildland fires are less likely to initiate crown fires from surrounding shrublands.
- Treat fuel loading in montane chaparral to reduce the likelihood that fires originating in this type will generate crown fires in adjacent forested stands.
- Manage chaparral in selected locations to protect the life and property of human inhabitants (e.g., the urban interface), to improve wildlife forage, and to protect watersheds from the adverse impacts of large, destructive, high intensity fires. In selected watersheds, manage for even-aged patch sizes of less than 5,000 acres.

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objective 1.

FH 4 - Insect and Disease Management

Protect natural resource values that are at risk due to insect or disease loss at levels outside of the desired range of variability or where needed to improve habitat:

- Thin conifer stands to prevent water stress and damage by bark beetles.
- Report unusual mortality of vegetation promptly to the Forest Vegetation Manager or Natural Resources/Planning Officer. The Forest Resource Department investigates detection reports and coordinates funding requests from the national forest for pest suppression and prevention projects.
- Consider desired pest management suppression projects when economically viable, such as suppression of dwarf mistletoe in high value trees at developed recreation sites.

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objective 1.

Air 1 - Minimize Smoke and Dust

Control and reduce smoke and fugitive dust to protect human health, improve safety and/or reduce or eliminate environmental impacts.

- Incorporate visibility requirements into project plans.
- Use emission reduction techniques (ERT).

Air 2 - Forest Air Quality Emissions

Maintain and update the inventory for wildland fire emissions and other forest resource management emissions within the State Implementation Plan (SIP). The State Implementation Plan inventories and establishes levels of air pollution that meet the long-term federal air quality goals for bringing the non-attainment areas to attainment of the National Ambient Air Quality Standards.

- Describe the magnitude and timing of prescribed and wildland fire emissions in each Air Pollution Control District.

WAT 1 - Watershed Function

Protect, maintain and restore natural watershed functions including slope processes, surface water and groundwater flow and retention, and riparian area sustainability:

- Assess impacts of proposed groundwater extraction proposals to assure that developments will not adversely affect aquatic, riparian or upland ecosystems.
- Restore, maintain and improve watershed conditions. Assure approved and funded rehabilitation and emergency watershed treatments are implemented in an effective and timely manner.
- Maintain or restore soil properties and productivity to ensure ecosystem health (soil microbiota and vegetation growth), soil hydrologic function, and biological buffering capacity.
- Manage Riparian Conservation Areas (RCA) to maintain or improve conditions for riparian dependent resources. Riparian Conservation Areas include aquatic and terrestrial ecosystems and lands adjacent to perennial, intermittent, and ephemeral streams, as well as around meadows, lakes, reservoirs, ponds, wetlands, vernal pools, seeps, and springs and other bodies of water. Riparian dependent resources are those natural resources that owe their existence to the area, such as fish, amphibians, reptiles, fairy shrimp, aquatic invertebrates, plants, birds, mammals, soil and water quality.
- Achieve and maintain natural stream channel conductivity, connectivity and function.
- Assess and manage geologic resources and hazards to integrate earth science principles and relationships into ecosystem management, reduce risks to people and resources, and interpret and protect unique values.
- Identify, prioritize based on risk, and mitigate impacts of abandoned and inactive landfills on water, soil and other resources. Stabilize and reclaim where necessary abandoned and inactive landfills to maintain proper watershed function, public safety and resource benefit.
- Inventory, analyze and prioritize abandoned mines to identify chemical and physical hazards, historic significance, and biological resources prior to reclamation. Mitigate safety hazards and adverse environmental impacts, conduct reclamation as needed, and assure that water quality standards are met.
- Maintain watershed integrity by disposing of displaced soil and rock debris in approved placement sites.
- Develop direction and policy (southern California, national forest, or place-wide as appropriate) for protecting, collecting, curating, and distributing paleontologic resources.

Linked to National Strategic Plan

Goal 5 - Improve watershed condition objectives 1, 2, and 3.

WAT 2 - Water Management

Manage groundwater and surface water to maintain or improve water quantity and quality in ways that minimize adverse effects:

- Assess impacts of proposed groundwater and surface water extraction proposals to assure that developments will not adversely affect aquatic, riparian or upland ecosystems and other uses, resources or rights (e.g., tribal water rights).
- Assess impacts of existing surface water extraction on critical habitats or when authorizations are issued or re-issued.
- Promote water conservation at all national forest administrative and authorized facilities. Protect and improve water quality by implementing best management practices and other project-specific water quality protection measures for all national forest and authorized activities. When reviewing non-forest water-related projects that may affect national forest resources, include appropriate conservation and water quality mitigation measures in the review response.
- Conserve and protect high quality water sources in quantities adequate to meet national forest needs.
- Take corrective actions to eliminate the conditions leading to California State listing of 303(d) impaired waters on National Forest System land. For those waters that are both on and off National Forest System land, ensure that Forest Service management does not contribute to listed water quality degradation.
- Actively pursue water rights and water allocation processes to secure instream flows and groundwater resources for current and future needs sufficient to sustain native riparian dependent resources and other national forest resources and uses.
- Identify the need for and encourage the establishment of water releases, for current and future use, to maintain instream flow needs including channel maintenance, and to protect and eliminate impacts on riparian dependent resources.
- Participate in all Federal Energy Regulatory Commission licensing and re-licensing efforts on National Forest System land to ensure sufficient consideration and protection is provided for riparian dependent resources. Incorporate instream flow, riparian, and other natural resource management requirements into 4(e) license conditions.
- Monitor water development projects to ensure that instream flows are meeting riparian dependent resource needs.
- To maintain or improve habitat containing threatened, endangered, proposed, candidate and sensitive species coordinate activities with CDF&G, NOAA Fisheries, USFWS, State Water Resource Control Board and other appropriate agencies involved in recommending instream flow and surface water requirements for waterways.
- Cooperate with federal, tribal, state and local governments and private entities to secure the instream flow needed to maintain, recover, and restore riparian dependent resources, channel conditions and aquatic habitat.

Linked to National Strategic Plan

Goal 5: Improve watershed condition objective 1.

WAT 3 - Hazardous Materials

Manage known hazardous materials risks:

- Maintain a written Hazardous Materials Response Plan that addresses risk and standard cleanup procedures.
- Coordinate with federal, tribal, state, city and county agencies and local landowners to develop emergency response guidelines for hazardous spills on National Forest System land or on adjacent land with potential to affect threatened, endangered, proposed, candidate and sensitive fish and amphibian habitat. In the event of hazardous material spills in known habitat on National Forest System land, the Forest Service will contact the USFWS within 24 hours. Quickly contact resource personnel and use them as consultants to minimize impacts to habitat and to initiate emergency consultation with the USFWS if necessary. Provide habitat maps to response personnel for hazardous spills.

Link 1 - Habitat Linkage Planning

Identify linkages to surrounding habitat reserves and other natural areas for maintaining biodiversity. Collaborate with local government, developers, and other entities to complement adjacent federal and non-federal land use zones and associated design criteria:

- Participate in regional planning efforts to identify linkages to surrounding habitat reserves and other natural areas for maintaining biodiversity.
- Work with land conservancies, local government and others to secure long-term habitat linkages.
- Manage national forest use and activities to be compatible with maintaining habitat linkages.
- Actively participate with local government, developers, and other entities to protect national forest values at intermix and interface zones.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

SD 1 - Wilderness

Protect and manage wilderness to improve the capability to sustain a desired range of benefits and values and so that changes in ecosystems are primarily a consequence of natural forces. Protect and manage areas recommended for wilderness designation to maintain their wilderness values:

- Within the life of the plan manage all wilderness areas to standard, including areas designated as new wildernesses when they are established.
- Upon designation of new wilderness areas and wilderness additions, implement legislative direction as specified by law.
- Ensure that current and future issues and management needs, including adequate biophysical and social monitoring, are addressed in all wilderness planning. Identify all use that results in adverse impacts and develop measures to alleviate those impacts to an appropriate level using state-of-the-art processes such as limits of acceptable change.
- Prescribed fire may be used in wilderness to retain wilderness values or where community protection needs exist due to development on private lands near the wilderness. Community protection projects have been identified within the Cucamonga and Sheep Mountain Wilderness Areas. Use prescribed fire in wilderness only to meet wilderness fire management objectives.
- Emphasize Minimum Impact Suppression Tactics in all wilderness wildland fire responses (see Appendix B in Part 3 of the forest plan). Suppression operations in the three wilderness areas and any subsequent wilderness additions may be conducted under control, contain, or confine suppression strategies.
- Wilderness resource advisors will be assigned as necessary to all wilderness fires.
- When new wilderness is recommended, include legislative wording that identifies "where a wilderness area is adjacent to or is in close proximity to inhabited areas, the Secretary may take appropriate measures to control or prevent wildland fire through federal, state, and/or local agencies and jurisdictions."

SD 2 - Wild and Scenic Rivers

Manage designated wild and scenic river segments to perpetuate their free-flowing condition and designated classifications, and to protect and enhance their outstandingly remarkable values and water quality.

- For those designated wild and scenic rivers, a Comprehensive River Management Plan and boundary declaration will be prepared and implemented as specified in the designation language.

Manage eligible wild and scenic river segments to perpetuate their free-flowing condition and proposed classifications, and to protect and enhance their outstandingly remarkable values and water quality through the suitability study period, and until designated or released from consideration:

- For those eligible wild and scenic river segments, interim protection measures will be applied to the bed, bank, and one-quarter mile on either side of the ordinary high-water mark.

SD 3 - Research Natural Areas

Protect and manage research natural areas (RNAs) to maintain unmodified conditions and natural processes. Identify a sufficient range of opportunities to meet research needs. Compatible uses and management activities are allowed:

- Submit Establishment Reports for designated research natural areas to the Regional Forester.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

SD 4 - Special Interest Areas

Protect and manage special interest areas (SIAs) for the values and features for which they are established. Use and management activities, including access, that complement or are subordinate to the values and features are allowed:

- Within the life of the forest plan update or prepare management plans, implementation schedules and monitoring protocols for existing and newly designated SIAs.

Her 1 - Heritage Resource Protection

Protect heritage resources for cultural and scientific value and public benefit:

- Document known significant cultural properties to identify any activity that adversely affects, or has the potential to adversely affect, or does not complement the site. Develop measures to mitigate the adverse effects or impacts.
- Use partnerships to implement site management plans for heritage resource sites, focusing on those sites with recognized significance or at risk from public or land use effects.
- Evaluate historic sites for appropriate management. Develop site management plans for noteworthy heritage resources wherever they occur.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objectives 1 and 2.

Her 2 - Public Involvement Program

Provide public involvement programs with opportunities for the public to partner in the stewardship of heritage resource sites:

- Develop public involvement programs to foster partnerships in heritage resource stewardship to aid in identifying and evaluating heritage sites.
- Work with local communities to understand, document, preserve, and interpret the national forest history for the public. Develop opportunities for partnerships with the public to maintain and reuse historic heritage resources.

Her 3 - Forest-wide Heritage Inventory

Increase knowledge of the occurrence, distribution, and diversity of site types for heritage resources on the national forest:

- Increase the heritage resource database through the survey of nonproject associated acreage. Prioritize inventories for those places where the percentage of uninventoried acres within the high heritage resource sensitivity zone exceeds 50 percent of the total high heritage resource sensitivity zone acres for the place.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objectives 1 and 3.

Her 4 - Heritage Research

Document and strengthen the linkages between heritage research and ecosystem management and research, and integrate knowledge and appreciation of past cultures into today's diversity:

- Identify research needs and opportunities for research programs for qualified persons or groups by developing cooperative agreements.

<p style="text-align: center;">Linked to National Strategic Plan</p>

<p>Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.</p>
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REC 1 - Recreation Opportunity

Manage national forest land to achieve recreation opportunity spectrum (ROS) classes.

- Wilderness ROS will be mapped and implemented when existing wilderness schedules are updated and/or when new wilderness schedules are written.

REC 2 - Sustainable Use and Environmental Design

Analyze, stabilize and restore areas where visitor use is negatively affecting recreation experiences, public safety and environmental resources. Manage visitor use within the limits of identified capacities: Implement recreation capacity control measures in specific high-use areas as use levels become a concern. Conduct threatened, endangered, proposed, candidate and sensitive species occupancy surveys within potential threatened, endangered, proposed, candidate and sensitive species recreation conflict areas. Implement Adaptive Mitigation for Recreation Uses (Appendix D) in existing and new recreation sites and uses whenever a conflict between uses or sensitive resources is detected.

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objective 1.



REC 3 - Recreation Participation

Offer a wide range of high quality, environmentally sustainable developed and dispersed recreation opportunities to a rapidly growing and culturally diverse visitor population, with minimal visitor conflicts and effects to other resources:

- Develop new, environmentally sustainable recreation opportunities, areas and infrastructure to relieve concentrated demand within existing high-use areas and to accommodate future growth and new uses elsewhere.
- Improve, remove or replace aging developed recreation infrastructure to better meet current needs and future demand. Replacing opportunities lost to closures will be a high priority.
- Inventory and analyze existing and potential dispersed use, including, but not limited to, hiking, motorized recreation, day-use, recreational target shooting, waterplay, snowplay and camping opportunities. Identify areas where that use is consistent with resource protection and public safety, and mitigate or eliminate problems over time.
- Implement adaptive management processes at recreation facilities to proactively respond to persons with disabilities, contemporary urban visitors, aging populations, diverse ethnic groups, and day-use emphasis (see Appendix C, Monitoring Requirements).

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objective 1.

REC 4 - Conservation Education

Visitors have a greater understanding about the significance and importance of forest ecosystems, heritage resources, and the interrelationship between people and the natural environment:

- The Forest Service plays a leadership role in environmental stewardship and conservation education partnerships with non-profits, volunteer groups, communities, governments, organization camps and private entities, emphasizing and enhancing the capability of field program and project delivery, especially to underserved populations. Coordination between national forests is promoted for maximum results and cost efficiencies of programs and projects.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

REC 5 - Recreation Special Use Authorizations

- Manage recreation residences as a valid use of National Forest System land.
- Complete Recreation Residence Consistency Review and Continuance Determinations including Recreation Residence Compliance Inspections.
- Manage all recreation special-uses in compliance with law, regulation and policy.
- Administer all recreation special-use authorizations to standard.
- Establish authorization holder responsibility for public education about threatened, endangered, proposed, candidate and sensitive species approved by the Forest Service for recreation special-use events within all threatened, endangered, proposed, candidate and sensitive species habitats.

LM 1 - Landscape Aesthetics

Manage landscapes and built elements to achieve scenic integrity objectives:

- Use best environmental design practices (BEIG) to harmonize changes in the landscape and advance environmentally sustainable design solutions.
- Mitigate ground disturbance to maintain scenic integrity objectives.

LM 2 - Landscape Restoration

Restore landscapes to reduce visual effects of nonconforming features:

- Prioritize landscape restoration activities in key places. Integrate restoration activities with other resource restoration.

LM 3 - Landscape Character

Maintain the character of key places to preserve their intact nature and valued attributes:

- Maintain the integrity of the expansive, unencumbered landscapes and traditional cultural features that provide the distinctive character of the place.
- Promote the planning and improvement of infrastructure along federal and state scenic travel routes.
- Promote the consideration of key landscape character in other landscape analyses such as Fireshed.

Law 1 - Enforcement and Investigations

Provide law enforcement (LE) services for safety and resource protection. Opportunities to supplement LE resources include but are not limited to:

- Supplement staff with law enforcement officers (LEOs) from other agencies, and by recruiting and deploying additional reserve law enforcement officers. Pursue alternate funding sources to supplement LE programs, such as the State of California Off-Highway Vehicle grant program.
- Utilize cooperative agreements with local law enforcement agencies. Supplement field personnel and provide additional law enforcement support primarily on high-use weekends or holidays when visitor use is highest, or as a response unit in locations where LEO presence is limited.
- Improve LE services by recruiting and employing Spanish speaking officers whenever possible. Provide training for officers that do not currently speak Spanish. Adapt to changes in interpreter/interpretation needs with the inclusion of people that are conversant in any of the other languages that are, or will become, predominant in the future by recruiting these people into the ride-along-program with the LEO cadre.
- As soon as practical, develop, update, or revise Forest Orders to define the long-term protection that apply to national forest needs.

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objectives 1 and 3.

Fac 1 - Facility Maintenance Backlog

The backlog of facilities that do not meet the desired condition or complement the recreation setting is reduced by replacing outdated substandard facilities with safe, efficient, durable, environmentally sensitive infrastructure. Accommodate the facilities needs of new employees and equipment:

- Identify and evaluate applicable property or buildings of potential historic value in support of the facility master plan. Remove facilities no longer needed or abandoned, and restore sites to natural conditions.
- Remove excess facilities and restore sites to natural conditions.
- Reduce the backlog with priority for health and safety and accessibility compliance.
- Increase the operating efficiency of existing buildings.
- Upgrade site utilities for efficient operation. Remodel or construct new buildings to conform to approved facilities master plans.
- Accommodate the 2003 supplementary fire employees and equipment.



Trans 1 - Transportation System

Plan, design, construct, and maintain National Forest System roads and trails to meet plan objectives, to promote sustainable resource conditions, and to safely accommodate anticipated levels and types of use:

- Implement landscape scale transportation system analysis on a priority basis. Coordinate with state, county, local and regional government entities, municipalities, tribal governments, other agencies, and the public.
- Add unclassified roads to the National Forest System of roads when site-specific road analysis determines there is a public need for the road.
- Enhance user safety and offer adequate parking at popular destinations on high traffic passenger car roads, while also minimizing adverse resource effects.
- Using priorities identified in the Roads Analysis Process, reduce the road maintenance backlog to provide safe, efficient routes for recreationists and through-traveling public, and to safely accommodate fire protection equipment and other high clearance vehicles.
- Implement Corridor Management Plan for the Angeles Crest Scenic Byway.

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objective 1, and
Goal 1- Reduce the risk from catastrophic wildland fire, objective 2.

Trans 2 - Unnecessary Roads

Reduce the number of unnecessary or redundant unclassified roads and restore landscapes:

- Decommission roads and trails that have been determined to be unnecessary for conversion to either the road or trail system through site-specific road analysis.
- Establish levels of restoration through project planning.

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objective 2.

Trans 3 - Improve Trails

Develop an interconnected, shared-use trail network and support facilities that complement local, regional and national trails and open space, and that also enhance day-use opportunities and access for the general public:

- Construct and maintain the trail network to levels commensurate with area objectives, sustainable resource conditions, and the type and level of use. Convert roads planned for decommissioning into trails if ecologically sustainable.
- Manage the Pacific Crest National Scenic Trail to protect the trail experience, and provide for the conservation and enjoyment of its nationally important scenic, historic, natural, and cultural qualities.
- Maintain and/or develop access points and connecting trails linked to surrounding communities and create opportunities for non-motorized trips of short duration.

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objective 1.

Trans 4 - Off-Highway Vehicle Opportunities

Improve off-highway vehicle opportunities and facilities for highway licensed and non-highway licensed vehicles:

- Improve 4-Wheel Drive opportunities in the easy, more, and most difficult route categories.
- In conjunction with the designation of low maintenance standard roads (and where applicable OHV areas) develop motorized trails that address the needs of off-highway vehicle enthusiasts.
- Submit candidate roads and trails to the State of California, Off-Highway Motor Vehicle Division, for designation as the California Back Country Discovery Trail as opportunities to afford this experience are identified.

Linked to National Strategic Plan

Goal 3 - Provide outdoor recreation opportunities, objective 2.

SFP 1 - Offer Special Forest Products

Provide miscellaneous forest products at appropriate levels to sustain resource values. In a manner consistent with adjacent Ranger Districts, manage special forest products to reduce or eliminate impacts to other resources:

- Record forest product permits to analyze magnitude of the removals.
- Use public fuelwood sales to remove large pockets of drought induced tree mortality in locations of urban interface where high fire danger is present.
- Limit collection of woody species under miscellaneous forest product permits to fuel reduction treatment areas or other project areas with completed NEPA project planning.

Lands 1 - Land Ownership Adjustment

Consolidate the National Forest System land base to support resource management objectives, improve management effectiveness, enhance public benefits, and/or improve habitat condition and linkage:

- Acquire lands or interest in lands through purchase, donation, exchange, rights-of-way acquisition, transfer, interchange, and boundary adjustment in order to address the issues associated with complex ownership patterns such as urban interface fire protection and occupancy trespass.
- Acquire lands or rights-of-way for road and trail access to support appropriate national forest activities and public needs.
- Work with land conservancies, local government, and others in order to secure long-term habitat linkages.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

Lands 2 - Non-Recreation Special Use Authorizations

Optimize utilization of encumbered National Forest System land and efficiently administer special-use authorizations (SUAs):

- Special-uses comply with law, regulation, and policy. Upon termination, restore special-use authorization areas to a specified condition. Administer existing SUAs in threatened, endangered, proposed, candidate and sensitive species habitats or heritage resource site locations to ensure they avoid or minimize impacts to threatened, endangered, proposed, candidate and sensitive species and their habitats and heritage resource sites.
- Work with special-use authorization holders to better administer National Forest System land and reduce administrative cost.
- Require SUAs to maximize opportunities to co-locate facilities and minimize encumbrance of National Forest System land.
- Phase out water diversion authorizations that adversely affect threatened, endangered, proposed, candidate and sensitive species.
- In threatened, endangered, proposed, candidate and sensitive species habitat that has been degraded by water withdrawals work to amend existing authorizations as necessary to provide suitable water flows for threatened, endangered, proposed, candidate and sensitive species.
- Where overhead transmission lines occur in California Condor habitat work with utility companies or authorization holders to install high-visibility or avoidance devices and raptor guards on poles and other structures potentially used as perching sites by California Condors.
- For special-use authorization holders operating within threatened, endangered, proposed, candidate and sensitive species key and occupied habitats, or areas of heritage resource sites develop and provide information and education (e.g., workshops, annual meetings) on ways to avoid and minimize effects of their activities on occupied threatened,

endangered, proposed, candidate and sensitive species habitat and heritage resource sites present.

- Use signing, barriers, or other suitable measures to protect threatened, endangered, proposed, candidate and sensitive species key and occupied habitats within special-use authorization areas.

Linked to National Strategic Plan

Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3, and

Goal 4 - Help meet energy resource needs, objective 1.

Lands 3 - Boundary Management

Reduce the backlog of landline posting and incidents of trespass:

- Survey and post key boundaries to eliminate occupancy trespass and prevent unauthorized occupancy.

Lands 4 - Mineral Withdrawals

Monitor and manage withdrawal status to document the condition of lands that could affect other actions (e.g., watershed protection, mining):

- Review existing withdrawals to determine if continuation is consistent with the statutory objectives of the programs for which the lands were dedicated.
- Recommend for withdrawal from mineral entry TEP species key habitats in areas of mineral potential where habitat is not protected by any other means and would benefit by withdrawal. Protective measures will be maintained for the period of time needed to provide the necessary protection for TEP species and key habitats. Implement in occupied habitats for the arroyo toad, California red-legged frog, mountain yellow-legged frog, southwestern willow flycatcher, and least Bell's vireo.

ME 1 - Minerals Management

Manage minerals and energy resources commensurate with the conservation of forest resource values and the long-term health and biological diversity of ecosystems.

- Limit withdrawals from mineral entry to maintain opportunities to access mineral and energy resources where environmentally sustainable and threatened, endangered, proposed, candidate, and sensitive species are not impacted.
- Assure long-term access and availability for leasing of oil and gas resources from environmentally suitable lands for regional, statewide and national energy needs.
- Use terms and conditions of the operating plan to offset the effects of mining consistent with the conservation of habitat for threatened, endangered, or sensitive species, and preserving significant heritage resources.
- Eliminate unapproved and noncompliant minerals operations.
- Facilitate environmentally and culturally sensitive exploration, development, and production of mineral and energy resources on National Forest System land open to these activities, or on withdrawn lands consistent with valid existing rights, and integrate these activities with the planning and management of other resources.
- Work with California Department of Fish and Game to prohibit suction dredging to protect threatened, endangered, proposed, candidate, and sensitive species. Participate with the state to identify for the public those sections of streams that are open or closed to dredging.
- Coordinate with California Department of Fish and Game on applying and enforcing state suction dredge regulations on the San Gabriel River. Participate with the state to identify for the public those sections of streams that are open or closed to dredging.
- For approved mining operations within occupied threatened, endangered, proposed, candidate and sensitive species habitat, riparian habitat, or other areas with species of concern, monitor mining operations as needed to ensure compliance with plans of operation.

ME 2 - Biomass Utilization

Seek opportunities to use debris from forest thinning and mortality removal for producing energy.

LG 1 - Livestock Grazing

Livestock grazing areas are maintained and remain sustainable and suitable over the long-term.

- Administer each livestock grazing area to standard within a three year period. Administering a livestock grazing area to standard includes: ensuring compliance with terms and conditions of the permit, allotment management plans, annual operating instructions, biological opinions, and forest plan standards. Permittees monitor for compliance with the permit standards and guides. The permittee submits monitoring and allotment management reports to the national forest officer in charge when requested (FSH 2209.13, 15.14b).
- Review and consider the Region 5 Permit Suspension and Cancellation Guidelines for non-compliance with permit terms and conditions (FSH 2209.13, 16.2, 16.21d). Plan and implement range structural improvements, such as but not limited to, water developments, and barbed wire fences are maintained in a serviceable condition. Structural improvements will incorporate wildlife protection measures when allotment management plans are revised or new improvements are planned.
- Utilize suitable vacant allotments, other livestock grazing areas, and transitory range for available forage or utilize these areas to move active livestock grazing areas toward meeting resource and rangeland management desired conditions.
- Review and apply the appropriate rangeland management practices necessary to meet or move toward desired conditions. Rangeland management practices include, but are not limited to: regulation of livestock numbers and distribution; season and degree of use; salt placement locations; and placement of structural improvements. Fencing should be considered as a last resort after other management practices have been determined to be ineffective. Water developments should be considered outside of riparian areas and where such developments would lessen the degree of riparian use.

Linked to National Strategic Plan

Goal 5 - Improve watershed condition, objectives 1, 2, and 3, and

Goal 6 - Mission related work in addition to that which supports the agency goals, objectives 1 and 3.

LG 2 - Rangeland Health

Rangelands are healthy and sustainable over the long-term. Rangelands are meeting or moving toward forest plan, ecosystem, and site-specific desired conditions.

- Prioritize and perform an interdisciplinary team rangeland assessment (e.g., long-term condition and trend transects and proper functioning condition assessments (PFC)) to determine if key areas are meeting or moving toward desired conditions and resource objectives. Adjust livestock management as necessary.
- Evaluate ecosystem health. Indicators used in the evaluation include, but are not limited to: measures of riparian structure and function; the amount and distribution of noxious weeds and invasive non native species; soil health; threatened, endangered, proposed, candidate and sensitive species habitat; rare plant species vigor; plant community composition and structure; sensitive heritage resources; and water quality. Adjust livestock management as necessary.
- Review and incorporate the Forest Plan Noxious Weed Management Strategy.
- Implement Best Management Practices for water quality.

Linked to National Strategic Plan

Goal 2 - Reduce the impacts from invasive species, objective 1,

Goal 5 - Improve watershed condition, objectives 1, 2, and 3, and

Goal 6 - Mission related work in addition to that which supports the agency goals, objectives 1 and 3.

Fire 1 - Fire Prevention

Reduce the number of human-caused wildland fires and associated human and environmental impacts. Focus fire prevention programs on the urban interface, threatened, endangered, proposed, candidate and sensitive species habitat, vegetative areas threatened with type conversion and areas of major recreation use:

- Continue environmental and fire prevention classroom education in local schools to reach the diverse communities the Forest Service serves.
- Implement Forest Fire Restrictions and Closure Plan as appropriate, including an internal/external public communication plan.
- Continue the activation and utilization of the National Fire Prevention and Education Teams as appropriate in order to augment local fire prevention resources.
- Develop and implement a plan to expand structure hazard reduction from 30' zones to 100' zones of clearance.
- Continue to refine the process of implementing partial or full national forest closure as appropriate in order to increase the margin of public and firefighter safety.

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objective 2.

Fire 2 - Direct Community Protection

Reduce the number of high risk/high value, and high and moderate risk acres using mechanical treatments, grazing, and prescribed fire. Identify and schedule for treatment the high risk and high value acres near communities and developed recreation sites, including the installation of Wildland/Urban interface (WUI) Defense and Threat Zone vegetation treatments. Highest priority should be given to those areas with substantial drought and insect-killed vegetation that present a significant threat to life and property in entire communities:

- Promote removal of tree mortality adjacent to structures as the first step in reducing threats to human life and investments.
- When National Forest System lands are managed for direct community protection, consider the use of Memorandums of Understanding with Fire Safe Councils as a means of allowing residents to meet state fire law or county brush clearance ordinances on a combination of private and public lands.
- Herbicides or the repetitive use of prescribed fire may be used in the WUI Defense zone on National Forest System land to avoid expensive treatments of resprouting chaparral species.



Member of Arroyo Fuels Crew during Charlton Flat Project (removing trees killed by bark beetle). April, 2004

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objectives 1 and 3.



Texas Canyon Hotshot Crew hiking off the fireline.
Crew is from Santa Clara-Mojave Rivers Ranger District.

Fire 3 - Fire Suppression Emphasis

All fires either on the national forest or that threaten the national forest will be suppressed. Wildland fires that pose life safety threats, threaten communities, improvements or infrastructure will receive a management response commensurate with minimizing acres burned. An appropriate management response (including a full range of suppression strategies) may be used elsewhere on the national forest where natural and cultural resource impacts along with fire suppression costs are primary concerns.

- Cross train with other fire agencies to improve suppression coordination and performance on fires burning in the Wildland/Urban Interface or developed area intermix.
- Continue to expand mutual aid agreements with fire cooperators in order to ensure the coverage of key fire stations during periods of fire resource drawdown.
- Continue the evaluation of current and future fire station locations with respect to strategic location, changing demographics, suitability and operating costs.
- Implement a "Fireshed" analysis of the national forest to either validate or modify current fire management strategies and tactics.

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objective 2.

Fire 4 - Firefighter and Public Safety

Improving firefighter and public safety is the primary objective in fire management. All other activities are tiered to this core value. Integrate fire management activities with those of other government agencies that share a mutual interest or benefit in fire activities on the national forest. Conduct fire management activities in a cost effective manner:

- Improve residential inspection capability to enhance the defensible space around structures.
- In concert with other agencies and Fire Safe Councils develop evacuation and structure protection plans that will enhance both firefighter and public safety.
- Maintain program reviews, training and qualification standards contained in the Fire Management Plan.
- Coordinate meetings, training and workshops with employees and cooperating fire agencies to improve fire and emergency operations capability and preparedness.
- Cooperate with local agencies to develop and build-out an inter-operable radio communications system for emergency response and incident management in southern California.

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objective 2.

Fire 5 - Fuelbreaks and Indirect Community Protection

Maintain the existing system of roadside fuelbreaks and fuelbreaks along watershed boundaries to minimize fire size and the number of communities threatened by both fires and floods. Consider constructing new fuelbreaks on land outside of wilderness or other special designations.

- Consider an opportunistic approach to fuels management. Take advantage of previously burned or treated areas to link future fuels and vegetation management or wildlife habitat improvement projects when doing fuels planning.
- Utilize fire landscape analysis to aid in the design of future fuelbreak systems, maintain multiple lines of community defense, and to minimize future wildland fire size.
- Develop a plan to minimize the propagation of invasive nonnative species during fire suppression and fuels or vegetation management activities.

Linked to National Strategic Plan

Goal 1- Reduce the risk from catastrophic wildland fire, objectives 1 and 3.



Dead tree removal project at Charlton Flat picnic area

Appendix C. Maps

Angeles National Forest

Land Use Zones

Recreation Opportunity Spectrum

Scenic Integrity Objectives

Inventoried Roadless Areas

Places