United States Department of Agriculture

Forest Service

Pacific Southwest Region

R5-MB-079

September 2005

Land Management Plan

Part 2 San Bernardino National Forest Strategy

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Tables

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.

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

http://www.fs.fed.us/r5/cleveland/projects/lmp

http://www.fs.fed.us/r5/lospadres/projects/lmp

http://www.fs.fed.us/r5/sanbernardino/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 San Bernardino 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 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.

Vista from San Gorgonio

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.

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

Suitable Land Uses

Land Use Zones

Land use zones (CFR 219.11(c)) were used to map the San Bernardino National Forest (SBNF) 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 2.4.1 through 2.4.4 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).

Table 2.4.1. Suitable Uses Resource Management, SBNF

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness
Rangeland Type Conversion for Forage production	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Restoration of Vegetation Condition	Suitable	Suitable	Suitable	Suitable	*By Exception	Suitable
Disposal of National Forest System lands	*By Exception	*By Exception	*By Exception	*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 2.4.2. Suitable Uses Public Use and Enjoyment, SBNF

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness
Recreation Residence Tracts	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Organization Camps	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Lodges, Resorts and Clubs	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Developed Winter Sports Areas	Designated Areas	Designated Areas	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)
Target Shooting Areas	*By Exception	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable
Public Motorized Use on Forest System Roads	Suitable	Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Authorized Motorized Use	Suitable	Suitable	Suitable	*By Exception	*By Exception	*By Exception
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
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
Mountain Bikes Forest System Roads and Trails	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	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

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

Table 2.4.3. Suitable Uses Commodity and Commercial Uses, SBNF

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness
(Non-Rec) Special Uses: Low Intensity Land Use	Suitable	Suitable	Suitable	*By Exception	*By Exception	*By Exception
Communication Sites	Designated Areas	Designated Areas	Designated Areas	*By Exception	*By Exception	Not Suitable
Livestock Grazing	Designated Areas	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Designated Areas
Major Transportation Corridors	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Major Utility Corridors	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable
Road construction or re-construction	Suitable	Suitable	Suitable for authorized use	Not Suitable	Not Suitable	Not Suitable
Developed Facilities	Suitable	Suitable	*By Exception	Not Suitable	Not Suitable	Not Suitable
Minerals Resources Exploration and Development	Suitable	Suitable	*By Exception	*By Exception	*By Exception	Not Suitable
Renewable Energy Resources	Suitable	Suitable	*By Exception	*By Exception	Not Suitable	Not Suitable
Wood Products, including fuelwood harvesting	Suitable	Suitable	Suitable	Suitable	*By Exception	Not Suitable
Special Forest Products	Suitable	Suitable	Suitable	Suitable	*By Exception	*By Exception

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

Table 2.4.4. Suitable Uses Fire and Fuels Management, SBNF

Land Use Zone:	DAI	BC	BCMUR	BCNM	CB	W
Activity or Use	Developed Areas Interface	Back Country	Back Country Motorized Use Restricted	Back Country Non-Motorized	Critical Biological	Wilderness
Community Protection Areas	Suitable	Suitable	Suitable	Suitable	*By Exception	*By Exception
Fuelbreak Construction including type conversion	Suitable	Suitable	Suitable	*By Exception	*By Exception	*By Exception
Wildland Fire Use Strategy	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.*

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 2.4.1 through 2.4.4 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. For example, what this means is that motorized uses are restricted to designated roads and trails. Vehicular traffic traveling cross-country or on non-designated routes is not allowed in any zone.

Seven land use zones have been identified for the San Bernardino National Forest (see appendix C, Land Use Zone maps). 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)

Developed Area Interface (58,472 acres or 8.8 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 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 are 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 18 percent of the National Forest System and non-system user created routes are found in this zone including about 57 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 zone.

Although this zone allows a broad range of higher intensity uses, the 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 existing 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 (172,950 acres or 26 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 63.1 percent of the National Forest System and non-system roads are found in this zone including 192 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 provides access for a wide variety of dispersed recreation opportunities in remote

area camping and access to trailhead facilities for hiking or biking. The majority of the designated OHV system is found here.

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 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 to 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) (37,148 acres or 5.6 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 include 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 route when done.

Approximately 7.5 percent of the National Forest System and non-system roads are found in this zone including 35 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 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 (238,157 acres or 35.8 percent of the national forest): This zone generally includes areas of the national forest that are undeveloped with few, if any roads. The characteristics 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 private land is not anticipated, but may occur by exception when there are existing rights to such access.

Approximately 8.8 percent of the National Forest System and non-system roads are found in this zone including about 101 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 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 (2,224 acres or 0.3 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 527: San Bernardino 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 .2 percent of the National Forest System and non-system roads are found in this zone, including three miles of unclassified road. Road density will not be increased and may be decreased as a result of species protection requirements.

Table 527. San Bernardino NF Critical Biological Land Use Zones

Primary Species Protected and Primary Uses			
CBLUZ	Primary Species Protected	Place	Primary Uses 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.
Bautista Creek	Arroyo toad, San Bernardino kangaroo rat, southwestern willow flycatcher, Quino checkerspot butterfly, *Dodecahema leptoceras*	Anza	Current use of Bautista Canyon Rd. and existing Hixon Bautista OHV Trail are retained. Creek crossing and bridge maintenance are retained and excluded from the CBLUZ.
Bertha Ridge	*Lesquerella kingii* ssp. *bernardina*, *Eriogonum ovalifolium* var. *vineum*, and many Sensitive plant species.	Big Bear	Beacon Special Use Permit retained with foot access for maintenance as per current terms of permit. Mining claims are present. If Plan of Operation is submitted, use authority under 36CFR 228.A to avoid or minimize impacts.
City Creek	Mountain yellow-legged frog, southwestern willow flycatcher (proposed critical habitat)	San Bernardino Front Country	Access, operation and maintenance on Highway 330 is retained.
Coxey Pebble Plain	Vernal blue butterfly, Ehrlich's checkerspot butterfly, pebble plain habitat with Sensitive plant species	Big Bear Back Country	Access on road to helispot and use of helispot are retained for future fire suppression needs through zoning of Back Country Motorized Use Restricted land use zone within CBLUZ. Continue to discourage unauthorized driving on this pebble plain.
Dark Canyon-Fuller Mill Creek	Mountain yellow-legged frog	Idyllwild	Use of Dark Canyon Campground and access road, Fuller Mill Picnic Area, and Azalea Trails Camp Special Use Permit are retained. Continue existing relocation of trail out of Fuller Mill Creek by campground. Signing and pubic contact to remain in place at campground and picnic area to preclude stream play. Implementation of Campground Host program is recommended to continue to protect this site.

Primary Species Protected and Primary Uses			
CBLUZ	Primary Species Protected	Place	Primary Uses 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.
Gold Mountain	Bald eagle roost area, *Arenaria ursina*, *Eriogonum kennedyi* var. *austromontanum*, *Castilleja cinerea*, and many Sensitive plant species, high quality pebble plain habitat.	Big Bear	Where CBLUZ overlaps with existing North Baldwin Lake and Holcomb Valley Special Interest Area, suitable uses in CBLUZ will be applied. Current use of Forest System Road 3N69 is retained for OHV trail and motorized use. A power line proposal with supporting infrastructure is anticipated in the future, however the footprint is not mapped at this time. Construction of this future power line may be consistent with CBLUZ if neutral or beneficial. Mining claims may be present. If Plan of Operation is submitted, use authority under 36CFR 228.A to avoid or minimize impacts.
Little Horsethief Canyon	Arroyo toad	Cajon	Retain Forest Order that prohibits vehicular use. Pacific Crest Trail use is retained. Mining claims are present. If Plan of Operation is submitted, use authority under 36CFR 228.A to avoid or minimize impacts.
Lower Deep Creek	Arroyo toad, southwestern willow flycatcher	Silverwood	Continued day use. Current foot access to Deep Creek Hot Springs, Warm Springs, Pacific Crest Trail, and Devil's Hole OHV Trail use and maintenance are retained. Future designation of the Bradford Trail may be consistent with CBLUZ if analysis shows designation would be neutral or beneficial to species.
South Baldwin Lake	Shay Creek unarmored three-spined stickleback, bald eagle, Andrew's marble butterfly, unidentified fairy shrimp, *Castilleja cinerea*, *Sidalcea pedata*, *Taraxacum californicum*, *Thelypodium stenopetalum* and several Sensitive plant species	Big Bear	Where CBLUZ overlaps with existing North Baldwin Lake and Holcomb Valley Special Interest Area, suitable uses in CBLUZ will be applied. Continue education and signing to discourage unauthorized uses originating from adjacent private lands.

Primary Species Protected and Primary Uses			
CBLUZ	Primary Species Protected	Place	Primary Uses 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.
Sugarloaf Meadow	Shay Creek unarmored three-spined stickleback, *Taraxacum californicum* (historic), *Platanthera leucostachys*, and only SBNF occurrence of *Sisyrinchium elmeri*	San Gorgonio	Pond is retained

Existing Wilderness (130,362 acres or 19.6 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 wildernesses. Road access is limited to uses identified in the specific legislation designating the wilderness (see wilderness in the forest-specific design criteria section of Part 2 of the forest plan); approximately 1.5 percent of the National Forest System and non-system roads are found in this zone including 17 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:

- Bighorn Mountain Wilderness
- Cucamonga Wilderness
- San Gorgonio Wilderness
- San Jacinto Wilderness
- Santa Rosa Wilderness
- Sheep Mountain Wilderness

Recommended Wilderness (26,439 acres or 4 percent of the national forest): This zone includes land that the Forest Service is recommending to Congress for wilderness designation. The zone 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. Non-conforming uses will be removed over time to improve wilderness character. 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. Approximately 0.8 percent of the National Forest System and non-system roads are found in this zone including 10 miles of unclassified road.

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 B (Cucamonga Wilderness)section20_20_10_20_10.htm
- Cactus Springs A (Santa Rosa Wilderness)
- Heartbreak Ridge (Bighorn Mountain Wilderness)
- Pyramid Peak B (San Jacinto Wilderness)
- Sheep Mountain (Sheep Mountain Wilderness)

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.

Children's Forest

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 12 eligible rivers on the San Bernardino National Forest.

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

Eligible Wild and Scenic Rivers include:

- Bautista Creek
- Bear Creek
- Fish Creek
- Fuller Mill Creek
- Holcomb Creek
- Lytle Creek - Middle Fork
- Palm Canyon
- San Jacinto River - North Fork
- Santa Ana River
- Santa Ana River - South Fork
- Siberia Creek
- Whitewater River - East Fork of South Fork
- Deep Creek

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 river's outstandingly remarkable values or free-flowing character.

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 recreational).

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:

- 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.

(See Inventoried Roadless Area Maps in appendix C.)

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:

- Cahuilla Mountain
- Fisherman's Camp
- Hall Canyon
- Horse Meadow
- Millard Canyon

Recommended Research Natural Areas include:

- Arrastre Flat
- Blackhawk
- Broom Flat
- Cleghorn Canyon
- Wildhorse Meadow

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 maintain the special characteristics for which the area was designated are appropriate.

Special Interest Areas include:

- Arrastre Creek
- Black Mountain
- North Baldwin Lake and Holcomb Valley
- Children's Forest
- San Andreas

Other Designations

- Designated Communication Sites - San Bernardino National Forest (table 477)
- Designated Utility Corridors - San Bernardino National Forest (table 487)
- Recreation Residence Tracts - San Bernardino National Forest (table 481)
- Designated Shooting Areas - San Bernardino National Forest (table 491)

Table 477. Designated Communication Sites, San Bernardino National Forest

Communications Site Name	Existing Uses	Approximate Location	Restrictions
Bailey Peak	Microwave/ Passive Reflector/ Broadcast Translator/ Two-way radio/ Low-power	Sec 13, T2N, R5W, SBM	
Keller Peak	Microwave/ Passive Reflector/ LPTV Translator/ Two-way radio/ Low-power	Sec 1, T1N, R2W, SBM	
Lakeview Point	Microwave/ Low-power	Sec 25, T2N, R2W, SBM	
Paivika Ridge	Microwave/ Broadcast Translator/ Two-way radio/ Low-power	Sec 29, T2N, R4W, SBM	
Skyland Peak	Two-way radio/ Non-Broadcast/ Low-power	Sec 27, T2N, R4W, SBM	Government Only
Snow Valley	Cellular	Sec 36, T2N, R2W, SBM	
Strawberry Peak	Microwave/ Broadcast Translator/ Two-way radio/ Low-power	Sec 30, T2N, R3W, SBM	
Tunnel Ridge	Non-Broadcast/ Cable Television/ Low-power	Sec 20, T2N, R4W, SBM	
Bertha Peak	Microwave/ Cable TV/ Two-way radio/ Low-power	Sec 5, T2N, R1E, SBM	
Bear Mountain	FM Broadcast/ TV Translator/ Two-way radio	Sec 34, T2N, R1E, SBM	
Red Mountain	Two-way radio/ Non-Broadcast/ Low-power	Sec 23, T6S, R2E, SBM	
Thomas Mountain	Two-way radio/ Non-Broadcast/ Low-power	Sec 28, T6S, R3E, SBM	
Cajon Summit	Two-way radio/ Non-Broadcast/ Low-power	Sec 18, T3N, R5W, SBM	
San Sevaine	Two-way radio/ Non-Broadcast/ Low-power	Sec 23, T2N, R6W, SBM	

Table 487. Designated Utility Corridors - San Bernardino National Forest

Utility Corridor Name	Approximate Land Area		Existing Uses
	Acres	Miles	
Interstate 15 (Cajon Pass)	23,140	12.0	500KV(3), 237KV(2), Oil & Gas Pipeline (4), Fiber Optic Line (5), Railroad (3), Interstate Highway 15, State Highway 138

Table 481. Recreation Residence Tracts, San Bernardino National Forest

Recreation Residence Tracts, San Bernardino National Forest
Alder Canyon
Barton Flats
Big Bear
Big Pines
Crest Road
Falls Tract
Fuller Mill Creek
Hook Creek
Lakeview
Lost Creek
Lytle Creek
Metcalf
Middle Fork
Mill Creek
Pineknot
Poligue Canyon
Round Cienega
Seven Oaks
Snow Creek
Snow Valley Creek
South Fork
Stetson Creek
Willow Glen

Table 491. Designated Shooting Areas - San Bernardino National Forest

Component	San Bernardino
Concession-Operated Sites	Lytle Creek Firing Line
Permitted Gun Clubs: Limited or No Public Access	Big Bear Sportman's Club Arrowhead Fish and Game Conservation Club
Designated Shooting Sites by Forest Order (Other Shooting Restrictions May Apply)	Big Pine Flat 1N09 Lightning Gulch Arrastre #1/#2 San Jacinto RD (part open)
Remainder of Forest	Closed to shooting.

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 encouraged throughout the national forests of southern California during hunting seasons designated by the CDF&G. Hunters must follow all state and local laws.

Angling is encouraged in most areas of the national forests during fishing seasons designated by the CDF&G. Anglers must follow all local and state laws.

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. 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). Strategic program emphasis is described through specific objectives that the national forest will focus on under current budget expectations. 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 San Bernardino 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: National 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 identified 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 (PWPS) and linking these to tracking of activities designed to implement the National Strategic Plan through the Forest Activities Tracking System (FACTS).

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:

- Resource Management Performance Indicators, SBNF (table 2.4.5, page 30)
- Public Use and Enjoyment Performance Indicators, SBNF (table 2.4.6, page 33)
- Facilities Operations and Maintenance Performance Indicators, SBNF (table 2.4.7, page 35)
- Commodities and Commercial Uses Performance Indicators, SBNF (table 2.4.8, page 39)
- Fire and Aviation Management Performance Indicators, SBNF (table 2.4.9, page 40)

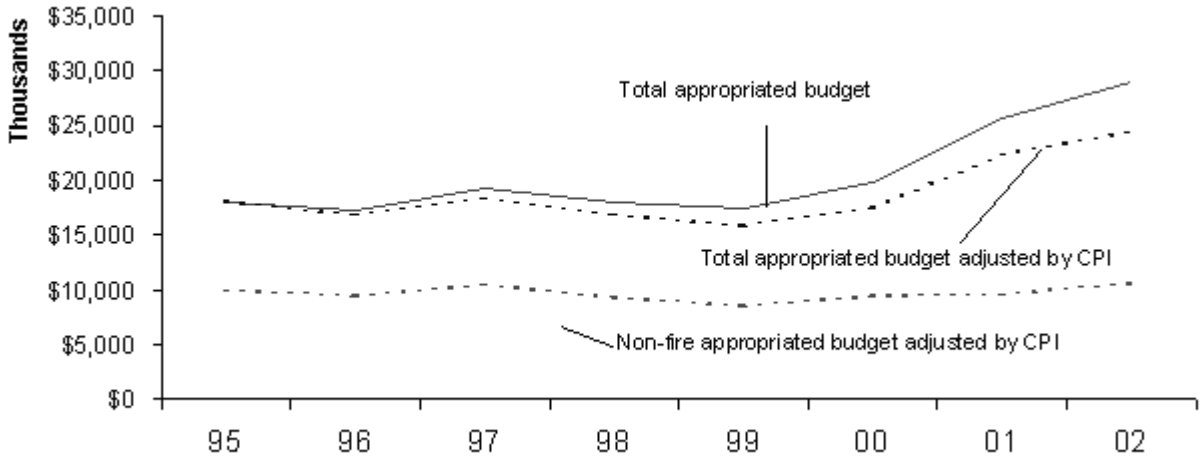
Actual performance is tracked over time through annual documentation of accomplishment and these trends are evaluated periodically to determine if the national forest needs to shift program strategies. This data is reported in the annual Monitoring and Evaluation Report as part of the national forest's 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, such as the Natural Resources Information System (NRIS) and the Infrastructure database (INFRA). Periodic evaluation of inventory data is used to explore trends in resource conditions over time. Annual Monitoring and Evaluation Reports (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

The national forest's budget allocations increased, even on an inflation adjusted basis, from 1995 to 2002. Analysis of budget history indicates that practically all of the increase was for hazardous fuels reduction and fire pre-suppression & preparedness to implement the National Fire Plan. Other program budgets have increased at roughly the rate of inflation. Excluding expenditures for wildland fire suppression and national fire & disaster support (these expenditures are paid when incurred by the Forest Service's national organization), the total budget was slightly over $27 million for 2002.

Figure 2 -San Bernardino National Forest Appropriated Base Budget History



Adjusted Base Budget: Adjusting budget dollars for inflation involves selecting a measure of inflation, in this case the national consumer price index for each year, and deciding on a base year, in this case 1995. In other words, this process converts 1996 through 2002 dollars of purchasing power into 1995 dollars of purchasing power. Adjusted dollars are referred to as 1995 dollars, while nonadjusted dollars are referred to as nominal dollars.

Measured in 1995 dollars, the San Bernardino National Forest's total budget, excluding money spent for wildland fire suppression and national fire & disaster support on the forest, followed a downward trend to a low of $15.7 million in 1999, and then from 2000 to 2002 increased dramatically. In 1995 dollars, the total 2002 budget allocation was $24.4 million.

Specific items that affected budget allocations from 1995 through 2002:

- The increase during 1997 in the overall downward trend was due to one-time allocations for land acquisitions during that year.
- From 1999-2002 Congress began allocating more money towards recreation across all of the nation's forests. Increases in nominal dollars were $385,000, $418,000 and $899,000 for 1999, 2000, and 2002, respectively.
- Dry weather extending from the Pacific Northwest to Florida during 2000 led to a difficult fire season, resulting in increased funding for hazardous fuels reduction and fire presuppression & preparedness under the framework of the National Fire Plan. The combined allocation for these two programs increased in nominal dollars from $9.2 million in 2000 to $16.4 million in 2002.

Management and Administration

The current complex web of federal, state, county, local, partnership, not-for-profit, tribal, 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 national 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.

General 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 San Bernardino, human resources, engineering, recreation, resources, public relations, information technology and other staff functions provide technical and administrative support to the Ranger Districts.

District Management

Administratively, the national forest is divided into three Ranger Districts: Mountaintop, Front Country, and San Jacinto, which are managed by three District Rangers who are responsible for managing all aspects of their assigned Ranger Districts. Operations, such as hazardous fuels reduction, archeological surveying, and special-use permitting, must go through the appropriate District Ranger prior to implementation. Finally, the Forest Supervisor and Deputy Forest Supervisor generate and communicate the vision, maintain government-to-government relationships with federally recognized tribes and notify non-federally recognized tribes, organizations and individuals, interact with external stakeholders, and prioritize forest-wide initiatives.

Effective Management

The national forest will enlist the support of local communities, partners, and volunteers to promote land stewardship by jointly developing and implementing a broad range of conservation activities (see the `http://www.fs.fed.us/r5/business-plans`).

Tribal Relations

Tribal relations touch virtually every aspect of Forest Service business. The objective of the Tribal Relations Program is to blend knowledge of American history, the ways tribal governments conduct business, and federal laws and legislation to shape national forest interaction into mutually benefiting working relationships with tribal governments.

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.

Partnerships

The national forest will emphasize the use of partnerships (internally and externally) to enhance public services and ecosystem management on public lands; through integrating this emphasis on partnerships into the culture and function of the entire organization.

Deep Creek Adopt-a-Trail volunteers

Resource Management

The management of the San Bernardino National Forest's resources is divided into six programs: wildlife, fish, rare plants and invasive species; vegetation; soil, geology, water and air; land ownership and adjustment; specially designated areas (including wilderness); and heritage resources. It also includes managing the data of these resources.

Wildlife, Fish and Plant Management

The Wildlife, Fisheries and Plant Program manages habitat to help meet the needs of threatened, endangered, and sensitive species, along with other species such as black bear, mule deer and rainbow trout. Management includes prevention and eradication efforts to reduce the effects of invasive nonnative species within these habitats.

The Wildlife, Fish and Plant Program will stabilize and improve the health and diversity of species habitat to achieve more natural conditions, including the use of fire in appropriate habitats (FH 3 - Restoration of Forest Health). The primary focus areas will be Critical Biological Zones, riparian and meadow habitats, carbonate and pebble plain habitats, forest health, bighorn sheep and maintaining landscape level habitat conditions for wildlife. The national forest will emphasize long-term habitat health from the threat posed by increasing human population and use (Lands 1 - Land Ownership Adjustment). Habitat loss and fragmentation (WL 2 - Management of Species of Concern) will be reduced through continued participation in regional efforts to create and preserve an interconnected open space network (Link 1 - Landscape Linkages). Declining trends in threatened, endangered, proposed, candidate, and sensitive species populations are expected to be stabilized or reversed by maintaining or improving habitat capability (WL 1 - Threatened, Endangered, Candidate, Proposed, and Sensitive Species Management), removing invasive nonnative species (IS 1 - Invasive Species Prevention and Control) and by reducing conflicts with other activities such as recreation and resource or community development (REC 2 - Sustainable Use and Environmental Design). Program emphasis includes implementing the 10 priority recovery tasks

and conservation measures identified in recovery plans and species and habitat conservation strategies as funding permits (WL 1 - Threatened, Endangered, Candidate, Proposed, and Sensitive Species Management); implementing 300-500 acres of terrestrial habitat improvement per year and three to five miles of stream habitat improvement per year, and restoring habitat and managing vehicle use to allow for recovery of burned areas (WL 2 - Management of Species of Concern). The national forest expects to continue the emphasis on improving our knowledge base of riparian dependent threatened and endangered species suitable habitat by implementing 10 percent of the national forest inventory needs per year (AM 2 – Forest-wide Inventory). Program emphasis also includes prioritizing completion of nonwilderness areas in the next five years.

Invasive species removal (Spanish broom)

Invasive Species

The Invasive Species Program emphasis includes protecting forest and rangeland ecosystems by preventing the introduction and spread of invasive nonnative species across the national forest. Priority locations for eradication are riparian and threatened, endangered, proposed, candidate, and sensitive species habitat, roadsides, fuel treatment areas, and areas within the national forest that have been disturbed by wildland fire and fire suppression activities. The national forest expects to survey and map the locations of invasive species, and to implement eradication measures on approximately 1-2 miles per year of riparian habitat and approximately 5-100 acres per year of uplands habitat (IS 1 - Invasive Species Prevention and Control).

Vegetation Management

Vegetation management is carried out to reduce hazardous fuels for various objectives, to maintain or enhance habitat and to recover burned or otherwise damaged vegetation. The Forest Restoration Program incorporates an integrated set of vegetation management actions designed to meet multiple objectives including restoration of forest health and community protection. Close coordination between the Fire and Aviation Management staff and Resource Management staff is required.

Many vegetation management activities are aimed at reduction of hazardous fuels. Objectives of fuels reduction projects include protecting urban communities and public and private infrastructure from damage by wildland fires, and reducing the potential for severe ecological

effects of fires, such as stand replacement, type conversion or increased post-fire erosion and debris flows.

Urban communities and infrastructure are protected from fire by reducing the flame length and intensity of fires to allow suppression opportunities. While in many cases the greatest benefit from this protection is achieved by reducing fuel loads near the infrastructure needing protection, fuel treatments some distance from the improvements can also be effective if strategically placed on the landscape relative to the direction fire is most likely to come from. Strategically placed fuel treatments can be used to stop fires, change their direction of spread, or reduce their intensity, all of which can contribute to protecting communities and infrastructure from damage.

Severe ecological effects of fires typically result from either extreme fire behavior or from large areas being burned in a single event, particularly with high intensity. Fuel treatments that reduce the amount of fuel, reduce the continuity of fuels, or result in less favorable fuel arrangements generally reduce the potential for severe ecological effects of fires. Locating fuels treatments strategically with respect to a value to be protected, such as an important watershed, or threatened or endangered species habitat, can result in benefits proportionally greater than the amount of area treated. Particularly in pine and mixed conifer forest types, fuel conditions are generally considered worse and the amount of destructive stand replacement fire is greater than what occurred historically, due to the disruption of the historic fire regime of more frequent, moderate severity fires. Fuel reduction treatments can reduce the severity of future fires and therefore contribute to sustaining healthy forests.

Fuel reduction treatments may be accomplished mechanically, or with the use of prescribed fire or herbicides. Mechanical treatments involve removing dead trees, thinning live trees, and thinning or removing shrubs, and disposing of the resulting slash. The resulting reduction in amount and continuity of surface and ladder fuels moves forested stands from Condition Class 3 towards Condition Class 1, and reduces the flame length, and intensity of fires in chaparral and forest stands. Prescribed burning is used to dispose of slash from mechanical activities, to reduce fire hazard in chaparral near communities, to break up fuel continuity across the landscape to limit wildland fire patch size, and for restoration and maintenance of healthy conifer forests. In many cases, mechanical fuels reduction treatments are needed to restore conifer forests to a condition suitable for successful reintroduction of fire, that is, to restore fire behavior and effects to be similar to the historic fire regime. Herbicides may be used for maintenance of mechanical fuel treatments or to eradicate invasive nonnative plants that displace native vegetation.

In addition to the benefits of thinning in reducing ladder fuels, thinning also reduces competition for water, sunlight, and nutrients among trees, or between trees and other vegetation such as grasses and shrubs. This reduction of competition is important for improving survival of planted trees, increasing growth, and reducing mortality resulting from trees having inadequate resources.

Planting of desirable species (generally native species from local seed sources) is another common technique in vegetation management. Planting of trees or shrubs is used to facilitate regeneration of vegetation following events, such as stand replacement fire or extensive mortality caused by drought in combination with insects and diseases.

The combination of all of these techniques (applied according to site specific prescriptions) allows managing vegetation for various purposes, such as more rapidly growing larger trees for

wildlife habitat, increasing vegetation cover to reduce post-fire soil erosion, maintaining mixed conifer forests in a condition less susceptible to stand replacement fire, or maintaining reduced fuel loads adjacent to communities to decrease the threat of losing homes in wildland fires.

The Vegetation Management Program emphasizes restoring forest health and community protection, (FH 2 - Prevent Type Conversion), (FH 3 - Restoration of Forest Health), and (Fire 2 - Direct Community Protection). Other forest restoration projects will be located further into the national forest, away from structures, but they will still have the goal of community protection (Fire 5 - Fuelbreaks and Indirect Community Protection). Over the next three to five years, these vegetation 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 community defense and threat zones. Program goals include completing approximately 20 percent of identified treatment needs. Plans are expected to include strategically locating fuels treatments in order to take advantage of burned areas. The mix of these activities will vary through time and across sites, but the national forest anticipates an average annual need of 10,000 acres of fuels and vegetation reduction activities, and up to 1,000 acres per year of reforestation activities (FH 1 - Vegetation Restoration). The location and prioritization will be determined using site-specific prescriptions developed to guide appropriate implementation for the various objectives described above.

Barton Flats, using a helicopter to remove dead trees

- **Mortality Removal - Annual Need: Included below.** This includes the removal of dead vegetation to reduce fire hazard. This category includes the use of timber sales to remove merchantable trees, and the contract removal of non-merchantable trees and shrubs. These projects include treatment of all slash and are expected to move forested areas from Condition Class 3 towards Condition Class 1. In chaparral areas, mortality removal is planned in order to reduce the fire hazard from high to low.
- **Thinning - Annual Need: Included below.** This includes 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 2 or 3 toward Condition Class 1. Thinning is required prior to the reintroduction of fire in most cases.
- **Reforestation And Restoration Of Forest Vegetation - Annual Need: 1,000 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: 1,000 acres.** Existing fuelbreaks are generally maintained using prescribed fire or mechanical treatments, such as the use of chainsaws or masticators. Most of the fuelbreaks are in high hazard chaparral areas and are designed to limit wildland fire size by providing for 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: 500 acres.** Most of the planned fuelbreaks are also along roads and ridgetops and are proposed for limiting wildland fire patch size. Most fuelbreaks are constructed with machinery. Some are built by hand or by using prescribed fire. Herbicides may be needed to kill re-sprouting 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 defensible space concept.
- **Wildland/Urban Interface (WUI) Defense and Threat Zones - Annual Need: 6,500 acres (Defense 3,500, Threat 3,000).** A WUI Defense Zone is a relatively narrow area in width (see standards S7 and S8 in Part 3 of the forest plan) and directly adjoining structures. The vegetation in the Defense Zone is managed in a manner to produce low rates of fire spread, low intensity heat, and short flame lengths in order to increase defensible space and firefighter safety. A secondary zone (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 in the WUI Defense Zone may include hand or machine removal of vegetation with possible follow-up treatments to include herbicides, in addition to hand and machine removal of resprouting plants. Treatments in the WUI Threat Zone are less intensive and can generally be maintained with prescribed fire over the long-term. In forested areas, extensive tree thinning may occur in WUI threat zones.
- **Prescribed (Rx) Fire - Annual Need: 2,000 acres.** Projects in this category are generally large burns in chaparral to reduce fire hazard near communities or adjacent conifer stands. Prescribed fire is also used to help restore and maintain lands in the coniferous forest areas, currently categorized as Condition Class 1 or 2. Some prescribed burns are conducted for the purpose of enhancement of wildlife browse conditions.

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

Physical Resources (Soil, Geology, Water and Air)

The San Bernardino National Forest was established to protect the watersheds that influence runoff and supply water to local communities and municipalities. Activities include management of lands and water quality, water supply, soil quality and productivity, and water rights. The Soil and Watershed Program cooperates with various water agencies and other national forest functional areas to reduce erosion and maintain high quality water for the various users and natural resources through application of Best Management Practices in all Forest Service activities (WAT 1 - Watershed Function). The program also involves restoration of damaged lands through soil and watershed improvement projects (WAT 2 - Water Management, and WAT 3 - Hazardous Materials). Maintaining public water rights on the national forest through the State Water Rights Process is another important activity (WAT 2 - Water Management).

The Geology Program identifies measures to reduce geologic hazards for fuels projects, infrastructure developments, burned area rehabilitation, and watershed management. Earth science principles are applied to protect and interpret geologic resources. The Geology Program emphasis is to identify and mitigate landslide and other geologic hazards (AM 2 - Forest-wide

Inventory), analyze groundwater resources for sustainable development (WAT 1 - Watershed Function, and WAT 2 - Water Management), reduce environmental impacts from unstable or poorly drained roads, and to improve watershed restoration and mine reclamation (WAT 1 - Watershed Function).

The Air Resources Program cooperates with state and local air pollution control authorities to gain approval for important air quality related national forest activities, such as prescribed fire, mining and recreation. This program also encourages and helps direct research studies on the impacts of air pollution on national forest resources. The program will emphasize prescribe fire smoke management techniques and work with control authorities to recognize the long-term trade offs between prescribed fire and wildland fire (Air 1 - Minimize Smoke and Dust, and Air 2 - Forest Air Emissions). The impacts of Ozone and Nitrogen on forest terrestrial and aquatic ecosystems will continue to be evaluated. Human health risks may be considered in approved activities, including prescribed fire, by meeting the smoke management requirements of State Title 17, federal and local air quality permitting authorities. Visibility monitoring will continue with the operation of the National Improve Network and landscape view cameras to monitor effects to wilderness values.

The overall Physical Resources Program emphasis will be three fold: 1) support and help facilitate fuels and vegetation management efforts designed to maintain or restore watershed health and protect life and property (WAT 1 - Watershed Function); 2) repair soil and watershed degradation; and 3) provide burned area emergency rehabilitation treatments after wildland fires to reduce potential flood damage to downstream resources and communities (WAT 1 - Watershed Function).

Thinning project near North Shore Arrowhead community

Land Ownership and Adjustment

The Lands Program handles land exchanges and purchases, rights-of-way acquisitions, and boundary and title management.

Program emphasis will be to acquire lands that enhance public use, allow for continued public access, improve habitat linkage, or contain special resources, such as threatened or endangered species, or riparian habitat. Staff expect to implement one land adjustment and acquire

approximately 500 acres per year (Lands 1 - Strategic Acquisition). The program will also emphasize retaining and restoring clear title to National Forest System land by resolving encroachment from adjacent private lands. Staff expect to survey approximately three to five miles of boundary annually to identify encroachment problems (Lands 3 - Boundary Management) with high priority given to recently burned areas and areas with substantial tree mortality and fuel buildup. Once identified, early resolution will be given to these encroachments.

Special Area Management

The Special Area Management Program will emphasize managing for all existing, recommended, and new special designations to conserve those unique values and features for which the area is protected. Special designations include: wilderness, eligible wild and scenic rivers, research natural areas, and special interest areas.

- SD 1 - Wilderness
- SD 2 - Wild and Scenic Rivers
- SD 3 - Research Natural Areas
- SD 4 - Special Interest Areas

Pile burning, San Bernardino NF

Heritage Resources

The Heritage Resource Program has the mission to protect significant heritage resources, to share their values with the American people, and to contribute relevant information and perspectives to natural resource management so that future generations will have an opportunity to discover the human story etched in the national forest.

The Heritage Resource Program emphasis includes identifying all activities that have the potential to adversely affect, or do not complement known significant cultural properties. Staff expect to develop and implement management plans to address adverse effects for approximately 25 percent of the affected sites within five years (Her 1 - Heritage Resource Protection). Program emphasis will also focus on interpretation opportunities and public participation programs, (designed to facilitate evaluation of sites for the National Register of Historic Places), (Her 2 - Public Involvement Program). Program priorities include survey and site record maintenance within the recent burned areas, and areas around communities with fuels problems (Her 3 - Forest-wide Heritage Inventory).

Table 2.4.5 Resource Management Performance Indicators, SBNF

Performance Indicators for Resource Management	Current Level	Estimated Forest Capability and Need
Acres of Terrestrial Habitat Enhanced	206	2,800
Miles of Aquatic Habitat Enhanced	4	25
Acres of Noxious Weeds Treated	38	130
Acres of Vegetation Improved (also see Hazardous Fuels Reduction)	188	2,000
Acres of Watershed Improved	125	1,450
Acres of Land Ownership Adjusted	1,381	2,500
Number of Heritage Resources Managed to Standard	65	77

Public Use and Enjoyment

Public use and enjoyment includes the management of visitor centers, public information, interpretive services and education, concessions and recreation special-uses, recreation fee collection, law enforcement, visitor safety and protection.

The recreation budget has gradually dwindled to less than half of what it was in the late 1970s, while at the same time demand for recreation opportunities has increased. The budget decrease has created an extremely resourceful and lean organization; one that is too lean in some areas to fully leverage the tremendous energy and skills of the nearby communities to more effectively manage the Recreation Program.

The public use and enjoyment function demonstrates what can be accomplished by creative, collaborative efforts to create a healthy recreation forest. National Forest staff is responsible for visitor education, volunteer programs, and forest protection. Forest Protection Officers work with volunteers to leverage their time. Professional volunteer organizations use fee money to hire managers for several large volunteer programs. It is important to note that without the fee program, all the programs listed here would suffer dramatically.

The law enforcement budget is also less than it was ten years ago, while the amount and types of unlawful activities have increased. Effects of this lean organization have resulted in a lack of ability to respond to incidents, to assist other programs, and to provide safe access across the national forest.

Campgrounds and Developed Sites

There are nine picnic areas, 25 trailheads, and 46 campgrounds with the capacity to accommodate approximately 4,350 campers on the San Bernardino National Forest.

Arrowhead North Shore Campground—dead tree removal

Maintenance is planned in two major categories: routine and deferred. Routine maintenance work includes: cleaning and repairing restrooms, picnic tables, fire rings and grills, signs; renting portable toilets, pumping vault toilets; removing graffiti from facilities and natural features; testing and maintaining water systems; posting kiosks with current information; and picking up and hauling trash. Deferred maintenance includes small projects that do not qualify as capital improvement projects, such as the replacement of a toilet that is past its useful life. Deferred maintenance is an unusual category, it is essentially facilities that have fallen into disrepair, because there has been no budget available to fix or replace the facility as it begins to deteriorate.

Concentrated Use Areas (CUAs)

A concentrated use area is an undeveloped area where maintenance and management time and money are invested, because recreation use leaves evident impacts, including litter, vandalism, and/or soil compaction. There are 83 of these areas identified on the San Bernardino National Forest. Activities at such sites include: hunting, fishing, wildlife watching, scenery viewing, picnicking, camping, snowplay, and waterplay. Facilities in these areas are limited to portable toilets, minimal parking, trashcans, signs and kiosks. These facilities require cleaning, pumping, graffiti removal, and repair of vandalism. Graffiti and trash removal is required along heavily used roads, as well as in CUAs. Heavy use near rivers and streams requires watershed restoration.

Recreation

The Recreation Program will make available a wide array of balanced, environmentally sustainable quality recreation opportunities to meet most of the needs of a growing, urban, culturally diverse population (REC 1 - Recreation Opportunity and REC 3 - Recreation Participation). Community outreach efforts lead to an involved citizen population that is representative of the communities the national forest serves. National Forest staff anticipate higher investment levels in order to provide maximum resource protection, including a greater Forest Service field presence, effective facility design, more intensive management, and improved monitoring and follow-up. National Forest staff expect to identify the existing areas of concentrated, developed, and dispersed recreation use in which unacceptable threatened, endangered, proposed, candidate, and sensitive species, resource or social impacts are occurring. The national forest anticipates implementing adaptive management measures on approximately

75 percent of these areas to reduce or eliminate conflicts (REC 2 - Sustainable Use and Environmental Design).

Recreation special-uses are expected to remain an important program component, including winter sports, recreation events, recreation residences, organization camps, and outfitter/guides including lodges, resorts and clubs.

New recreation special-use permits will be authorized when use is compatible with forest plan direction; a similar opportunity does not exist on non-federal lands and impacts to national forest resources can be mitigated. Emphasis will be given to resolving issues related to administration of existing permits rather than processing new authorizations.

Investment emphasis is expected to focus on national forest recreation facility needs. Staff expect to develop opportunities through partnerships and special funding to reduce the backlog of facility maintenance by approximately 5-10 percent (Fac 1 - Facilities Maintenance Backlog).

Conservation Education

Conservation education will receive a substantial emphasis including a focus on developing land stewardship ethics (REC 4 - Conservation Education). National Forest staff expect the quality of the program to improve and to reach more participants including a diverse urban demographic. Expectations include amending the existing national forest interpretive plan to address changing demographics and new issues, including strategies for forest health and high-use recreation sites/areas where threatened, endangered, proposed, candidate, and sensitive species and heritage conflicts may occur. Implementation of existing interpretive plans will be emphasized. The Conservation Education Program will emphasize leveraging scarce resources by increasing national forest partnerships by approximately 20 percent, with a focus on forest health, investment projects, visitor services, and reducing the maintenance backlog.

Landscape and Scenery Management

The Landscape and Scenery Management Program emphasis is expected to conserve and restore aesthetic, recreation, and open space values, especially those of high-valued landscapes that serve as scenic backdrops to local communities and those with increasingly rare values, such as open space and solitude (LM 1 - Landscape Aesthetics, LM 3 - Landscape Character, LM 2 - Landscape Restoration, and REC 1 - Recreation Opportunity). Landscape scenery improvement shall

be planned in the accomplishment of proposed activities. Improvement may include the opening of views, forest health practices, vegetation planting, or plant species emphasis.

Law Enforcement

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 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.

Table 2.4.6. Public Use and Enjoyment Performance Indicators, SBNF

Performance Indicators for Public Use and Enjoyment	Current Level	Estimated Forest Capability and Need
Products Provided to Standard (Interpretation and Education)	185	400
Recreation Special Use Authorizations Administered to Standard	875	1,010
PAOT Days Managed to Standard (Developed Sites)	269,362	356,976
Recreation Days Managed to Standard (General Forest Areas)	5,699	14,500

Facilities Operation and Maintenance

Buildings, Grounds & Utilities

This program area focuses on operating and maintaining Forest Service owned and leased fire and administrative buildings and other associated buildings and infrastructures. The national forest has 222 non-recreation buildings and three visitor centers located on 43 administrative sites. The facilities include administrative offices, fire stations, communication and utility buildings, barracks, storage buildings, shop buildings, and an airtanker base. This program includes operating and maintaining numerous gas and electrical utility systems, 25 water systems, and 53 sewage disposal systems. Work involves annual (routine) maintenance and deferred/heavy maintenance, as well as facility upgrades and improvements to buildings, utilities and grounds.

The Administrative Buildings and Grounds Program will emphasize maintaining and improving existing facilities and exploring new opportunities to develop fire management support facilities.

National Forest staff expect to reduce the facilities maintenance backlog by approximately 5 percent (see Fac 1 - Facilities Maintenance Backlog).

Roads

This program area focuses on operating and maintaining the National Forest System roads within the San Bernardino National Forest. The national forest's National Forest System roads consists of 1,178 miles of dirt roads and 56 miles of paved roads. Other paved roads and dirt roads are maintained and operated by other entities, including Caltrans (state), counties, and the private sector. Maintenance activities include maintaining roadside vegetation, removing weeds, grading, paving, striping, repairing potholes, cleaning and installing drainage control structures, removal of rocks and landslides, repairing washouts, and bridge repairs. Roads are maintained to provide for user safety and to meet road maintenance management objectives. Operations for the Roads Program include managing road closures, restrictions, use permits, maintenance agreements, and rights-of-way use agreements.

The Roads Program will emphasize managing the transportation system to accommodate increased user demand, to reduce conflicts between user groups, to protect the national forest and communities, and other resource considerations. National Forest System roads and trails will be maintained to reduce the level of adverse effects to species and watersheds while safely accommodating use (see REC 3 - Recreation Participation). National Forest staff expect to maintain approximately 20 percent of the National Forest System roads to their objective operation maintenance level (see Trans 1 - Transportation Management).

Trails

The San Bernardino National Forest has a network of 535 miles of non-motorized trails and 36 miles of motorized trails for hiking, mountain biking, equestrian use and off-highway vehicle use. The Trails Program consists of maintaining, constructing,

and reconstructing the National Forest System trails and related facilities, such as trailheads, bulletin boards, signage, and parking areas. Also integral is use monitoring, use types, and impacts to the natural resources.

The program will emphasize improving the national forest OHV system by designating OHV road and trail routes and effectively managing inappropriate use (see Trans 1 - Transportation Management). The program includes designating trails suitable for mechanized (mountain bike) use. National Forest staff expect to provide well-managed dispersed recreation parking by developing and implementing localized place strategies (see Trans 1 - Transportation Management). National Forest staff also expect to complete a site-specific road analysis of the unclassified roads, and to make recommendations for decommissioning where conflicts with threatened, endangered, proposed, candidate, and sensitive species are occurring, or for including routes into the National Forest System roads and trails. National Forest staff expect to decommission or classify approximately 150 miles of unclassified roads or trails (see Trans 1 - Transportation Management). The program will focus on creating more easy-to-moderate day-use trails and trail loops and linkages. Additional focus includes resolving road and trail conflicts occurring between user groups, communities and resources and with Level 3 roads, and removing inappropriate uses. National Forest staff expect to resolve one conflict per year.

Access to the national forest is expected to be acquired where needed for public and administrative use by purchasing or exchanging land, acquiring easements and rights-of-way. The program will emphasize developing and maintaining road and trail systems that address access issues and minimize conflicts with private landowners. National Forest staff expect to acquire one right-of-way needed to operate the National Forest System roads and trails per year (see Lands 1 - Land Ownership Adjustment).

Table 2.4.7. Facilities Operations and Maintenance Performance Indicators, SBNF

Performance Indicators for Facility Operations and Maintenance	Current Level	Estimated Forest Capability and Need
Miles of Passenger Car Roads Maintained to Objective Maintenance Level	95	316
Miles of High Clearance & Back Country Roads Maintained to Objective Maintenance Level	279	789
Miles of Road Decommissioned	6	30
Miles of Trail Operated and Maintained to Standard	20	471

Commodity and Commercial Uses

This program covers a broad spectrum of use, including everything from small gold mines to tree nurseries to jet fuel pipelines to pinecones. The majority of cash receipts from these activities are sent to the U.S. Treasury, with 25 percent sent to local governments.

The grazing, timber, and non-timber Forest Products Program areas are managed for noncommercial values. Timber harvest may occur to meet forest restoration, wildlife, fuels, watershed or other needs. Timber harvest will not occur for the sole purpose of producing wood products. The allowable sale quantity (ASQ) is zero.

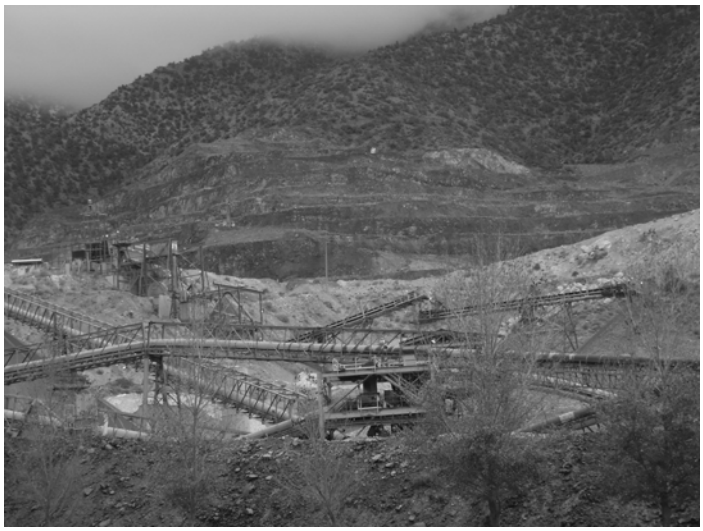
The Commodity and Commercial Use Program plans, prepares, and administers special forest product sales (including personal fuelwood and wood product sales), issues botanic research

permits, and tracks the collection of ethnobotanic products, such as ferns and basket weaving materials. The program ensures that the vegetative forest products removed from the national forest (wood products including fuelwood and various trees, plants, seeds, cones and products used for decorative or medicinal purposes) are within management guidelines.

Non-Recreation Special-Uses

The management of non-recreation special-uses focuses on the permitting and monitoring of special-uses, such as sanitary systems (sewage pipeline and transfer stations); research activities; still photography and motion pictures; power generation; oil & gas pipelines; electric transmission lines; boat docks & marinas; radio, television and cell phone towers; telephone lines; water lines; and roads.

Existing special-uses are expected to continue. New special-use authorizations will be authorized only if: 1) the use is compatible with Forest Service Manual direction; 2) the use cannot be reasonably accommodated on non-National Forest System lands; 3) impacts to national forest resources can be mitigated; and 4) the cost is not a defining issue. The emphasis will be on preserving open space in a natural setting. The Forest Service expects to complete approximately 80-90 percent of the special-use authorization re-issuance backlog. Emphasis will be given to resolving issues related to land encumbered by existing authorizations rather than processing new authorizations (see Lands 2 - Non-Recreation Special Use Authorizations).



Limestone mining, Desert Rim

Water

Local demand for water is greater than can be produced from national forest watersheds. Groundwater extraction from the national forest contributes to the municipal water supply for many urban communities within and adjacent to the national forest. The national forest produces a significant amount of the total water demand within its area of influence.

The Physical Resources Program emphasis is expected to balance the needs of water users with resource needs for maintaining or improving stream, riparian, springs and wetland habitat by procuring water rights and instream flow agreements to address the increased demand for the ground and surface water resources of the national forest (see WAT 2 - Water Management). National Forest staff expect to complete approximately 5 percent of the water diversion permit

reauthorizations backlog (see Lands 2 - Non-Recreation Special Use Authorizations), including acquiring available water rights or relocating diversions to the national forest perimeter where there is a demonstrated need for riparian species management.

Minerals and Non-Renewable Energy Resources:

The national forest maintains its role in a viable, healthy minerals industry in an environmentally sound manner by administering its Mineral Program to facilitate the orderly exploration, development, and production of mineral and energy resources.

Nondiscretionary activities are sanctioned under the General Mining Act of 1872, as amended. These activities include exploration and development of all locatable hard rock minerals such as gold, silver, lead, zinc and other minerals. Discretionary activities, such as exploration and development of oil, gas, geothermal, sand, gravel, building stone, and common clay, are permitted under various minerals leasing acts and disposal authorities.

Utility corridor, Cajon Pass

The minerals staff administers activities related to mining, leasing, identifying and closing abandoned mines, and reclaiming mined lands while protecting other 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 (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. Reasonable access for approved mineral operations will be allowed. The emphasis will be consistent with the requirements of the Carbonate Habitat Management Strategy to sustain mineral production by providing refugia for resource protection (ME 1 - Minerals Management, and Lands 4 - Mineral Withdrawals). Staff expect to increase the

carbonate plant habitat reserve by approximately 2,600 acres through land acquisition or exchange (Lands 1 - Land Ownership Adjustment), allowing for future mining in other areas.

As determined in a 2003 study of Oil and Gas potential, the San Bernardino National Forest contains no lands classified by the Bureau of Land Management as having potential for occurrence of Oil and Gas resources. Therefore, pursuant to 36 CFR 228.102(d), national forest lands are "not available" for exploration and development of Oil and Gas resources. If at some future date new information shows some potential for Oil or Gas occurrence, this decision will be reconsidered.

Grazing

The Grazing Program provides forage for cattle while at the same time helps achieve vegetation and wildlife goals. Currently, the national forest has five active cattle grazing allotments. The Forest Service concentrates its efforts on managing the vegetation resources across the range allotments to serve a multitude of resource needs, including habitat for a variety of plant and animal species, clean water, and sustainable grazing and browsing. The type of resource work that occurs on allotments includes inventory and monitoring of rangeland conditions to maintain or improve rangeland health.

The goal of the Grazing Program is for all rangelands to progress toward a healthier condition. Where there are unhealthy rangelands, national forest personnel strive to restore rangeland ecosystem functions through the understanding and cooperation of everyone involved in grazing management, including landowners, land managers, users, universities, other agencies, and the public.

The Livestock Grazing Program will emphasize protecting and restoring rangelands. Priority will be given to completing the backlog of National Environmental Policy Act (NEPA) compliance projects in order to meet the requirements of the Recission Act of 1995 (LM 2 - Landscape Restoration).

Forest Biomass

Special Forest Products

Special Forest Products are renewable products derived from biological resources for personal, educational, commercial, and scientific use. Examples include: personal fuelwood, ethnobotanic products (such as ferns and basket weaving materials), native seeds for commercial sale, pine cones, etc., (see SFP 1 - Offer Special Forest Products).

Wood Products

The national forest generates wood products, such as saw timber, pulpwood, cull logs, small round wood, house logs, utility poles, and biomass from healthy forest restoration, fuels management and community protection projects. Product removal could benefit the national forest by reducing fuel loading and reducing the cost to remove the material. There is potential for use of forest biomass for energy generation.

National Forest staff expect to accommodate legitimate proposals for biomass utilization and to cultivate use as a means of vegetation management (see ME 2 - Biomass Utilization, and WP1 - Offer Wood Products).

Table 2.4.8. Commodities and Commercial Uses Performance Indicators, SBNF

Performance Indicators for Commodity and Commercial Uses	Current Level	Estimated Forest Capability and Need
Land Use Authorizations Administered to Standard	439	800
Number of Mineral Operations Administered	15	15
Manage Grazing Allotments	17,000	32,500

Fire Management

Today there are over 90,000 residential and commercial structures worth approximately 10 billion dollars in assessed value located within the national forest boundary. Not included in this figure, are the increasingly dense urban interfaces with communities including Hesperia, Hemet, Highland, Rancho Cucamonga, Redlands, San Bernardino, San Jacinto, Palm Desert, Palm Springs, Yucaipa, Banning, Beaumont, and Devore. All of these communities are susceptible to an out-of-control wildland fire and the floods that result from steep slopes where vegetation has burned.

Fire prevention, fuels reduction and fire suppression are the major components of the Fire and Aviation program. When a wildland fire is reported, fire personnel are dispatched to the fire and also to other fire stations to provide assistance. Related actions including evacuations are then coordinated within the national forest and through adjoining Fire Department jurisdictions with various law enforcement agencies to keep people safely away from wildland fire. Fires are suppressed on the ground with engines, hand crews, and machinery and from the air with helicopters and airtankers. Physical barriers, such as hand and dozer lines and fire retardant drops are used to slow fire progress so that fires can be more effectively contained. Once a fire is contained, lands damaged by fire suppression activities are evaluated and then rehabilitated. Effects of the fire and the potential for post-fire effects to life, property and natural resources are also evaluated and mitigated as needed by a team of resource specialists as part of the Burned Area Emergency Response.

All wildland fires on the San Bernardino National Forest are considered to be a potential threat to communities. The Fire Management Program will emphasize preparation for aggressive fire suppression and implementing prevention strategies to achieve

objectives including protecting life and property from wildland fire and subsequent floods (see Fire 1 - Fire Prevention). National Forest staff expect to maintain the suppression organization at 90 percent of the same level as 2004 funding allowed (see Fire 3 - Fire Suppression Emphasis, and Fire 4 - Firefighter and Public Safety). Additional expectations include revising approximately 50 percent of all cooperative agreements with local fire agencies and completing the national forest Fire Management Plan.

Table 2.4.9. Fire and Aviation Management Performance Indicators, SBNF

Performance Indicator for Aviation and Fire Management	Current Level	Estimated Forest Capability and Need
Acres of Hazardous Fuel Reduction	3,953	25,100

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 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.

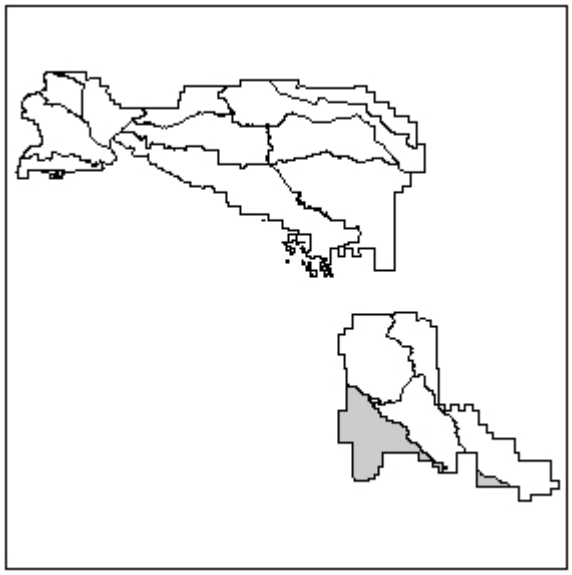
These are the Places identified for the San Bernardino National Forest:

- Anza (51,625 acres)
- Arrowhead (36,663 acres)
- Big Bear (39,078 acres)
- Big Bear Back Country (63,889 acres)
- Cajon (27,040 acres)
- Desert Rim (28,011 acres)
- Garner Valley (38,451 acres)
- Idyllwild (44,361 acres)
- Lytle Creek (42,384 acres)
- San Bernardino Front Country (84,566 acres)
- San Gorgonio (99,925 acres)
- Santa Rosa and San Jacinto Mountains National Monument (63,726 acres)
- Silverwood (21,075 acres)
- Mojave Front Country (Within San Bernardino National Forest) (11,879 acres)
- The Front Country (Within San Bernardino National Forest) (13,079 acres)

Anza

Theme: Chaparral-covered hillsides braided by seasonally flowing streams. Anza offers a distinctive, rural character, and remote open space, just miles from major urban centers. The Juan Bautista de Anza National Historic Trail marks the passage of early Spanish explorers through Bautista Canyon.

Settings: The Anza Place is located within the San Jacinto foothills, stretching from the valley communities of Hemet and San Jacinto to Cahuilla Mountain and the southwestern slope of Thomas Mountain. To the south lies the community of Anza, named after the Spanish explorer Juan Bautista De Anza, who led an overland expedition in this area in the 1770s. De Anza traveled through the heart of this landscape on his expedition from Tubac, Arizona north to San Francisco. Visitors often travel through Bautista Canyon revisiting this historic route, or as a short cut from Hemet to Anza. The Cahuilla Mountain Research Natural Area located here is dedicated to the study of Coulter pine and black oak. Portions of the active Rouse grazing allotment are present within this Place.



The climate is temperate, with sub-humid to hot summers at the lower elevations of 1,500 feet; giving way to cooler temperatures in the higher elevations. Most of this land is semi-arid with no lakes or man-made reservoirs, and all streams are dry in the summer except for springs fed from the higher mountains. Annual precipitation ranges from 10 to 30 inches per year, mostly in the form of rain. Steep mountains characterize the land, with narrow to rounded ridges and narrow canyons.

Valley view, Anza Place

Traditionally, the Cahuilla Indians used these lands, and had extensive trade networks with neighboring tribes. Today, many areas within the Place continue to be used by the Cahuilla and their neighbors the Luiseno. Access to tribal collecting areas is adequate, but could be

improved. In 1893, the reservation was established for the Ramona Band of Cahuilla Indians. The reservation is bordered by National Forest System land on three sides.

Grasslands in the valleys yield to a chaparral covered landscape at the lower elevations, including chamise, buckwheat, sage and mountain lilac. In the higher elevations, there are stands of canyon live oak, pine and bigcone Douglas-fir. Much of the landscape is dense chaparral on the slopes, with a riparian corridor along the Bautista Canyon bottom that contains diverse species of trees, shrubs, forbs, sedges, rushes and grasses. Wildland fire threat is ever-present here, along with the cycle of erosion and flood.

The southwestern willow flycatcher, the San Bernardino kangaroo rat, arroyo toad and Quino checkerspot butterfly occur within the Place. The biological diversity along the river corridors within this Place is unusually high. Critical habitat for San Bernardino kangaroo rat is designated close to the San Jacinto River. Bautista Creek possesses the largest number of endangered and Region 5 sensitive wildlife species of any location on the national forest. Designated critical habitat for San Bernardino kangaroo rat and proposed critical habitat for arroyo toad occurs in Bautista Canyon. Bautista Creek also supports the only population on the national forest of the endangered slender horned spine-flower. Alluvial fan scrub habitat is present. The encroachment of tamarisk (an invasive nonnative species within the creek corridor) reduces the water table and affects species diversity. There is critical habitat for the Quino checkerspot butterfly in the vicinity of Hixon Flat. Deer, quail, and mountain lions are present throughout the Anza Place. Private lands adjacent to the southern portion of the Place provide a regional habitat linkage connecting the San Jacinto Mountains to the Palomar Mountains on the Cleveland National Forest.

The Anza Place is sparsely populated, with most of the population located in the adjacent communities of Hemet, San Jacinto and the Anza Valley. No major highways transect this area, and there are only a few national forest dirt roads. Because of the limited access, the area is not a high-use recreation area. Most of the visitation focuses on hiking, biking, hunting and driving for pleasure. A designated OHV route system is present. Remote camping is available. Trash dumping and target shooting in unauthorized locations occurs frequently.

Eligible Wild and Scenic Rivers:

- Bautista Creek 11.7 miles

Established Research Natural Areas:

- Cahuilla Mountain 861 acres

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Bautista Creek

Desired Condition: The Anza Place is maintained as a historic and natural appearing landscape that functions as a transition zone to the higher mountains beyond, as well as providing a natural continuous expanse of vegetation as viewed from the High Country. The valued landscape attributes to be preserved over time are the mosaic pattern of the chaparral-covered hills, the ribbons of diverse native vegetation in the canyons and riparian areas, the presence of oaks, bigcone Douglas-fir and pine in higher elevations. Native American access to traditional gathering areas is improved and areas are protected. Heritage resource sites are protected. Active

grazing allotments are sustainable and contain a high proportion of native species. Chaparral communities and timber stands are at pre-fire suppression conditions. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Tamarisk and other exotic species are reduced over time. Accurate national forest boundaries are reestablished and maintained.

A wide variety of dispersed recreation opportunities are maintained over time. The OHV route system is improved and unauthorized use is directed to roads and trails that are designated for this use.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, forest interpretation and fuels management. Forest health projects will be implemented to remove dead trees, reduce stand density, and promote pre-settlement fire return intervals. Reforestation projects will maintain tree diversity.

Visitor experiences will be enhanced through interpretation of the historic route of Juan Bautista De Anza National Historic Trail. The improvement of the OHV route system will be explored, as will a motorized right-of-way access for fire suppression in Reed Valley.

Enhancement of wildlife habitat for threatened, endangered, proposed, candidate and sensitive species, such as the southwestern willow flycatcher, arroyo toad, San Bernardino Kangaroo rat, Quino checkerspot butterfly, and slender horned spineflower will be emphasized in all management activities. Maintaining the unique biological diversity found in Bautista Creek and the San Jacinto River, removal of tamarisk and other exotic species, and management of the national forest portion of the regional habitat linkage to the south will also be emphasized.

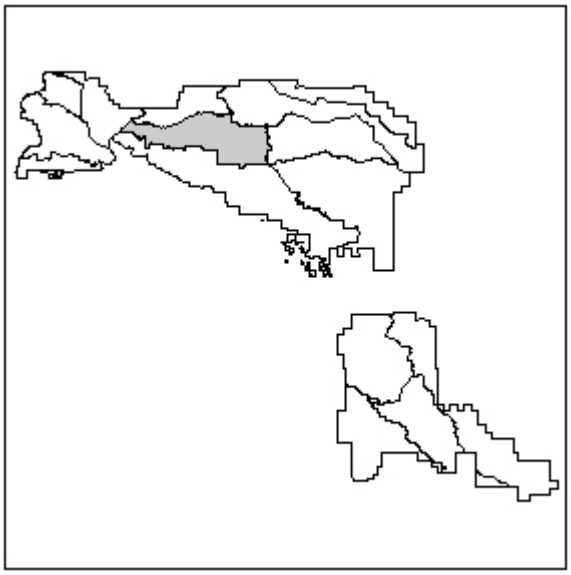
Heritage resource sites and Native American gathering areas will be protected. Native American tribes will become partners through protocol agreements and provide assistance with interpretation and management of traditional gathering areas. The California Site Steward Program will be implemented.

Accurate national forest boundaries along the Wildland/Urban Interface will be reestablished and maintained. Law enforcement actions and activities will be emphasized to eliminate unauthorized shooting and trash dumping in streamside areas and to promote public and employee safety.

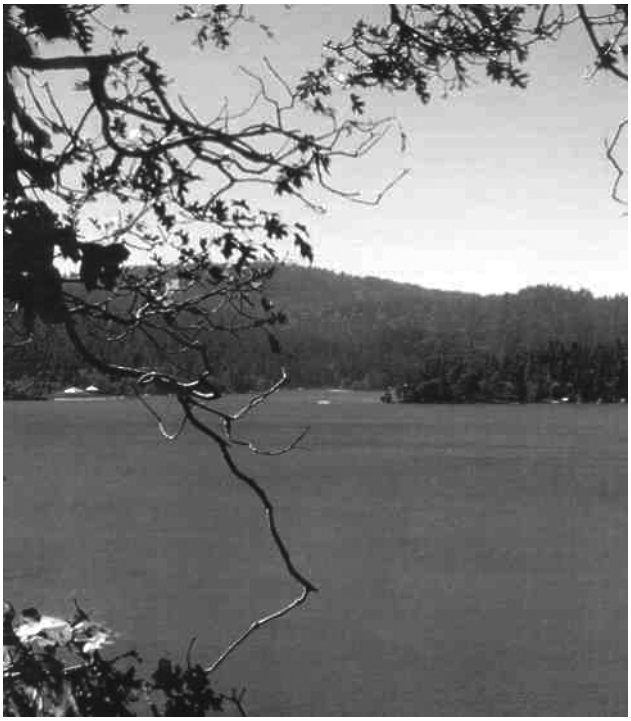
Arrowhead

Theme: A scenic mountain retreat for residents and visitors alike, the Arrowhead Place has large areas of urban development on private lands around Lake Arrowhead. Montane conifer forest, a perennial stream in Deep Creek and abundant recreation opportunities characterize this area. The National Children's Forest is a living classroom for environmental education.

Setting: The Arrowhead Place is known for its scenic vistas, lakes, diversity of vegetation, and seasonal climatic changes. The upper portion of Deep Creek (a major tributary of the Mojave River) is a unique feature of this Place. It is one of only two designated State of California 'Wild Trout Streams' within the national forest and offers a popular fly-fishing opportunity. The National Children's Forest Special Interest Area (SIA) provides a 3,394 acre living classroom for environmental education that links students, teachers and parents to their public land. The Fisherman's Camp Research Natural Area (set aside for Coulter pine research) is also located here. The Deep Creek Grazing Allotment is present.



The Arrowhead Place is a steep landscape characterized by rounded summits. Elevations range from 4,000 to 8,000 feet. Precipitation ranges from 30 to 40 inches annually, with up to 80 inches of snow falling at the highest elevations. Fog is often present along the rim. The rate of groundwater extraction in the area and lack of private land water flows into forest streams are a concern.



Forests and woodlands are here abound with Coulter pine, canyon live oak, and black oak with scattered stands of juniper and single-leaf pinyon pine in the northeast section of the Place. At the higher elevations, Jeffrey pine, ponderosa pine and incense cedar are present. Bigcone Douglas-fir occupies drainages within the chaparral-covered hillsides and mountain dogwood occupies shaded stream corridors at the higher elevations. Large acreages of dense conifer forest on both national forest and private land have been affected by high tree mortality related to drought, and the threat of wildland fire in the rural/urban interface is a significant concern. The Old Fire of 2003 destroyed a large number of homes in the Cedar Glen-Hook Creek area, illustrating the unprecedented

fuels problem. Over a dozen communities are located here, and the number of residents living within the national forest boundary is one of the highest in the nation.

This Place supports diverse plant and wildlife communities including a large expanse of high quality California spotted owl habitat and much of the known range of the southern rubber boa. Southwestern willow flycatcher, yellow warbler, northern flying squirrel, and many other special status species are found here. Wintering bald eagle day and night roost sites are present on national forest land adjacent to Lake Arrowhead and Silverwood Lake. Private land throughout the area has high potential for development, which is increasing species dependence on national forest land. Critical habitat for the arroyo southwestern toad is designated below 5,000 feet along Deep Creek and is proposed for the southwestern willow flycatcher. Deep Creek also supports native fish including a hybridized population of the Mohave tui chub. This corridor serves as an important habitat linkage, connecting southwestern willow flycatcher habitat in the desert to habitat in the mountains. An important landscape linkage for deer and bear is present in the Heap's Peak/Sheep Creek area, connecting desert and coastal areas.

The Snow Valley Pebble Plain Complex supports one of the largest known occurrences of the ashy gray paintbrush, a federally threatened species. San Bernardino Mountains owl's-clover, Lemon lily, Humboldt lily, several other Region 5 sensitive plant species and vernal mesic habitat are also present throughout the Place.

Significant historic and prehistoric heritage properties occur here. Rock Camp (a large prehistoric encampment named for its numerous bedrock milling features) is one of the best-known heritage sites in southern California. Historically, the area was an important location of early logging activity and the setting of the "Battle of Indian Hill," the last major encounter between Euro-Americans and Native Americans in southern California.

Visitors access the area by California State Highways 138 and 18, known as the Rim of the World Scenic Byway. California State Highways 330, 38 and 173 provide alternate access routes. Public access to Lake Arrowhead, and adjacent Lake Papoose is restricted by private property ownership. Power, water transmission, telephone, cable television, communication sites, and sewer rights-of-way cross national forest land serving the communities. There are many requests for additional non-recreation special-use permits, or expansions of existing permits. Popular motion picture filming locations are located here. Adjacent private land development has resulted in many encroachments on National Forest System lands.

Abundant recreation opportunities (especially day-use) are provided here for both local residents and the large and diverse influx of seasonal visitors. Hiking, backpacking, camping, fly-fishing, horseback riding, wildlife viewing, fern gathering, mountain biking, hunting, pleasure driving and 4-wheeling opportunities are present. The hang-gliding and paragliding site at Pavika Point is nationally recognized. Recreational target shooting is available at a range operated under special-use authorization. Snowplay, nordic skiing, alpine skiing and snow boarding draw large crowds during the winter months. Snow mobile opportunities are available on National Forest System Road 1N96. The Pacific Crest National Scenic Trail and the Camp Creek National Recreation Trail provide popular hiking, backpacking, and equestrian opportunities; non-motorized and motorized trail opportunities are present along the North Shore National Recreation Trail. Although the most well-defined motorized trail system on the national forest occurs here, improvements could still be made. There are noise conflicts between national forest OHV use and adjacent landowners.

There is also concern for effects to resources caused by increased off-trail mountain bike use. A non-motorized trail system linking mountain communities to the national forest has been proposed with community support. There are developed family campgrounds, group campgrounds, and day-use picnic areas located here, as well as organization camps and recreation residence tracts. Equestrian facilities and non-motorized loop trails are lacking. Heaps Peak Arboretum (partially burned in the Old Fire of 2003) offers self guided interpretive tours and the Fire Lookout Programs at Keller and Strawberry Peak offer fascinating interpretive and volunteer opportunities. In light of the recent tree mortality and Old Fire of 2003, there is a window of opportunity for the national forest and the community to develop a community based Volunteer Restoration Program.

Recreation facilities and trails are in need of maintenance and improvements to meet public demand. Rehabilitation of unclassified roads is needed to improve water quality and provide solitude for wildlife. Unlawful activities, such as trash dumping, off-road vehicle use, and property vandalism are reoccurring problems adjacent to communities. Dispersed camping in unauthorized locations, creation of unauthorized routes and user created maintenance, and unlawful campfire use also occurs. Additional unlawful activities, including marijuana cultivation, methamphetamine lab dumps, and abandonment of stolen vehicles are increasing as urban areas within the national forest boundary continue to develop. Law enforcement staffing levels are inadequate to manage the number of users.

Eligible Wild and Scenic Rivers:

- Deep Creek 10.6 miles
- Holcomb Creek 0.5 miles

Special Interest Areas:

- Childrens Forest 3,394 acres

Established Research Natural Areas:

- Fishermans Camp 412 acres

Total national forest acres--Arrowhead Place: 36,663

Desired Condition: The Arrowhead Place is maintained as a natural appearing landscape that functions as a recreation retreat setting with seasonal influences. The built environment is that of a mountain village with the dominant material of wood and stone accents. Chaparral and forested areas are managed to provide fire protection for adjacent communities, recreation areas and wildlife habitat. Habitat conditions for threatened, endangered, proposed, and sensitive species are improving over time; invasive nonnative species are reduced. Accurate national forest boundaries are reestablished and maintained. Heritage resources are identified, protected, and interpreted through establishment of tribal partnerships. A wide variety of recreation uses will be promoted, where appropriate and environmentally sustainable.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management. Forest health projects will be implemented to remove dead trees and reduce stand density that will result in a more natural pattern of low intensity fires and return intervals. In addition, these projects will focus on returning forest ecosystems to a more healthy condition. Reforestation projects will maintain tree diversity. Conservation education, with a focus on the demonstration and interpretation of healthy forests, will be emphasized to enhance the experience of visitors and promote stewardship. Building joint community based partnerships will be emphasized for resource protection and restoration.

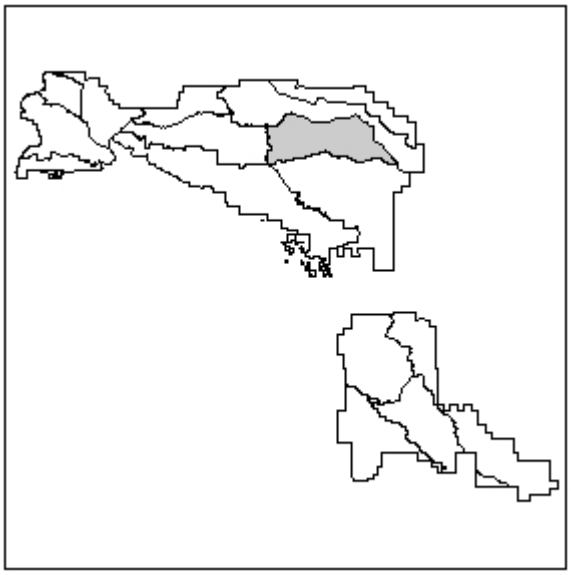
Heritage properties are identified, preserved and interpreted for their scientific values, tribal interests, and public enjoyment. Enhancement of wildlife habitat and recovery of threatened, endangered and sensitive species will be emphasized in all management activities. Maintaining the unique biological diversity and regional habitat linkages, protecting Deep Creek and removal of invasive nonnative species will be emphasized.

Acquisition of land will be emphasized to improve administrative and public access, increase recreation opportunities, promote species recovery, and reduce urban/wildland boundaries. Accurate national forest boundaries along the urban interface will be reestablished and maintained. The national forest will continue to work closely with developers, planners and local officials to reduce resource impacts and conflicts on national forest lands from nearby development.

Conservation education will be emphasized at the National Children's Forest, Keller and Strawberry Peak Fire lookouts, Heaps Peak Arboretum, Deep Creek, and along the Rim of the World Scenic Byway. Renovation of developed sites will be emphasized, as will development of safe areas for snowplay, development of a dispersed camping strategy, and day-use recreation at Deep Creek. A wide variety of dispersed recreation opportunities are maintained over time. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. The OHV route system is improved and unauthorized use is directed to system roads and trails. Watershed management will be emphasized, as will restoration of areas burned in catastrophic wildland fires. Law enforcement actions and activities will be emphasized to eliminate unauthorized activities and to promote public safety and enjoyment.

Big Bear

Theme: The premier mountain lake resort destination in southern California. Visitors and residents of Big Bear Place heavily use this landscape of urban development and surrounding public lands. Unique habitats support one of the highest concentrations of threatened, endangered and sensitive plant and wildlife species in California.



Setting: Big Bear Place is a scenic, high-country landscape with abundant, year-round recreation and wildlife viewing opportunities. Millions of visitors from throughout southern California are drawn annually to this resort community known for its clean air, cool temperatures and mountain beauty. The mountains here are moderately steep with narrow to rounded summits. Elevations range from 6,500 feet at the Big Bear Lake Dam up to 9,952 feet in the surrounding mountains. Precipitation averages 22 inches per year; 64 inches occurs as snowfall in the higher elevations. Portions of two special interest areas occur here. The North Baldwin-Holcomb Valley Special Interest Area is designated for historical, zoological and botanical values and the Arrastre Creek Special Interest Area is designated for botanical and zoological values. The eastern portion of the unit is managed as part of the Wild Burro Territory.

Big Bear Lake is the largest high elevation lake in southern California, with a surface area of approximately 10 square miles and an intricate 23-mile shoreline. Developed a century ago to impound water for diversion to the citrus industry in the San Bernardino Valley, it is now managed by the Big Bear Municipal Water District. Bluff, Cedar, and Erwin Lakes and Lake Williams are also man-made water bodies, but under private management. Baldwin Lake is ephemeral, and the only natural lake in the area. Water management is a concern in the Big Bear basin. Water supplies in the basin may not be adequate to serve competing demands. Surface and groundwater extractions and intra-basin transfers play a role in the water level of Big Bear and Baldwin Lakes, ponds, and riparian areas and in the maintenance of wet meadow habitat. Water extraction under permit may be affecting endangered unarmored three-spine stickleback

habitat. Several million gallons of sewage effluent are exported from the basin to the desert via an outfall line. The national forest is working with the Big Bear Area Regional Wastewater Agency to treat this water and keep it in the basin. A small amount of locatable mineral potential (dolomite) exists in the northwestern portion of the Big Bear Place. One small area is under claim for gold mining.

Pinyon-juniper woodland, Jeffrey pine forest, and mixed conifer and subalpine forests are found here. One of the two quaking aspen groves in southern California and the Champion lodgepole pine occur here. Drought induced mortality in Jeffrey pine forest is occurring at a high rate, raising the risk of wildland fire. There is potential for stand replacing fires and type conversion in the pinyon -juniper woodland within the unit, as large acreages of this vegetation type have burned (and re-burned) to the north and east. Community defense zones are needed to protect the communities of Big Bear Lake, Big Bear City, Fawnskin, Moonridge, Sugarloaf, Baldwin Lake, Erwin Lake and Lake Williams. Firewood collection is an important local use here. No livestock grazing allotments are present.

An unusually large number of federally listed plant and animal species and Region 5 sensitive species are found here. Big Bear Lake is home to the largest population of wintering bald eagles in southern California and provides year round habitat for waterfowl. Shay Meadow and Baldwin Lake support the only remaining natural population on the national forest of an endangered fish, the unarmored three-spine stickleback. Nesting pairs of southwestern willow flycatcher occur within the Place. Bear Creek is one of two designated State of California Wild Trout Streams on the national forest and also supports suitable habitat for southwestern willow flycatcher. Nesting pairs of California spotted owls are present within forested habitats and the area is one of a few locations in the southern California national forests where common nighthawks, gray vireos, and gray flycatchers breed. An important habitat linkage for conifer forest dependent species is present from Sugarlump Mountain south into the San Gorgonio Place. Ecologically unique plant communities found on pebble plain, carbonate substrate and montane meadow habitat support plant and invertebrate species found nowhere else in the world. The entire range of the Bear Valley bladderpod occurs here and designated Critical Habitat for this plant is present. Five of the six occurrences of the pedate checker-mallow known on National Forest System land occur here and one of only two occurrences of the slender-petaled mustard on National Forest System land is present. Effects to listed species and their habitats from high levels of recreation use are a concern here.

High concentrations of prehistoric and historic heritage resources are found here along with some of the oldest habitatation sites on the national forest. Natural features, such as Baldwin Lake and Pan Hot springs figure prominently in Native American creation stories and legends. The protection and interpretation of these sites is an ongoing concern.

Access is via California State Highways 18, and 38 (Rim of the World Scenic Byway), with a large network of classified roads and trails providing access throughout the Place. Unauthorized routes originating from private lands adjacent to the national forest boundary and the increased use of mountain bikes off of roads and trails are of concern here. National Forest System lands contribute a significant portion of the total recreation value generated by visitors to the Big Bear area. Serrano Campground is the most requested campground in the National Recreation Reservation System. Snow Summit and Bear Mountain Ski Areas (operating under special-use permit) provide the best winter sports activities in southern California. Recreational target

shooting and horseback riding opportunities are accommodated at facilities under special-use authorization. Filming locations are requested frequently on both national forest and private land. One of the heaviest concentrations of recreation residences in southern California occurs here, including those in the Southwest Shore Historic Tract. Power, water transmission, telephone, cable television, communication sites, and sewer rights-of-way cross national forest land serving the communities.

Quality information, interpretation, environmental education and volunteer programs are offered at the Big Bear Discovery Center. Other activities include picnicking, fishing, wildlife viewing, hiking, horseback riding, rock climbing, snowshoeing, snowplay and cross-country skiing. Portions of the Pacific Crest National Scenic Trail and the Sugarloaf National Recreation Trail are located here.

Visitor use within this Place is seasonally heavy, and often concentrated in a few areas. Developed site peak capacity is regularly exceeded on summer weekends and holidays and use is expected to grow in the future. Many developed sites near Big Bear Lake are aging and in need of maintenance and reconstruction to meet accessibility standards. Many high use recreation areas overlap with threatened, endangered, and sensitive species habitat. These habitats and populations of listed species are affected by the high level of recreation activities, unauthorized road and trail establishment, trash dumping, wood theft and invasive species. Unlawful use of campfires is also a concern.

Approximately one third of the lands within the Big Bear Place are in private ownership and endangered species occurring on private lands adjacent to the national forest are under increasing pressure from development. The remaining undeveloped parcels are high priority for acquisition, because of their recreational and biological values. As development continues, an increasing desire to develop urban infrastructures on National Forest System lands is anticipated.

Eligible Wild and Scenic Rivers:

- Bear Creek 6.5 miles
- Siberia Creek 3.0 miles

Proposed Research Natural Areas:

- Broom Flat 323 acres

Special Interest Areas:

- Arrastre Creek 3,551 acres
- North Baldwin Lake Holcomb Valley 1,825 acres

Critical Biological Land Use Zones (see table: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Bertha Ridge
- Gold Mountain
- South Baldwin

Desired Condition: Big Bear Place is maintained as a rural, natural appearing landscape that functions as a recreation setting for water-oriented summer recreation and the surrounding mountains for winter sports activities. The valued landscape attributes to be preserved over time

are the big-tree conifer forests to provide the alpine character; and the relic quaking aspen grove, lodge pole pine forests and the rocky base of terrain providing numerous outcrops. The built environment emulates the natural environment by using wood and rock accents. Chaparral and forested areas are managed to provide fire protection for adjacent communities, recreation areas and wildlife habitat. Habitat conditions for threatened, endangered, proposed, and sensitive species are improving over time; invasive nonnative species are reduced. Accurate national forest boundaries are reestablished and maintained. Heritage resources are identified, protected, and interpreted through establishment of tribal partnerships. A wide variety of recreation uses will be promoted, where appropriate and environmentally sustainable.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management. Forest health projects will be implemented to remove dead trees and reduce stand density that will result in a more natural pattern of low intensity fires and return intervals. In addition, these projects will focus on returning forest ecosystems to a more healthy condition. Reforestation projects will maintain tree diversity. Conservation education (with a focus on the demonstration and interpretation of healthy forests) will be emphasized at the Big Bear Discovery Center to enhance the experience of visitors and promote stewardship. Building joint community based partnerships will be emphasized for resource protection and restoration.

Offering quality recreation opportunities while ensuring protection and recovery for threatened, endangered and sensitive plant and animal species is a priority. Capacity may be evaluated, off-season use promoted and facilities and scenic quality will be maintained and improved. Alternative locations for the Big Bear Sportsman's Club are being explored. Opportunities for the improvement of trails, facilities and water-based recreation will be explored. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. Management of special-use permitted recreation events and recreation residences and dispersed camping will be improved. The national forest will coordinate with Team Big Bear mountain bike permittee to bring several unclassified trails into the system and provide maintenance.

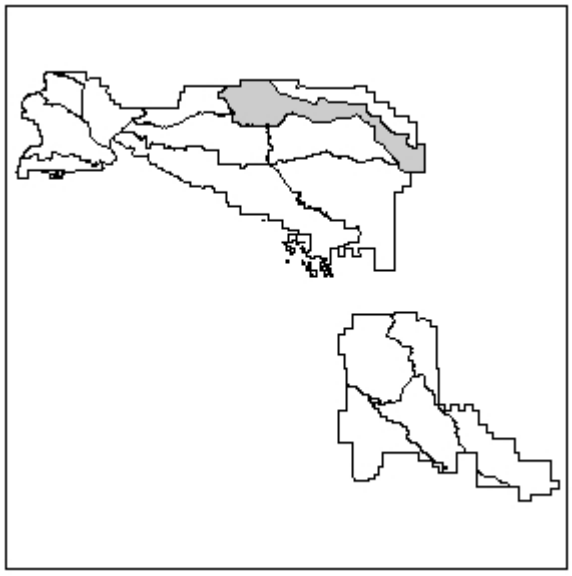
View of Big Bear Lake from Bear Mountain Ski Area. Photo courtesy of Big Bear Mountain Resorts.

Watershed condition and listed species habitats will be improved by relocating classified roads out of sensitive habitat where possible, decommissioning/adding to system/conversion to trails existing unclassified roads, which affect species habitat, and preventing unauthorized off-road vehicle use. Continued implementation of the Revised Road Maintenance Policy will reduce effects to roadside habitats. Actions to prevent extinction of the unarmored three-spine stickleback and restoration of degraded pebble plain habitat will remain a priority. Habitats for sensitive and other species of concern will be managed to prevent downward trends in populations or habitat capability and to prevent federal listing. Conservation and protection of ground and surface water resources and habitat linkages and removal of invasive species will be emphasized. The Big Bear Native Plant Nursery will continue to be the focus for ecological restoration projects on the national forest.

The identification, evaluation, interpretation and protection of heritage properties will be emphasized and tribal partnerships will be enhanced. Acquisition of land will be emphasized to improve administrative and public access, increase recreation opportunities, promote species recovery and prevent undesirable development. Accurate national forest boundaries along the urban interface will be reestablished and maintained. Trespass and encroachment will be reduced. Law enforcement activities will be coordinated with other functional areas for the protection of national forest resources and the safety of national forest visitors and employees.

Big Bear Back Country

Theme: The Big Bear Back Country Place has an abundance of roaded recreation opportunities and colorful gold mining history. This area is also biologically diverse, with important high desert, mountain meadow and conifer forest ecosystems.



Setting: The Big Bear Back Country Place is known for its colorful mining history, prehistoric habitations and scenic character. From 1860 until the early 1900s, Holcomb Valley was the location of southern California's largest gold rush and the mining towns of Belleville, Clapboard Town and Union Town were located here. Extractions of gold, silver and copper continued here over a longer period of time than anywhere else in California. The last mining operation of any size concluded in 1958. Holcomb Valley is a California Historic District, noted for its abundant historic and prehistoric sites. Other historic mining areas are present in Lone Valley and Rattlesnake Canyon. Rose Mine, which housed a mountain community at the turn of the century is now a National Historical Site. The Arrastre Creek area has been important to Native Americans since prehistoric times. A large portion of the North Baldwin/Holcomb Valley Special Interest Area, designated for its unique historical, botanical and zoological features, and the Arrastre Creek Special Interest Area, designated for botanical and zoological features are present in this Place. The eastern portion of the unit is managed as Wild Burro Territory.

Although several gold claims remain active, mining today focuses on carbonate substrates. Large-scale industrial companies extract the ore for use in making pharmaceuticals and cement and many acres within this area are under claim. Two large mining pits and an overburden site are located north of Hitchcock Spring. The Claudia Pit is under reclamation; however, the Cloudy Pit remains open due to potential for future extractions. Additional potential for active mining occurs on the Right Star Claim in Lone Valley.

Belleville Meadow, Big Bear Back Country Place

Elevations range from roughly 4,400 to 8,000 feet. Annual precipitation ranges from 8 to 25 inches, much of this falling as snow in the higher elevations. Coxey Pond is the only open body of water in this Place. Holcomb Creek and Arrastre Creek provide a perennial water source for wildlife. Jacoby

Creek and Coxey Creek are also important, as are the other ephemeral drainages, seeps and springs present.

The open, temperate, high desert landscape in the eastern portion of the Place is characterized by Joshua tree stands and pinyon -juniper covered hillsides. Holcomb Valley (with its large montane meadow system) dominates the center of the Place. Jeffrey pine, western juniper, canyon live oak and white fir cover the hillsides here. The 1999 Willow Fire burned the western portion of the Place and vast acreages of desert scrub, chaparral, pinyon -juniper woodland, and Jeffrey pine forest are regenerating. The management of pinyon -juniper woodlands (susceptible to type conversion after large, frequent fires) is important here. Prevention of cheatgrass invasion, which carries fires, and the suppression of wildland fire in the burned Jeffrey pine and pinyon juniper forest is needed for the next 50 to 100 years to allow for regeneration of these communities. In other areas throughout this Place, drought induced conifer mortality is occurring in remaining stands. Pinyon -juniper woodlands are also being affected.

The biological diversity within this Place is unusually high. Montane meadow, pebble plain, carbonate and vernal mesic habitat support a large number of threatened, endangered, and Region 5 sensitive and watchlist plants. Critical habitat designated for the recovery of the carbonate endemic plants is present. Six pebble plain complexes occur; two of them support the host plants for rare butterfly species endemic to this area. One of the largest concentrations of endemic plant species in California occurs in Belleville Meadow. This area is one of a few locations in the southern California national forests where common nighthawks, gray vireos, and gray flycatchers breed. Aquatic, riparian and forested habitats along Holcomb Creek support nesting pairs of southwestern willow flycatcher, California spotted owl, San Bernardino flying squirrel, partially armored stickleback, sculpin and rare bats. Naturally reproducing rainbow trout are also present. Arrastre Creek (one of the only perennial streams in the area) provides habitat for a diverse array of wildlife species. This riparian corridor also provides a wildlife linkage for the Cushenbury Nelson's bighorn sheep herd to connect to the San Gorgonio herd. Another important habitat linkage occurs on the west side of North Peak extending north to its connection with Fifteen Mile Valley. Excellent habitat for big game species is also present in the Heartbreak Ridge area that is now recommended as an expansion of the Bighorn Mountain Wilderness.

National Forest System Roads 3N16, 3N14 and 3N03 provide access to the area from California State Highway 18 and connect to many other national forest roads and trails. This area has the highest number of unclassified roads and trails in all of the four southern California national forests, with approximately three miles of road per square mile. The volume of new unauthorized road and trail creation is high, as is the breaching of decommissioned and restored roadbeds. Resource degradation caused by unauthorized use is high here. No residential communities occur within or adjacent to the boundaries of this unit; however several structures are present on private in-holdings. A gas pipeline, sewer outfall, and underground fiber optic lines are present in this unit and water is extracted from Van Dusen Creek as a community water source. Power and phone lines are present. Holcomb Valley is a well-known location of several famous movie and television productions, and a large number of new media production requests are received each year. Areas within this Place are also used by the military for patrolling, orienteering and other training exercises.

The Big Bear Back Country Place offers a wide variety of dispersed recreation opportunities. The Pacific Crest National Scenic Trail traverses almost the entire length of the Place, offering

popular hiking and equestrian opportunities. Holcomb Valley is a popular area for mountain biking. The Gold Fever Trail (a self-guided auto tour) is a popular way to view Holcomb Valley's historical features. Other popular activities include wildlife viewing, driving for pleasure, rock climbing, cycling, and cross country skiing.

Numerous developed campgrounds provide family, equestrian and group camping opportunities. An OHV staging area and trail system provides high desert riding opportunities at Cactus Flat. Regionally significant OHV events occur here annually under special-use authorization. Recreational target shooting areas are designated in four locations within this Place. The eastern and western sections of this Place offer some of the most popular areas for deer, quail and turkey hunting on the national forest.

Unauthorized uses, such as user created trails and off-trail mountain bike use, are affecting natural and cultural resources. Use of campfires in unauthorized locations is also a concern, as is trash dumping and resource damage within target shooting areas.

Eligible Wild and Scenic Rivers:

- Holcomb Creek 14.5 miles

Recommended Wilderness:

- Heartbreak Ridge (Bighorn Mountain Wilderness), 5,142 acres

Recommended Research Natural Areas:

- Arrastre Flat 1,104 acres
- Broom Flat 94 acres

Special Interest Areas:

- Arrastre Creek
- North Baldwin Lake Holcomb Valley 8,758 acres

Kennedy's buckwheat, a Pebble Plain plant.

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Coxey pebble plain

Desired Condition: The Big Bear Back Country Place is maintained as a historic and natural appearing landscape that functions as a recreation setting for backcountry rustic road-touring recreation experiences and continues to provide some of the infrastructure needed to support the community. The valued landscape attributes to be preserved over time are the stands of Joshua trees and Pinyon juniper, the large montane meadow system and the open high-desert undeveloped character; all an important part of the landscape character associated with mining and Native American use. National Forest heritage resources are identified. Partnerships are encouraged to provide stewardship of valuable heritage properties. A wide variety of recreation uses will be promoted, where appropriate and environmentally sustainable.

Habitat conditions for threatened, endangered, proposed, and sensitive species are improving over time; invasive nonnative species are reduced. Carbonate habitats are protected from mining

impacts in perpetuity within carbonate habitat reserves dedicated and managed as described in the Carbonate Habitat Management Strategy. The Carbonate Habitat Reserve is managed to allow public uses that are compatible with the conservation of the listed carbonate plants. Areas disturbed through past activity are restored.

Adequate OHV staging locations and loop trails are designated. Accurate national forest boundaries are established and maintained.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, national forest interpretation and fuels management. Forest health projects will be implemented to remove dead trees and reduce stand density that will result in a more natural pattern of low intensity fires and return intervals. In addition, these projects will focus on returning forest ecosystems to a more healthy condition. Reforestation projects will maintain tree diversity.

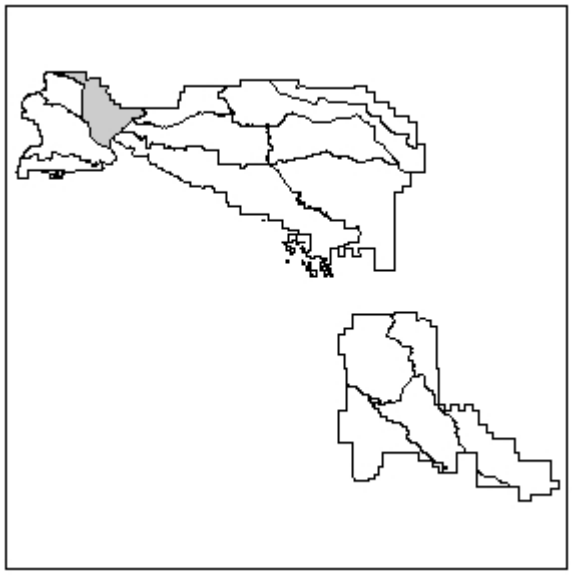
Management will balance recreation use with protection of heritage resource properties within a natural appearing landscape. Facility improvements, management of OHV road and trail systems, non-motorized trails, and conservation education are priorities. Emphasis on the transportation system will continue due to the high number of roads and trails here. Relocation of classified roads out of sensitive habitat, analysis and decommissioning/adding to system/conversion to trails of existing unclassified roads and trails, and preventing the establishment of new roads are all priorities. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. The OHV route system is improved and unauthorized use is directed to National Forest System roads and national forest designated trails.

Conservation and protection of ground and surface water resources and removal of invasive species will be emphasized. Maintenance of habitat for threatened, endangered, proposed, candidate, and sensitive species and management of habitat linkages will be emphasized in all management activities. Management is expected to center on implementation of the Carbonate Habitat Management Strategy to continue mining while preserving and managing habitat for the four federally listed plants.

Development of a dispersed camping strategy will be another focus. Wherever possible, acquisition of land will be emphasized to acquire habitat, or to provide recreation access. The identification, evaluation, interpretation and protection of heritage properties will be emphasized. Law enforcement actions and activities will be emphasized to eliminate unauthorized activities and to promote public safety and enjoyment. Accurate national forest boundaries will be reestablished and maintained.

Cajon

Theme: The major transportation gateway and utility corridor into southern California. The San Andreas Fault passes through this fire prone, fire evolved chaparral-covered hillside. This area functions as the key wildlife corridor/linkage between the San Gabriel and San Bernardino Mountains. The riparian habitat and plant and animal species it supports are extremely important to maintaining the biological diversity of the region.



Setting: Once a prehistoric travel way, the Cajon Pass Place is now a major modern transportation and utility corridor serving all of southern California. This includes 19 major uses including railroads, highways, pipelines, fiber optic lines, and electric lines. Billions of dollars of commerce and utility services move annually through the Cajon Pass Place. Native Americans, Spanish explorers, Mormon settlers, and travelers along Route 66 all entered southern California through the Cajon Pass Place. Forty-six million vehicles now travel annually through this Place. The San Andreas Special Interest Area, designated for it's cultural, geological and zoological values is present here.

The northern portion of this Place is a diverse landscape, with areas of high desert, where elevations range from 3,000 to 4,200 feet; the climate is hot and arid, and precipitation is as low as 4 to 10 inches. At higher elevations along the corridor, the land has steep mountains, with narrow to rounded summits and narrow canyons. Elevations here range from 3,000 to 6,500 feet, with a warm temperate climate, precipitation of 20 to 40 inches, and chaparral to scattered mixed conifer vegetation. The steepness and geology of this landscape promotes rapid water runoff.

The San Andreas Fault is the dominant geologic feature in this Place. The fault trace separates the San Gabriel Mountains from the San Bernardino Mountains along Lone Pine Canyon. Lost Lake is one of the few naturally occurring, fault-formed perennial lakes along the rift zone in southern California. Lost Lake is the only sag

pond on the San Bernardino National Forest. Mormon Rocks and the associated paleontological resources are unique geological formations. Oil and gas development occurs to the north of this Place, and there may be some potential for future development.

Vegetative cover is primarily chaparral. There is a high frequency of fires adjacent to the transportation corridors, including the Grand Prix and Old Fires of 2003, resulting in type conversion from chaparral vegetation to nonnative grasses. Alluvial fan scrub is an important habitat that is also present. The degradation of riparian habitats by invasive nonnative species such as arundo is a major problem in Cajon Wash and tree of heaven and pampas grass in other locations.

This Place is a critical evolutionary landscape linkage between the high desert and the coastal basins and from the San Bernardino Mountains to the San Gabriel Mountains. Loss of habitat connectivity as a result of the development of Interstate 15, California State Highways 138 and 66, railroads, and increasing urbanization are affecting wildlife passage. Establishment of a regional habitat linkage to improve connectivity between the San Gabriel Mountains and the San Bernardino Mountains is needed. A strategic linkage plan for Cajon Pass Place has recently been developed with conservation partners.

The southwestern willow flycatcher, least Bell's vireo, San Bernardino Kangaroo rat, and arroyo toad occur within the Place. The biological diversity along the river corridors within this Place is unusually high. Critical habitat for the San Bernardino kangaroo rat is present along Cajon Wash, and the yellow-billed cuckoo has the potential to occur there as well. Habitat for the arroyo toad is present in Little Horsethief Canyon, Crowder Canyon, and Cajon Wash. A minerals withdrawal to promote recovery of the arroyo toad has been proposed in the Little Horsethief Creek tributaries. The largest areas of cottonwood/willow habitat on the national forest are found in Cajon Wash, Crowder Canyon, and Lost Lake; and Least Bell's vireo and southwestern willow flycatcher nest in these locations. This Place also has important habitat for speckled dace, a Region 5 sensitive species. A low-density desert tortoise population may also occur within the Place.

Native Americans occupied this Place in the past and obtained animal and plant resources important to their lifeways.

Interstate 15 and California State Highway 138 provide the primary access into the Place. A few national forest roads provide further access into more remote areas. The fast-growing desert communities of Hesperia and Victorville exert a major influence on this Place. Rapid urbanization along the northern edge of the Place is encroaching upon National Forest System land across a boundary that has few natural barriers, and affecting species habitat, primarily through resultant unauthorized OHV use.

Human population densities within the Place itself are low however, and visitor use varies with seasonal changes in the weather. Popular activities include hiking, OHV use, picnicking, sightseeing, mountain biking, and hunting. Many locations along the railroad tracks provide excellent, internationally significant opportunities to view and photograph trains. A nationally recognized location for radio controlled flyer events is present here. The Pacific Crest Trail traverses the Place for approximately nine miles from Silverwood Lake on the east to Cajon Junction at the I-15 corridor. Small OHV trail systems are located on Baldy Mesa and Cleghorn Ridge.

Unlawful off-road vehicle use has been in the past, and remains today a major problem at Baldy Mesa, Crowder Canyon, Cajon Wash, and in areas where recent wildland fires have burned vegetation to allow motorized access where none had been before. Unlawful activities, such as trash dumping, use of campfires in unauthorized locations, and property vandalism are reoccurring difficulties. Other unlawful activities, such as methamphetamine lab dumps, and abandonment of stolen vehicles are increasing as areas adjacent to the national forest are being developed.

Recommended Research Natural Areas:

- Cleghorn Canyon 1,662 acres

Special Interest Areas:

- San Andreas 3,715 acres

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Little Horsethief Canyon

Desired Condition: The Cajon Pass Place is maintained as a natural appearing landscape providing managed recreation opportunities, a transportation gateway, a utility corridor and a wildlife habitat linkage. A wide variety of dispersed recreation opportunities are maintained over time. The OHV route system is improved and unauthorized use is directed to roads and trails that are designated for this use.

The valued landscape attributes to be preserved over time are an age-class mosaic in chaparral, riparian habitat, native grasses, and the rock outcrops in the dissected terrain. Chaparral is managed to provide fire protection for adjacent communities, recreation areas, and wildlife habitat and to protect from type conversion to nonnative grass. Invasive species within riparian areas are reduced over time. Habitat conditions for threatened, endangered and sensitive species are improving over time. Heritage properties and paleontological resources are identified, evaluated and interpreted. Native American gathering areas are protected. Property lines are located and managed and administrative rights-of-way are appropriately acquired.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management in cooperation with city, county and state agencies. Efforts will also be made to reduce fire occurrence and frequency next to I-15, railroads, powerlines, and other utility infrastructures.

Habitats for federally listed and Region 5 sensitive species within the Place will be managed to promote species conservation and recovery. The regional landscape linkages between the coast and the desert and the San Gabriel Mountains and the San Bernardino Mountains will be kept intact, functioning and improved. The identification, evaluation, interpretation and protection of heritage properties, paleontological resources and the San Andreas Fault will be emphasized. Partnerships with Native American tribes will be improved.

The emphasis will also focus on maintaining the Cajon Pass utility corridor access for people, goods and services, while retaining the rugged and picturesque character of the landscape. The national forest will continue to work closely with developers, planners and local officials to reduce resource impacts and conflicts on national forest lands from nearby development.

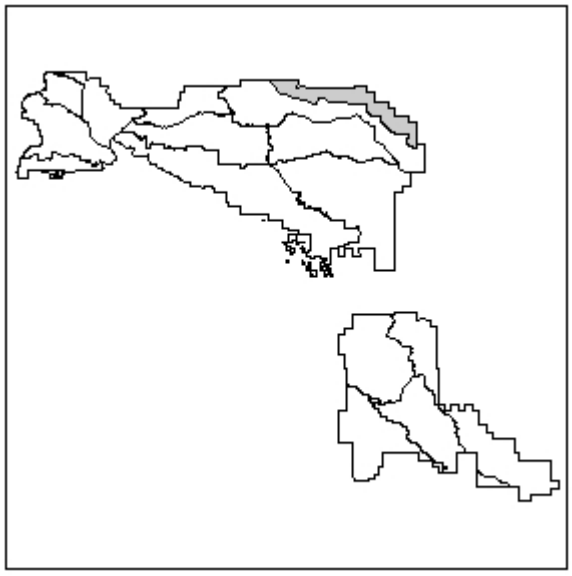
Accurate national forest boundaries will be reestablished and maintained and encroachment will be reduced.

Motorized and non-motorized trails that are sustainable to the environment will be developed to improve existing trail opportunities. Off-highway vehicle trails will be established in areas of low environmental sensitivity to provide an attractive alternative to unlawful use and to promote user cooperation in avoiding sensitive areas. There will be a continued emphasis on preventing establishment of user created, off-route vehicle travel and unauthorized off-trail use by mountain bikes. Remote control glider recreation opportunities and locations will be explored. The Pacific Crest National Scenic Trail will remain a priority for management and maintenance.

Eradication efforts for arundo will be emphasized and prevention of unauthorized off-road driving in Cajon Wash and Crowder Canyon will continue. There will be an emphasis on OHV management in Baldy Mesa. Law enforcement activities will be coordinated with other functional areas for the protection of national forest resources and the safety of national forest visitors and employees.

Desert Rim

Theme: A remote, high desert landscape with extensive industrial limestone mining operations. Joshua trees at the lower elevations lead to shaded canyons and forested ridges. Some of the largest occurrences of federally listed native plants are found here in the carbonate deposits laid down by ancient inland seas. Solitude and challenge are found within the primitive Bighorn Mountain Wilderness.



Setting: The Desert Rim Place is a high desert, remote, rugged landscape formed by complex geologic faulting. This is the location where the north slope of the San Bernardino Mountains links up with the Mojave Desert. In the 1800s, small amounts of gold, silver and lead were extracted here. Today, the majority of land is valued for the presence of large quantities of high quality, limestone mineral deposits used in the production of pharmaceuticals and cement. These carbonate deposits (derived from an ancient inland sea) are also valuable habitat supporting four species of threatened and endangered plants found nowhere else in the world. A portion of the Bighorn Mountain Wilderness, managed jointly by the Forest Service and the Bureau of Land Management (BLM) is located here. Also located in this Place are portions of the North Baldwin Lake and Holcomb Valley Special Interest Area, established for its unique botanical, zoological, and historical features and the Arrastre Creek Special Interest Area established for it's botanical and zoological features.

The Desert Rim Place landscape is arid, but contains many intermittent streams and important spring locations. Arrastre Creek, Crystal Creek, Terrace Springs, Visera Spring, Grapevine Creek, Burnt Flat pond, and Marble, Artic and Furnace Canyons provide important water sources for wildlife. The area is known for its unique features and is a popular location for geological exploration. The majority of the land here is under mining claim for limestone and metals. Three large-scale industrial limestone mines are present, annually producing about three million tons of cement-grade limestone and 1.5 million tons of high-brightness limestone.

Shaded canyons and ridges of the Desert Rim Place are forested with Jeffrey pine, white fir and incense cedar. As the landscape drops in

elevation toward the desert, pinyon-juniper woodlands cover the slopes and valleys and intermix with Joshua tree woodlands and desert scrub. Tamarisk is affecting riparian habitat in Arrastre Creek and Old Woman Spring. The 1999 Willow Fire burned conifer forest and pinyon- juniper woodland in the western portion of this Place. Suppression of fire is necessary to allow natural regeneration of these habitat types. Carbonate and pebble plain habitat supporting federally listed plant species is present. A large area of critical habitat is designated for the recovery of carbonate endemic plants. An intensive collaborative effort led to the development of the Carbonate Habitat Management Strategy (CHMS) in 2003. The strategy is designed to provide long-term protection for the carbonate endemic plants and also provide for continued mining.

Important wildlife habitat and linkages are also present here. Southwestern willow flycatcher and desert tortoise are present. The Cushenbury herd of Nelson's bighorn sheep and California spotted owl are present on the Desert Rim. Excellent year-round deer range is found throughout most of the Place. Pinyon and Joshua tree woodlands provide habitat for rare birds, such as hepatic tanager, calliope hummingbird, gray flycatcher and Lewis woodpecker. Important desert riparian habitats exist in this Place.

Access through the Desert Rim Place from the mountains to the desert is via California State Highway 18 west to Lucerne Valley 3NO3, and 2N02 east to Pioneer Town. Ninety miles of road provide access throughout the Place. The Rattlesnake Grazing Allotment, consisting of 1,386 acres on National Forest System land, occurs on the southeast portion of the Place in the Bighorn Mountain Wilderness and on land administered by the BLM. The eastern portion of the Place is managed as Wild Burro Territory. Most of the private parcels within the Place boundary are utilized for limestone mining operations; no residential uses of land exist. Utility and transportation rights-of-way occur within the Place.

Primitive and semi-primitive recreation experiences are found in this Place. The Bighorn Mountain Wilderness offers primitive hiking, backpacking, horseback riding and hunting opportunities. Other popular activities include driving for pleasure, wildlife viewing, and OHV use along designated routes. Vehicle trespass and existing structures need evaluation to ensure the area is conforming to wilderness values. No developed recreation sites are located within this Place and conservation education opportunities are limited. Significant heritage resources associated with historic mining and prehistoric habitation occur here and are in need of protection.

Although recent efforts to reduce unauthorized uses in this Place have been successful, many unlawful activities continue to occur. Unlawful recreational target shooting, trash dumping, off-road vehicle use, and unauthorized woodcutting continue here, affecting both habitats and heritage resources.

Existing Wilderness:

- Bighorn Mountain Wilderness 11,905 acres

Recommended Research Natural Areas:

- Arrastre Flat 347 acres
- Blackhawk 1,561 acres

Special Interest Areas:

- Arrastre Creek 1,123 acres
- North Baldwin Lake Holcomb Valley 207 acres

Desired Condition: Desert Rim Place is maintained as a modified to natural appearing landscape that functions as a sanctuary for a large number of federally listed native plants and a highly valued area for limestone production. The valued landscape attributes to be preserved over time are the Jeffrey pine, white fir and incense cedar in the shaded aspects of ridges and canyons; intermittent streams and springs with riparian features and white carbonate outcrops. Carbonate habitats are protected from mining impacts in perpetuity within carbonate habitat reserves dedicated and managed as described in the Carbonate Habitat Management Strategy. The Carbonate Habitat Reserve is managed to allow public uses that are compatible with the conservation of the listed carbonate plants. Within the Carbonate Habitat Management Area, carbonate plants are likely to persist indefinitely by managing and maintaining geomorphic and ecological processes of the landscape in large, well-placed blocks of habitat. Destruction or modification of critical habitat is avoided. Listed species are recovered and delisted. Future listings are not needed. Areas disturbed through past activity are restored.

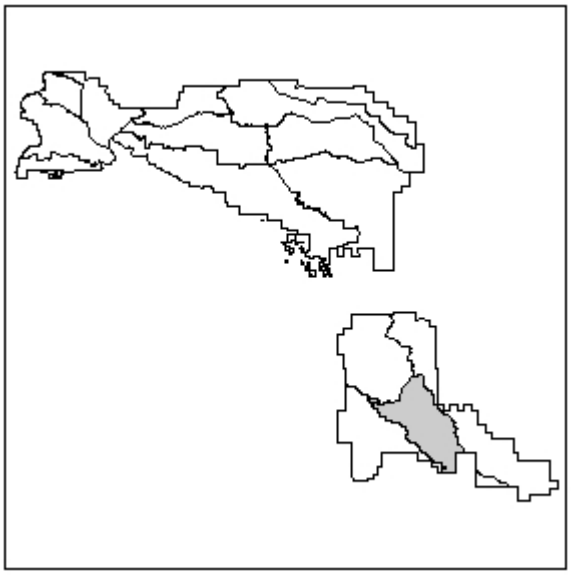
Program Emphasis: Community protection from wildland fire is of the highest priority. This area will be treated as needed to reduce chance of wildland fire to communities in Big Bear and Lucerne Valley. It will be emphasized through public education, fire prevention, and fuels management. Forest health projects will be implemented to remove dead trees and reduce stand density where necessary to result in a more natural pattern of low intensity fires and return intervals. In addition, these projects will focus on returning forest ecosystems to a more healthy condition.

Management is expected to center on implementation of the Carbonate Habitat Management Strategy and to continue mining while preserving and managing habitat for the four federally listed plants. Maintenance of plant and wildlife habitat for threatened, endangered and sensitive plant and wildlife species will be emphasized in all management activities. Enforcement of livestock and vehicle restrictions in the Bighorn Mountains Wilderness with the BLM is a priority, especially in the Viscera Springs area. The identification, evaluation, interpretation and protection of heritage properties will be emphasized. Prioritization of locations needing increased law enforcement patrol will be emphasized for protection of national forest visitors and employees.

Garner Valley

Theme: Green meadows and historic ranchland in an expansive mountain valley frame the Garner Valley Place. Lake Hemet and surrounding areas offer popular recreation opportunities and scenic vistas of an open pine forest.

Setting: Garner Valley Place is located within the San Jacinto Mountain Range. The San Jacinto Wilderness borders the Place to the north, while the Santa Rosa and San Jacinto Mountains National Monument forms its eastern boundary. California State Highway 74 (the Palms to Pines Scenic Byway) traverses this area from southeast to northwest. Garner Valley offers access and views into the San Jacinto Wilderness.



Elevations within the Garner Valley Place range from approximately 2,500 feet to over 8,500 feet. Historically, the area has been mined and grazed; grazing continues today. The Paradise and Garner Grazing Allotments are active. Portions of the Rouse and Wellman Grazing Allotments are also active.

The mountain climate ranges from hot to temperate in the lower elevations and cold temperatures in the higher elevations. Annual precipitation varies from 16 to 30 inches, with snow falling mostly in the higher elevations. Water is scarce in the summer months, except for scattered springs and groundwater. Lake Hemet is the largest body of water in the area. It is an artificial reservoir providing water to the local area, and boating and fishing opportunities. Striking rock outcrops and unique landforms are found along the desert divide, which forms the boundary with the Santa Rosa and San Jacinto Mountains National Monument.

The Garner Valley Place is blanketed with basin sagebrush intermingled with meadow plants and nonnative grasses. Jeffrey pine grows

along the valley's edge, while at the south end pinyon/juniper woodlands prevail. Ponderosa pine stands and mixed conifer forest are found on the slopes of Mt. San Jacinto, with lodgepole pine present at higher elevations. Parry pinyon and red shank chaparral are also present. Sagebrush encroachment is occurring in the valley and its adjacent timbered areas as a result of past fire suppression activities. Because sagebrush is highly flammable, the risk that fires will destroy the trees and convert the area to brush and grassland is high. Dense chaparral stands in timbered areas also threaten conifer vegetation. Substantial conifer mortality has created a fuel buildup that is a problem for community protection.

The large acreages of montane meadow found here provide habitat for many unique plants and animals. The foothills above the valley support pebble plain-like habitat unique to the San Jacinto Mountains. The only known locations of Johnson's rock cress, a Region 5 sensitive plant species, are found in this Place. One of the only locations on southern California where bald eagles can be observed year-round is found at Lake Hemet. The highest known distribution for Quino checkerspot butterfly is found in the southeastern portion of the valley. Garner Valley meadows and adjacent uplands are important deer habitat where fire has been used to maintain habitat quality. A State Game Refuge located at the northern end of the valley provides protection for game species from hunting.

The Cahuilla Indians were the earliest known people living in Garner Valley and it is believed that their ancestors settled in the Place thousands of years ago. The Cahuillas' lived here for hundreds of years prior to European settlement and they continue traditional use of the land today. The Santa Rosa Band of Mission Indians' Reservation is located on the southeastern side of the Place. Historic Euro-American land uses of the Place include ranching, some mining, and later, recreation uses of Lake Hemet and local trails. Early ranchers cleared the pine-covered Garner Valley to create pastures for their cattle and horses.

Access to the national forest is a concern in Garner Valley, as the Forest Service does not hold public rights-of-way and private landowners allow limited access through their property. The proximity of local communities to national forest land has also led to numerous encroachments in the area.

This Place contains a variety of recreation opportunities, including mountain biking, hiking, hunting, fishing, camping, and equestrian use. Opportunities for primitive recreation are present in the San Jacinto Wilderness. Tool Box Spring Campground and Lake Hemet Picnic Area are located here, and the Pacific Crest Trail traverses the eastern boundary of the area along the desert divide. There is insufficient parking at some trailheads to accommodate users and conflicts occasionally arise among some hiking, biking, and equestrian trail users.

There are no special designations.

Desired Condition: Garner Valley Place is maintained as a historic and natural appearing landscape that functions as a recreation setting offering scenic vistas of open pine forests. The valued landscape attributes to be preserved over time are the natural appearing landscape views from the Scenic Byway, the presence of montane meadows, the Jeffrey pine forests along the valley's edge, the mixed conifer forests and bigcone Douglas-fir stands, and lodgepole pine in higher elevations. Heritage resources are managed to standard. Active grazing allotments are sustainable and contain a high proportion of native species. Chaparral communities and timber stands are at pre-fire suppression conditions. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Accurate national forest

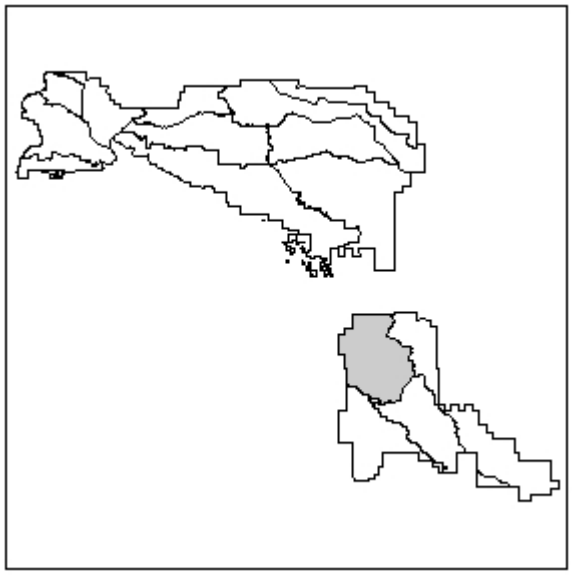
boundaries are reestablished and maintained. Rights-of-way to improve public access to national forest land are acquired.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, fuels management and direct suppression. Community protection projects identified in the San Jacinto Wilderness may be implemented to reduce the risk of wildland fire to communities. Forest health projects will be implemented to remove dead trees, reduce stand density, promote pre-fire suppression fire return intervals and reduce sagebrush encroachment. Reforestation projects will maintain tree diversity.

Management will focus on maintaining the open grassland character and expansive wet meadows and vistas of Garner Valley. Allotment management will be emphasized. Wherever possible, acquisition of land will be emphasized to improve public and administrative access, protect resources, and maintain open space and scenic qualities. Accurate national forest boundaries along the urban interface will be reestablished and maintained. Developed recreation sites will be improved and new recreation opportunities will be explored. Heritage resources will be protected and interpreted as appropriate. Enhancement of wildlife habitat for threatened, endangered, proposed, candidate, and sensitive species, such as bald eagles, Quino checkerspot butterfly and unique plant species will be emphasized in all management activities.

Idyllwild

Theme: A mountain hideaway of art and music nestled beneath jagged rocks and towering pines, Idyllwild is the gateway to the San Jacinto Wilderness.



Setting: The Idyllwild Place is located in the higher elevations of the San Jacinto Mountains and is characterized by steep canyons and jagged rocks. Elevations in the Place range from 2,000 feet to 10,804 feet at the top of San Jacinto peak. The San Jacinto Wilderness has long been a popular destination for visitors to this Place, and the newly created Santa Rosa and San Jacinto Mountains National Monument borders the eastern boundary. The spectacular features of the national forest provide the backdrop for this unique community. Idyllwild attracts and inspires many people interested in the arts. Because of its proximity to Palm Springs, this Place continues to receive a large number of international visitors. The Hall Canyon Research Natural Area, dedicated to the study of mixed conifer forest, and the Black Mountain Scenic Area are located here, as is Mt. San Jacinto State Park.

The mountain climate ranges from hot to temperate at the lower elevations and cold temperatures at the highest elevations. Surface water is scarce in the summer months, except for scattered springs and the perennial streams of the North Fork of the San Jacinto River and Fuller Mill Creek. Lake Fulmor, a small man-made lake, is located here as is Baytree Springs, an important drinking water gathering area for locals and visitors alike. Annual precipitation ranges from 16 to 30 inches, with snow falling mostly at the highest elevations.

The San Jacinto foothills contain a mix of manzanita, sagebrush, buckwheat, chamise and scrub oak. In the higher elevations, the chaparral gives way to stands of bigcone Douglas-fir, mixed oak and conifer, including California black oak and canyon live oak. Coulter pine, sugar pine, Jeffrey Pine, ponderosa pine, incense cedar, white fir and lodgepole pine are also present. The Vista Grande and Soboba Grazing Allotments are currently vacant.

Hiking to Tahquitz Rock, Idyllwild Place

Many private inholdings are located within or adjacent to National Forest System lands in this Place. Fuel buildup has occurred in the chaparral and timbered portions of this Place, increasing the probability of large stand replacement fires. Fire hazard has been exacerbated by

drought and a high level of tree mortality, presenting risks to private landowners and national forest facilities. Wildland/Urban Interface Defense and Threat Zones are needed to protect Idyllwild and surrounding communities. Use of prescribed fire is also needed.

This popular mountain Place contains unique biological diversity. A distinct population of mountain yellow-legged frog occurs here. California spotted owls are present. Southern rubber boas occur here at the southernmost portion of their range. San Bernardino flying squirrels are also known to have occurred here. A small amount of critical habitat for the San Bernardino kangaroo rat, and the arroyo toad is present along the San Jacinto River. A small amount of critical habitat for the Peninsular Range bighorn sheep is also present. The only known occurrences of the California bedstraw, a Region 5 sensitive plant species, occur here; lemon lilies are also present. The northern portion of this Place is an important element of the regional habitat linkage connecting the San Jacinto Mountains and the San Bernardino Mountain Front Country through the Banning Pass.

California State Highway 243 (entering the national forest from the north at Banning) runs southeast as the Palms to Pines Scenic Byway. This is a highly traveled scenic route where people can spend the day driving for pleasure. Access to National Forest System land within this Place is generally good, although some areas near the community of Idyllwild are lacking rights-of-way due to the large number of private in-holdings. The proximity of the communities to the national forest has led to numerous encroachments.

The Idyllwild Place was inhabited hundreds of years ago by the Cahuilla Indians and their ancestors. The Serrano and Luiseno Indians also traveled through, and possibly settled in this Place. Numerous trade routes traversed through this Place. The Morongo Band of Mission Indians' Reservation lies immediately north of the Place. Members of the Ramona Band of Cahuilla Indians, Santa Rosa Band of Mission Indians, the Soboba Band of Luiseno Indians, the Cahuilla Band of Mission Indians, and the Agua Caliente Band of Cahuilla Indians still have ties to the Place today. Settlers of European descent traveled to the Place in the late 1860s to log, mine, raise cattle and create a retreat. During the Great Depression, the Civilian Conservation Corp constructed Black Mountain Road, Tahquitz Peak Lookout, along with guard stations, trails, campgrounds and fuelbreaks.

National Forest visitors find opportunities to hike, camp, fish, horseback ride and mountain bike, while rock climbers try their skills at climbing vertical faces of rock. Opportunities for primitive recreation are present in the San Jacinto Wilderness. Information on recreation opportunities is available at the newly renovated Idyllwild District Office. There is a high demand for snowplay here during the winter months. Bee Canyon is heavily used for recreational target shooting, and hunters find a variety of game in the more remote areas. The Pacific Crest Trail traverses through Idyllwild Place within the San Jacinto Wilderness. A non-motorized trail linking Idyllwild to Pine Cove on the national forest has been proposed with community support. A limited number of "easy" hiking trails can be accessed from Idyllwild Place. Opportunities for both mountain bike and off-highway vehicle use are limited. There is a designated OHV route system in the Angeles Hill/Indian Mountain area. Developed recreation facilities are in need of renovation.

Law enforcement staffing levels are inadequate to manage the number of users. Activities, such as trash dumping, unlawful off-road vehicle use, and property vandalism are reoccurring problems. Unlawful activities, such marijuana cultivation, methamphetamine lab dumps, and abandonment of stolen vehicles are increasing as the urban areas adjacent to the national forest

are being developed. Protection of the numerous heritage resources located within the area is also a concern. Conflicts between recreational target shooters and OHV use are reoccurring problems in Bee Canyon.

Eligible Wild and Scenic Rivers:

- Fuller Mill Creek 3.4 miles
- San Jacinto River - North Fork 11.2 miles

Established Research Natural Areas:

- Hall Canyon 671 acres

Special Interest Areas:

- Black Mountain 6,028 acres

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Dark Canyon-Fuller Mill Creek

Desired Condition: Idyllwild Place is maintained as a natural appearing landscape that functions as a recreation setting and wilderness gateway. The valued landscape attributes to be preserved over time are the natural appearing views from the scenic byway and Pacific Crest Trail, the presence of conifers above the 4,000-foot level, the current diversity of chaparral species at the foothill locations, and the presence of rock outcrops. Chaparral communities and timber stands are at pre-fire suppression conditions. Heritage resources are identified, protected and interpreted as appropriate. Traditional cultural properties are protected. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Accurate national forest boundaries are reestablished and maintained. A wide variety of dispersed and developed opportunities are maintained and improved.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management. Community protection projects identified in the San Jacinto Wilderness may be implemented to reduce the risk of wildland fire to communities. Forest health projects will be implemented to remove

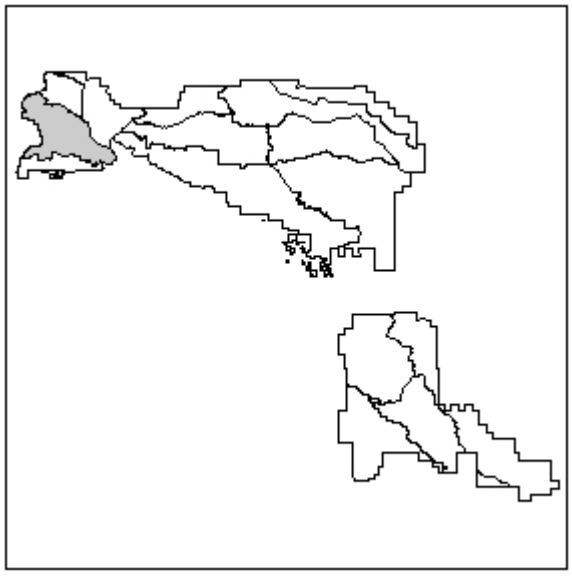
dead trees, reduce stand density, and promote pre-fire suppression fire return intervals. Reforestation projects will maintain tree diversity. Conservation education, with a focus on the demonstration and interpretation of healthy forests, at the expanded District Office will be emphasized to enhance the experience of visitors and promote stewardship.

The scenic focus will be on maintaining views of jagged rocks and towering pines, especially from the scenic byway. Wherever possible, acquisition of land will be emphasized to improve public and administrative access and to maintain open space and scenic qualities. Accurate national forest boundaries along the urban interface will be reestablished and maintained. Trespass and encroachment will be reduced. Opportunities for a variety of new non-motorized trails (especially short, easy-to-moderate difficulty, day loop trails) and designated recreational target shooting and snowplay areas will be explored. Developed recreation sites will be improved. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. The OHV route system in the Angeles Hill-Indian Mountain area is evaluated for needed improvement. Unauthorized OHV use is directed to designated routes. Law enforcement activities will be coordinated with other functional areas for the protection of national forest resources and the safety of national forest visitors and employees.

Enhancement of habitat for threatened, endangered, proposed, candidate and sensitive species, such as the mountain yellow-legged frog, California spotted owl, southern rubber boa and California bedstraw will be emphasized in all management activities. Surveys will be conducted to determine continued presence of San Bernardino flying squirrel. Activities will also be managed to maintain the regional habitat linkages to the north and west. Significant heritage sites will be protected and enhanced. Heritage resource sites and Watchable Wildlife areas will be managed and interpreted along travel corridors within the Place.

Lytle Creek

Theme: Lytle Creek offers a popular year-round stream gathering place for urban families. Steep, chaparral-covered hillsides with perennial and intermittent streams and fragmented riparian vegetation, coastal sage scrub, scattered groves of large sugar pine and bigcone Douglas-fir provide important wildlife habitat. This Place supplies the primary source of water for the city of Fontana.



Setting: The Lytle Creek Place lies at the eastern-most extension of the San Gabriel Mountains. The area is highly dissected by deep canyons, steep slopes, cliffs, and narrow ridges. The North, Middle, and South Forks of Lytle Creek are the dominant physical features in this Place, which has been a popular recreation destination for many generations of local residents from the cities of San Bernardino, Rialto, Fontana, and Colton. The San Andreas Fault is prominent here, extending in a northwest/southeast trend along the northern boundary of this Place. Elevations range from 2,000 feet along the Interstate-15 corridor to 9,000 feet along the boundary with the San Gabriel High Country. Cucamonga Peak, the Cucamonga Wilderness, the Sheep Mountain Wilderness and Mt. San Antonio typify the rugged, mountainous country west of the I-15 transportation corridor.

The climate of the area ranges from Mediterranean to mountain, from temperate to hot, with cooler temperatures at the higher elevations. Precipitation ranges from seven inches at lower elevations to 40 inches, with snow in the winter on the taller peaks. Lytle Creek and its tributaries are perennial streams. Surface and groundwater extraction for hydropower and municipal uses, campgrounds and picnic areas, and unauthorized use have reduced flow in the lower reaches of the canyon. Riparian and water

resources are affected by the large numbers of recreationists that come into contact with the water. Recreation dams impede downstream flow during periods of low water and affect species dependent upon a consistent flow regime.

Riparian vegetation is fragmented and discontinuous along many sections of Lytle Creek due to the dynamic nature of rain events in the drainage, and is generally limited to a narrow swath along the streams. Mature stands of mixed conifer with black oaks, chaparral, and some pockets of bigcone Douglas-fir are found in the Middle and South Forks of Lytle Creek, while some of the largest sugar pines in southern California are found on San Sevaine Ridge. The south-facing slopes throughout the area are mostly dominated by chaparral. Vegetation along the urban interface and transportation corridors is being converted from chaparral, coastal sage scrub, and hardwood/Douglas-fir stands to annual grasses due to the increased frequency of stand replacing wildland fire. Vegetation remains adjacent to the urban community in some locations, presenting fire risks to private landowners. Wildland/Urban Interface Community Defense Zones are needed to protect the Lytle Creek community from wildland fire. The 2003 Grand Prix Fire resulted in the loss of homes in the Lytle Creek community and Middle Fork recreation residence tract, demonstrating the serious fuels problem here. Post fire flooding in this area also occurs. A high concentration of tree-of-heaven, a non-native invasive plant species, is present here and should be eradicated.

Lytle Creek supports a diverse population of riparian species, particularly in the upper reaches where water flow and riparian vegetation are adequate. Riparian bird diversity is high and the lower reaches of the creek support a healthy population of speckled dace, a Region 5 sensitive species. Most of the perennial streams support trout, and the most heavily used reaches are planted by the California Department of Fish and Game. Water withdrawal in the lower reaches of the canyon is affecting downstream species and their habitats, especially during periods of low water. Critical habitat for the San Bernardino kangaroo rat and the California Gnatcatcher is found in the southeastern portion of the Place. Periodic flooding in Lytle Creek Wash is required to maintain suitable habitat for the San Bernardino kangaroo rat. Nelson's Bighorn Sheep are found at the higher elevations of the Place. Over the last two decades, the sheep population in the San Gabriel Mountains has declined by 85-95 percent for reasons that are poorly understood. Sheep habitat burned in the 2003 Grand Prix Fire is expected to greatly improve habitat quality. Sheep response to the burned habitat will need to be monitored.

Native Americans occupied this Place in the past and obtained animal and plant resources important to their life ways. Native American botanical gathering areas are present today.

Lytle Creek Canyon contains the community of Lytle Creek, as well as two tracts of nearby recreation residences on National Forest System land. Conflicts occur on busy summer weekends as crowds spill onto private land. The community is working with the Forest Service to manage this use. Access into the Place is primarily gained via the county road system with further dispersal of recreational or service traffic being accomplished via the national forest road system.

The Lytle Creek Federal Energy Regulatory Commission (FERC) Project operated between Southern California Edison and Fontana Union Water Company was re-licensed in 2002 for 20 years. It includes a diversion, flow-lines, powerhouses, and other water delivery facilities. It also includes an underground water collection facility called the Grapeland Tunnel that was built around the turn of the century.

Lytle Creek Place is very popular as a gathering location, especially for the area's ethnically diverse population dominated by Latino visitors. Family units share traditional, cultural values within the cool confines of the shaded streams and refreshing water during hot summer days in this Place. Water-based recreation is popular here during the warmer months, with waterplay, fishing, picnicking, and dispersed camping concentrated mainly along the canyon bottoms of the Middle and North Forks of Lytle Creek. Recreation impacts affect portions of the creek and management is needed to allow vegetative recovery in some locations. Dispersed camping opportunities at Yellow Post sites in the upper reaches of the North Fork are numerous here. Other activities include sightseeing, hiking, hunting, and photography. Lytle Creek Firing Line (a popular concessionaire managed target shooting area) is located here. The Applewhite Picnic Area and Campground is located adjacent to the North Fork of Lytle Creek. There is a lack of designated trails originating from the campground and picnic area, as well as easy access loops for families hiking in the canyons. The Pacific Crest National Scenic Trail crosses the Place near its northern boundary. The Cucamonga Wilderness can be accessed via trails located along the Middle Fork of Lytle Creek and from San Antonio Canyon on the west. A native plant garden with bilingual interpretive signing and the recently renovated front office interpretive display at the Lytle Creek District Office are visited by thousands of school children annually.

Unlawful activities, such as trash dumping, unauthorized off-road vehicle use, and property vandalism are reoccurring difficulties. Other unlawful activities, such as marijuana cultivation, methamphetamine lab dumps, and abandonment of stolen vehicles are increasing as areas adjacent to the national forest are being developed.

Eligible Wild and Scenic Rivers:

- Lytle Creek - Middle Fork 2.4 miles

Existing Wilderness:

- Cucamonga Wilderness 8,350 acres
- Sheep Mountain Wilderness 1,804 acres

Recommended Wilderness:

- Cucamonga B (Cucamonga Wilderness) 6,516 acres
- Sheep Mountain (Sheep Mountain Wilderness) 1,823 acres

Total national forest acres--Lytle Creek Place: 42,384

Desired Condition: Lytle Creek Place is maintained as a natural appearing landscape that functions as a location for family-oriented, day-use and dispersed and developed recreation. The valued landscape attributes to be preserved over time are scattered riparian-area vegetation, the presence of mature stands of mixed conifer and bigcone Douglas-fir, the presence of sugar pines, coastal sage scrub, and an age class mosaic in chaparral. Chaparral and forested areas are managed to provide fire protection for adjacent communities, recreation areas, and wildlife habitat. Habitat conditions for threatened, endangered and sensitive species are improving over time. Heritage properties and Native American gathering areas are identified and protected. Access to the Cucamonga Wilderness is maintained. No new winter sports areas or expansion of existing winter sports areas are developed. Property lines are located and managed. Law enforcement presence in high-use areas minimizes unauthorized activities and conflicts.

Program Emphasis: Community protection from wildland fire in Lytle Creek is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management in cooperation with city, county and state agencies. Community protection projects identified in the Cucamonga and Sheep Mountain Wildernesses may be implemented to reduce the risk of wildland fire to communities.

The scenic focus will be on maintaining a naturally appearing mosaic of chaparral, and mixed conifer forest, montane forest, bigcone Douglas-fir, and riparian vegetation. Habitats for federally listed and Region 5 sensitive species within the Place will be managed to promote species conservation and recovery, with maintenance of water flows and processes being a high priority. Monitoring sheep and sheep habitat response to the Grand Prix Fire of 2003, and working to identify and reduce recreation conflicts with sheep will be a priority. Prescribed fire will be used to develop more natural conditions in bighorn sheep range. Management of the coastal sage scrub community will be emphasized as will removal of invasive non-native species.

Important heritage properties will be recorded. We will work with Native Americans to identify traditional cultural properties and to protect gathering areas.

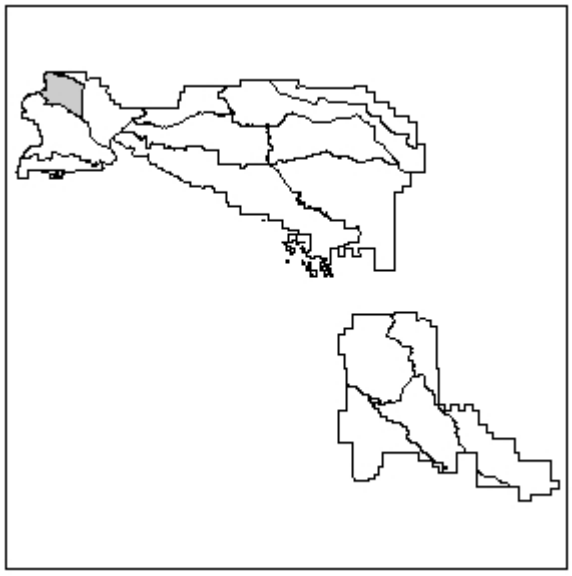
Management will focus on providing quality recreation opportunities, balanced with riparian resource protection and enhancement, for the culturally diverse visitors who come to this Place. Existing recreation capacity control within Lytle Creek Canyon will continue and Multilingual Conservation Education Programs will be emphasized. An emphasis will be placed on retaining the primitive nature of the South Fork of Lytle Creek. The Lytle Creek Firing Line will continue to be managed under permit for recreational target shooting and can be used as a model for this activity in other locations.

The Lytle Creek Federal Energy Regulatory Commission (FERC) project will be maintained and monitored for TES species habitat effects and needed mitigations. A Watershed Conservancy partnership will be explored for implementation.

A recreation strategy for the Middle Fork of Lytle Creek and the Cucamonga Wilderness will be created. New recreation opportunities to create non-motorized, short, easy-to-moderate, day loop trails originating from the campground and picnic area will be explored. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. Management of recreation residence special-use permit compliance will be improved and conflicts between permit holders and riparian values will be resolved. Accurate national forest boundaries will be reestablished and maintained and encroachment will be reduced. Forest Service field personnel and law enforcement staff will be highly visible. There will be a continued emphasis on preventing unauthorized off-route vehicle travel and unauthorized off-trail use by mountain bikes.

Mojave Front Country (Within San Bernardino National Forest)

Theme: Functions year-round as low elevation open space for Mojave Basin residents, as well as metropolitan residents of Los Angeles and San Bernardino Counties. Mojave Front Country serves as the backdrop for the Antelope Valley, while providing breathtaking desert views from within the Place. This 'desert interface' landscape provides portals from the Mojave Basin to the Angeles and San Bernardino National Forests.



Setting: The Mojave Front Country 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 some limited 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 on the San Bernardino National Forest. The presence of faulting has resulted in the movement and exposure of mineral resources that influence 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. It is a transition zone from high desert to forest. Desert scrub, chaparral and conifer forest are the most dominate plant communities. In higher elevations, bigcone Douglas-fir, and Ponderosa and Jeffrey pines are present as scattered individuals or tight clumps. Pinyon pine and Joshua trees are present at the lowest elevations. The Circle Mountain area is dominated by xeric chaparral, and Joshua tree and pinyon-juniper woodlands. Some of the pinyon-juniper woodlands in this area have burned and need protection from frequent fire for regeneration.

Important habitat linkages occur between the national forest and adjacent private land and between the Angeles and San Bernardino National Forests. Threats to plant and animal species and other sensitive habitat areas include unauthorized vehicle use, dispersed recreation, and wildland fire.

On the San Bernardino National Forest, the Mojave Front Country Place provides habitat for Region 5 sensitive plant and animal species and is important for large mammals, such as mule deer and mountain lion.

The cultural landscape of the Mojave Front Country is generally undeveloped. Some of the oldest and most varied heritage resource sites for the national forest exist within the Place.

This area is quickly changing from a rural undeveloped landscape to an urbanized setting along the national forest boundary and along California State Highway 138. Housing development along the boundary is affecting access to the national forest. Human impacts that create strong visual contrast within this landscape include: road cuts and utility corridors. This area is generally accessed from California State Highway 138, and Lone Pine Canyon Road. The limited paths through this nearly inaccessible landscape lead visitors to dramatic desert panoramas and rugged mountain background views. Opportunities exist to create connections with open space areas in the Mojave Desert.

On the San Bernardino National Forest, the only developed recreation consists of a segment of the Pacific Crest National Scenic Trail and the Morman Rocks Interpretive Trail. There is little other dispersed recreation activity other than seasonal hunting.

The rapidly increasing development presents a challenge to the local governments and the and the Angeles and San Bernardino National Forests need to have a more consistent management strategy along the national forest boundary. It also places greater emphasis on the national forests to provide fire protection and habitat linkages in those areas of intense buildup along the boundary. Encroachment has increased due to urban and rural development resulting in access and encroachment issues.

Adjacent developments are creating their own social trails on national forest land, primarily caused by an increase in unauthorized vehicle use and equestrian use. Unauthorized vehicle use is resulting in severe erosion and damage to natural resources and cultural resources. This Place also has problems with trash, and car and pet dumping.

There are no special designations on the San Bernardino National Forest.

Desired Condition: Mojave Front Country Place is maintained as a natural appearing and culturally rich landscape that functions as a year-round, low elevation open space for Mojave Basin residents and residents of Los Angeles and San Bernardino Counties. It also serves as a scenic backdrop for the Antelope Valley. The valued landscape attributes to be preserved over time are distinct desert views from within the landscape and rugged mountain background views, desert scrub with scattered Pinyon pine and Joshua trees, and heritage resources.

Chaparral, forests and pinyon and Joshua tree woodlands are managed to provide fire protection for adjacent urban communities, compatible dispersed recreation use, high quality wildlife habitat and to protect plant communities from type conversion by frequent burning. Habitat conditions for sensitive species are improving over time. Wildlife linkages from the San Gabriel Mountains to the San Bernardino Mountains are maintained. Heritage properties are identified,

evaluated and interpreted. Property lines are located and managed and administrative rights-of-way are appropriately acquired. Law enforcement presence in high-use areas minimizes unauthorized activities and conflicts.

A wide variety of dispersed recreation opportunities are maintained over time. The OHV route system is improved and unauthorized use is directed to roads and trails that are designated for this use.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management in cooperation with city, county and state agencies. The Pinyon Fuelbreak on Circle Mountain Ridge on the San Bernardino National Forest will be maintained. Forest health and water needs will be managed to provide for a healthy forest ecosystem with in-stream flows necessary to support surface and subsurface resources. Uses will be balanced and will promote the conservation of resource qualities that sustain these uses and provide attractions for this Place. The Pacific Crest National Scenic Trail remains a priority for management and maintenance.

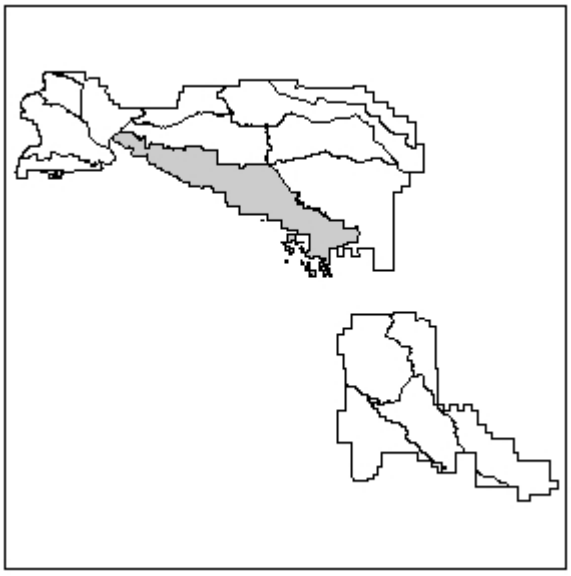
Habitats for federally listed and Region 5 sensitive species within the Place will be managed to promote species conservation and recovery. The regional wildlife linkages between the San Gabriel Mountains and the San Bernardino Mountains will be kept intact, functioning and improved. The identification, evaluation, interpretation and protection of heritage properties will be emphasized. Partnerships with Native American tribes will be improved.

Management will focus on recreation use by visitors, and national forest infrastructure that is sustainable, consistent with the natural setting and integrity, and has minimal effects to threatened, endangered or sensitive species or their habitat. There will be a focus on the interpretation of the San Andreas Fault, Mormon Rocks, and the Desert/Coastal evolutionary interface.

Accurate national forest boundaries will be reestablished and maintained and encroachment will be reduced. Forest Service field personnel and law enforcement staff will be highly visible.

San Bernardino Front Country

Theme: A rugged, scenic backdrop to an urban, growing San Bernardino Valley. Steep canyons shelter important riparian habitat. Several heavily driven state highways provide a commuter and visitor portal into the communities and recreation opportunities of the high country forest.



Setting: The San Bernardino Front Country Place is a rugged, scenic backdrop to a dynamic urban interface, prominently identified by the large historic 'Arrowhead' landmark on Arrowhead Peak. Rising to the north of the cities of San Bernardino, Redlands, Highland and Yucaipa, the steep brush-covered mountains quickly climb in elevation from 1,500 feet to 6,000 feet. Narrow canyons of critical riparian habitat and rounded summits with patches of montane conifer are found here. There are diverse and unique physical and biological resources that are strongly influenced by human activities from the nearby urban interface.

The Serrano tribes and Mission Indians used these lands traditionally and continue this use today. Reservations established for the San Manuel Band of Mission Indians and the Morongo Band of Mission Indians are located within and adjacent to the Place. The management of the Whitewater watershed on National Forest System land is of concern to the Agua Caliente Band of Cahuilla Indians.

There are no existing special designations.

The climate is generally warm (temperate) with a marine influence (Mediterranean) and the area receives 15 to 30 inches of precipitation per year, with some snow at the higher elevations. Rain may run off quickly from the steep mountainsides and through the canyons of the San Bernardino Front Country, at times causing flash floods and eroding the slopes along the roads. The Santa Ana River (recently dammed for flood control by the Seven Oaks Dam at the national forest boundary), Mill Creek and City Creek are the major watershed features here. The Santa Ana River (comprising the largest stream and watershed on the forest) runs through the southern tier

of this Place. One of the highest waterfalls on the forest (Big Falls) is located near the community of Forest Falls. Surface and groundwater extraction occurs in the Place.

The vegetation includes coastal sage scrub, mixed chaparral, and stands of bigcone Douglas-fir and canyon live oak and Coulter pine at the lower elevations. Jeffrey, ponderosa, sugar and knobcone pine, white fir and black and canyon live oak are present at the higher elevations. Poor air quality affects vegetation health and vigor, as well as obscuring views. Frequent fires have converted coastal sage scrub and chaparral to nonnative grasslands along the lower slopes. Noxious weeds are present.

A high fire danger threatening foothill and mountaintop communities is present during much of the year. The effects of the reoccurring pattern of wildland fire were realized by the high loss of homes when the Old Fire burned much of this Place from I-15 to the Seven Oaks Dam in 2003. There is a high potential for erosion and flooding for the next several years. Community defense zones are a concern as urban development adjacent to the national forest continues to expand and increase the potential for fire starts. Although an extensive fuelbreak system exists, some fuelbreaks lack regular maintenance, compromising their potential effectiveness.

City Creek, San Bernardino Front Country Place. This critical biological zone shows 2003 flood effects after the wildfires.

This Place is home to diverse and unique plant and wildlife communities. Important habitat for southwestern willow flycatcher and speckled dace exists here. The only known extant mountain yellow-legged frog habitat in the San Bernardino Mountains was adversely affected when heavy rainfall scoured out the creek and the watershed burned in the 2003 wildland fires. A small number of frogs were salvaged prior to the post-fire flooding event and their offspring may be reintroduced if it is determined that no frogs survived and if a successful captive breeding program can be established. This Place contains designated critical habitat for the San Bernardino kangaroo rat, California gnatcatcher, and the Santa Ana sucker. National Forest lands near Oak Glen provide a connection to regional habitat linkage connecting the San Bernardino Mountains to the Redlands Badlands and ultimately to the San Jacinto/Lake Perris Core Reserve. San Gorgonio River provides a similar habitat linkage to the San Jacinto Mountains to the south.

Several Region 5 sensitive plant species are also found here. Least Bell's vireo nest in this Place. Invasive nonnative plant species are present and need eradication.

The Serrano tribes and Mission Indians used these lands traditionally and continue this use today. The reservation established for the Morongo Band of Mission Indians is located adjacent to the southern boundary of the Place. The management of the Whitewater watershed is of concern to the Agua Caliente Band of Cahuilla Indians.

The Santa Ana River (SAR) and Mill Creek FERC projects are located within this Place. The FERC licenses were renewed in 2002 for 20 years. The SAR project is located entirely on National Forest System lands and diverts water from Alder Creek and the Santa Ana River. Conversely, the Mill Creek FERC project is located almost exclusively on private lands. Both projects generate hydroelectric power and provide domestic water for municipal water companies.

The Place includes opportunities for a mixture of motorized and non-motorized recreation. The San Bernardino Front Country is the primary portal into the San Bernardino Mountains from urban valley communities throughout southern California on heavily traveled California State Highways 18, 330 and 38 (Rim of the World Scenic Byway). Visitor use within the Place is generally low to moderate, typically concentrated in a few locations near water and/or trees. Recreation facilities are mostly day-use, few in number, heavily used and worn out. Dispersed recreation activities include 4-wheel driving, sightseeing/driving for pleasure, hiking, equestrian use, mountain biking, picnicking, waterplay, snowplay, hang gliding, dispersed camping, hunting and recreational target shooting. The Santa Ana River Trail is a popular, regionally designated non-motorized 'crest to coast' route. Few other trails exist. Creation of unauthorized trails from adjacent urban communities is occurring. A recreational target shooting area along national forest road 1N09 may be causing resource damage and may have health and safety concerns. Unauthorized Paintball use is also occurring in riparian areas. Interpretive and environmental education opportunities are limited, mostly occurring at the Mill Creek Ranger Station.

Multiple human uses in and around this Place and the checkerboard pattern of public and private land complicate management. There are access, landline and trespass issues. The Inland Feeder Project (eight miles of tunnel under the national forest) is located here, as are several high-pressure gas lines. Unlawful activities including marijuana cultivation, drug production, dumping, vandalism, graffiti use, and unauthorized off-road driving occur in this Place. There is urban development occurring along the southern boundary of the San Bernardino Front Country Place, often affecting national forest resources and administrative and public access.

Eligible Wild and Scenic Rivers:

- Bear Creek 1.1 miles
- Santa Ana River 1.7 miles
- Whitewater River - East Fork of South Fork 1.4 miles

Recommended Wilderness:

- Raywood Flat B (San Gorgonio Wilderness) 1,989 acres,

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- City Creek

Total national forest acres--San Bernardino Front Country: 84,566

Desired Condition: San Bernardino Front Country Place is maintained as a natural appearing 'first impression' landscape that functions as a scenic backdrop and forest portal with high-quality, natural-appearing landscape vistas providing managed recreation opportunities. The valued landscape attributes to be preserved over time are craggy silhouettes of the mountain peaks, the mosaic of rock outcrops, an age-class mosaic in chaparral, coastal sage scrub, riparian habitat and the presence of conifers in the higher elevations and canyons. Chaparral and forested areas are managed to provide fire protection for adjacent urban communities, recreation areas and wildlife habitat. Habitat conditions for threatened, endangered, and sensitive species are improving over time. The Santa Ana River above the Seven Oaks Dam is a healthy aquatic ecosystem capable of supporting native fish and wildlife populations and a quality rainbow trout fishery. Invasive animal and plant species are reduced over time. Heritage properties and Native American gathering areas are identified and protected. Partnerships between the national forest and Native American tribes increase. Property lines are located and managed.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management in cooperation with city, county and state agencies. Community protection projects identified in the San Gorgonio Wilderness may be implemented to reduce the risk of wildland fire to communities. Forest health projects will be implemented to remove dead trees, reduce stand density and promote pre-suppression era fire return intervals.

Habitat for threatened, endangered, and sensitive species, such as the southwestern willow flycatcher, mountain yellow-legged frog and speckled dace will be conserved. Activities on national forest land will also be managed to maintain the regional habitat linkage to the south. Opportunities for the removal of invasive non-native species will concentrate on tamarisk, tree-of-heaven, arundo, and Spanish broom. The national forest will work with Southern California Edison and the water agencies to restore and maintain aquatic and riparian habitat and native species above the Seven Oaks Dam. Restoration of the Santa Ana sucker and the Santa Ana River speckled dace populations as the habitat recovers will be a priority. This will include prevention of invasive nonnative aquatic species from moving upstream from the Seven Oaks Dam.

Through partnership agreements, Native American tribes provide assistance with identifying, protecting, interpreting heritage resources.

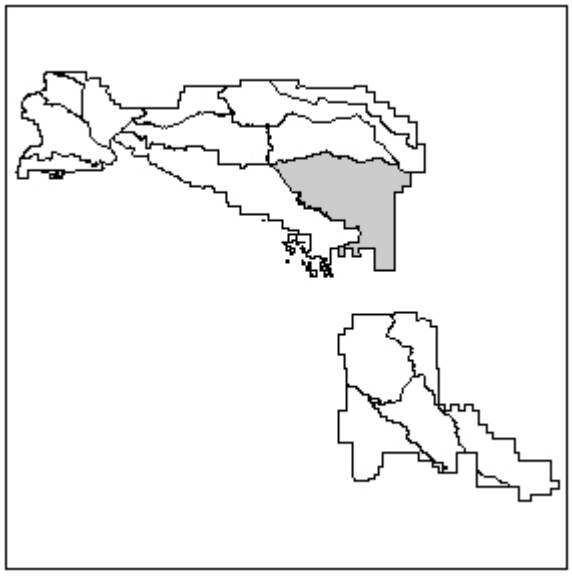
Management is expected to focus on active participation with local governments to plan for scenic and recreation values while protecting important natural resources from adjacent urbanization and special-uses. New trail development of the Front Country Trail will be proposed and day-use recreation opportunities will be emphasized for a diverse urban population while protecting public safety and riparian habitat. National Forest staff expect recreational target shooting to be well-managed and developed recreation facilities to be reconstructed to improve their condition. Snowplay activities in Forest Falls will be managed.

Conservation education will include a bilingual emphasis. Land acquisition is expected to consolidate ownership. Accurate national forest boundaries along the urban interface will be reestablished and maintained. Impacts from the Wildland/Urban Interface will be managed. The national forest will continue to work closely with developers, planners and local officials to reduce resource impacts and conflicts on national forest land from nearby development. Law enforcement activities will be coordinated with other functional areas for the protection of national forest resources and the safety of national forest visitors and employees.

Both Mill Creek and Santa Ana River FERC projects will be maintained and monitored for effects on TES species and aquatic/riparian habitats. The Forest Service will pursue partnership opportunities with water companies, other agencies, and other private land owners for additional environmental improvements.

San Gorgonio

Theme: Often referred to as the Alps of southern California, this area is dominated by the presence of Mt. San Gorgonio, the tallest peak in the Transverse Range. Dense chaparral, montane meadows, old growth forest and alpine habitat are found here. Visitors flock to the recreation opportunities in Barton Flats, Heart Bar and the San Gorgonio Wilderness. The San Gorgonio Wilderness is one of the most popular wildernesses in the National Forest System.



Setting: Mt. San Gorgonio and surrounding peaks dominate this landscape. 'Old Grayback' at an elevation of 11,499 feet is the tallest peak in southern California, from which you can see the Sierra Nevada Mountains and Catalina Island on a clear day. Glacial activity during the Ice Age carved out rugged canyons and created fields of scree and boulders. Regionally unique alpine plant and tree communities have since evolved in this high, harsh, windy environment. The Santa Ana River, comprising the largest stream and watershed on the national forest, runs through the northern tier of this Place. The San Gorgonio Wilderness is one of southern California's oldest, largest and heavily visited wilderness areas. The land in this Place consists of steep canyons with rounded summits and flats, from high desert landscapes at 1,500 feet to vast expanses of conifer forest at higher elevations. It is rich in history and a favorite all-season playground for the public. The Horse Meadow Research Natural Area, set aside for the study of white fir, and the Millard Canyon Research Natural Area, which is dedicated to interior live oak research are both located here.

Barton Flats mountain vista, San Gorgonio Place

Mt. San Gorgonio feeds the headwaters of the Santa Ana and the Whitewater Rivers. The climate varies from a warm temperate with marine influence (Mediterranean) to vertically differentiated complex mountain temperatures. Precipitation can vary from 10 inches of rain at the lower elevations to 40 inches of snow at the higher elevations. Runoff may be rapid on this

landscape of steep mountains and narrow canyons, at times causing flooding at the mouths of canyons like Mill Creek. Jenks Lake, a small man-made lake, natural Dollar Lake and Tosh's Tarn, and Dry Lake (a dammed marsh) are the only bodies of water in this area. Streams are prevalent. There are surface and groundwater extractions in the Place, as well as unauthorized extractions.

Vegetation communities are diverse due to the range of altitude. The lower elevations on the south side are covered by chaparral communities and live oak stands, yielding to bigcone Douglas-fir, and a mixed conifer series at the higher elevations. The upper reaches of the San Gorgonio Mountains are covered with ponderosa pine, sugar pine, incense cedar, Coulter pine, Jeffrey pine, lodgepole pine and limber pine leading to tree line and then up into a world of alpine plants. Some of the largest wet montane meadows on the national forest also occur at this elevation. Poor air quality during much of the year affects vegetation health and vigor. Noxious weeds are present.

There is a possibility of catastrophic wildland fire, because of drought related mortality, the presence of old age chaparral and forest densification. Mortality of big berry manzanita, Coulter pine, bigcone Douglas-fir and Jeffrey pine has been high within this Place; canyon oak and interior live oak species have also been affected. This presents a risk to national forest facilities, including recreation residences and organization camps, as well as to private infrastructures.

One of the two quaking aspen groves on the national forest occurs in Fish Creek. Several habitats support a number of federally listed and Region 5 sensitive plant species. The only known occurrences of Barton Flats horkelia are present here. The Santa Ana River and its' tributaries provide habitat for deer, bear, rainbow and brown trout and are important water sources for wildlife. The large expanse of montane conifer forest and riparian communities support a dense population of California spotted owl (especially on the north-facing slopes of the Santa Ana River watershed), nesting pairs of southwestern willow flycatcher along the Santa Ana River and tributaries, San Bernardino flying squirrel, and southern rubber boa. One of four populations of the Nelson's bighorn sheep is found here. The wildlife corridor connecting Sugarlump Mountain to the Big Bear Place is important for conifer dependent species, as is the corridor connecting the habitat between the San Gorgonio and the Cushenbury bighorn sheep herds. The regional wildlife linkage connecting the San Bernardino Mountains to the San Jacinto Mountains is present here. The south-facing slopes of the Santa Ana River watershed are an important deer winter range for a local migratory herd. A dense black bear population occurs within this Place.

The Place provides opportunities for a mixture of motorized and non-motorized recreation, as well as more primitive opportunities in the San Gorgonio Wilderness. California State Highway 38 (the Rim of the World Scenic Byway) is the primary gateway to the San Gorgonio Place, leading from Mentone to the Onyx Summit and beyond to Big Bear. Developed recreation is very popular at the Barton Flats and Heart Bar complexes. The most popular types of dispersed recreation include camping, picnicking, swimming, fishing, day hiking, mountain biking, horseback riding and backpacking; while winter brings nordic skiing and snowplay activities. Snowmobile opportunities are available in the Coon Creek area on National Forest System roads 1N02 and 1N95. Wheelchair accessible sites for fishing are located on the Santa Ana River. This Place has some of the most popular equestrian trails in southern California. Hunting of both bear and deer is popular. The Santa Ana River is the largest and most heavily visited fishing stream on

the national forest, with both stocked and naturally reproducing trout. The regionally designated Santa Ana River Trail, the Pacific Crest National Scenic Trail, and Clark's Grade Historic Trail are located here. There are no designated OHV routes. Seasonal volunteer-staffed Visitor Information Centers at Barton Flats and Horse Meadows are maintained. The San Gorgonio Place generally has a wild and remote feeling despite development in the Barton Flats area. Scenic values are high.

The San Gorgonio FERC project is located within this Place. Originally designed for both hydroelectric generation and water supply, it is now only capable of producing water due to a massive flume failure resulting in a large-scale slope failure. It is no longer capable of producing electricity economically; however, it continues to divert water from the headwaters of the Whitewater River into Banning Canyon. The FERC license expired in 2003. Southern California Edison is seeking to decommission the hydroelectric generation capability and transfer the project to the Pass Water Agency. The Banning Heights area is now considering application for a special-use authorization for continued access to water from the diversion.

The Place supports a number of resource uses. The vacant Santa Ana River Grazing Allotment is located here. Mining claims on carbonate substrate are present. Fuelwood permits are issued for designated portions of this Place. A high number of recreation residences are found here, as well as a greater density of organization camps than on any other national forest in the country. Law enforcement issues in this Place primarily consist of unlawful trash/hazardous materials dumping, campfires, unauthorized off-road use, and marijuana cultivation.

Eligible Wild and Scenic Rivers:

- Bear Creek 1.2 miles
- Fish Creek 3.6 miles
- Santa Ana River 18.1 miles
- Whitewater River - East Fork of South Fork 24.2 miles

Existing Wilderness:

- San Gorgonio Wilderness 56,628 acres

Recommended Wilderness:

- Raywood Flat B (San Gorgonio Wilderness) 1,951 acres.

Established Research Natural Areas:

- Millard Canyon 785 acres
- Horse Meadow 935 acres

Recommended Research Natural Areas:

- Wildhorse Meadow 1,203 acres

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Sugarloaf Meadow

Total national forest acres--San Gorgonio Place: 99,925

Desired Condition: San Gorgonio Place is maintained as a naturally evolving and natural appearing landscape that functions as an alpine recreation setting containing wilderness and a wilderness portal. The valued landscape attributes to be preserved over time include the craggy silhouettes of the mountain peaks, the wind-carved alpine character, montane meadows, the bigcone Douglas-fir, ponderosa pine, mixed conifer, subalpine forests at higher locations and associated steep slopes and drainages, well-defined age-class mosaic in chaparral, the occurrence of rock outcrops, and natural appearing views from the scenic byway and Pacific Crest Trail. A wide variety of recreation uses will be provided, where appropriate and environmentally sustainable.

Chaparral and forested areas are managed to provide fire protection for adjacent urban communities, recreation areas, and wildlife habitat, and to protect from type conversion to grass. Habitat conditions for threatened, endangered and sensitive species are improving over time. Habitat linkages are intact and functioning. Feral cattle are removed; invasive nonnative plants are reduced over time. Heritage properties are identified, evaluated and interpreted and Native American partnerships are in place. Management of special-use recreation residences and organization camps are improved. Property lines are located and managed and administrative rights-of-way are appropriately acquired.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management in cooperation with city, county and state agencies. Community protection projects identified in the San

Gorgonio Wilderness may be implemented to reduce the risk of wildland fire to communities. Opportunities for development of fire management facilities in the east end (i.e., Heart Bar to Onyx Summit) will be explored. Forest health projects will be implemented to remove dead trees, reduce stand density and promote pre-fire suppression era fire return intervals. Reforestation projects will maintain forest diversity.

Enhancement of plant and wildlife habitat and linkage corridors for threatened, endangered and sensitive species will be emphasized in all management activities. An active program of prescribed burning/fuelbreak maintenance is expected to result in quality Nelson's bighorn sheep habitat and deer winter/summer range. Wildlife corridors will be maintained or enhanced. Minimum in-stream flows and groundwater standards will be established for wildlife and to ensure that water use is managed at environmentally sustainable levels. Removal of feral cattle and Spanish broom will be emphasized.

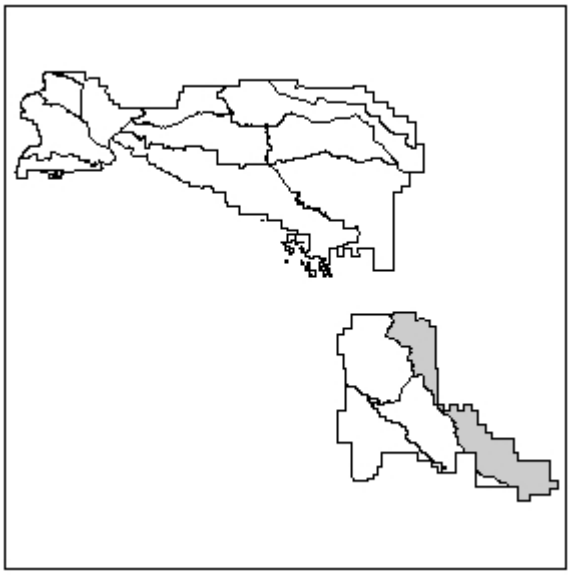
Identification, evaluation and interpretation of heritage properties and Native American partnerships will be emphasized.

Management of special-use recreation residences and organization camps will be improved. Increased environmental education opportunities are expected within organization camps. Maintenance and improvement of recreation infrastructure is a priority as is development of safe snowplay areas and a dispersed camping strategy. Opportunities to acquire land for future re-routes of the Pacific Crest National Scenic Trail will be explored to improve recreation opportunities and to protect sensitive resources, as well as providing a contiguous land base in the wilderness. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. National Forest staff expect to continue to work closely with developers, planners and local officials in order to reduce resource impacts and conflicts on national forest land. Accurate national forest boundaries will be reestablished and maintained. There will be a continued emphasis on preventing establishment of off-route vehicle travel and unauthorized off-trail use by mountain bikes.

The San Gorgonio FERC project will be analyzed to address decommissioning of the hydroelectric facilities and water delivery infrastructure. It will also address aquatic/riparian habitat improvements in Banning Canyon.

Santa Rosa and San Jacinto Mountains National Monument

Theme: The Santa Rosa and San Jacinto Mountains National Monument highlights dramatic desert landmarks, reaching from cactus in the low desert to pines in the high country. Unique habitats, including a fan palm oasis, and bighorn sheep herds are located in this area, as are a major State Park and two wildernesses offering remote recreation opportunities.



Setting: The Santa Rosa and San Jacinto Mountains National Monument is located west of the Coachella Valley, providing a dramatic and picturesque backdrop for the desert communities of Palm Springs, Rancho Mirage, Cathedral City, Palm Desert, Indian Wells, Indio, Thousand Palms, Desert Hot Springs and La Quinta. The San Jacinto Mountains rise sharply from the valley floor, with steep canyons sweeping upward to jagged peaks, massive boulders, and mountain meadows. Elevations range from 2,000 feet near the desert floor to 10,834 feet at the top of San Jacinto Peak. This dramatic escarpment is one of the steepest in North America. The area was designated as a National Monument in the year 2000 to protect critical watershed, flora and fauna, and to preserve the unique scenic and cultural values that exist on this land. It includes both Bureau of Land Management (BLM) and National Forest System land and is managed jointly by the two agencies. The Place also contains 578 acres of the Black Mountain Scenic Special Interest Area. This Place description refers only to national forest land.

With only four inches of rainfall each year at lower elevations, little surface water is available except for occasional springs, which surface at the mouths of canyons. The springs are a unique oasis in this desert environment, supporting a wide variety of plants and animals, and providing a water source for millenia.

Vegetation ranges from cactus, creosote, chamise, and red shank along desert slopes, to stands of ponderosa pine, mixed conifer, Jeffrey pine, and lodgepole pine at the higher elevations. Canyon live oak is found deep in the canyons along the western boundary, while Parry pinyon and California juniper are present at higher elevations on desert slopes. Portions of the active Wellman Grazing Allotment are located here.

Fuel densities in timbered areas are increasing the risk of catastrophic wildland fire. The extended drought and associated bug kill has resulted in substantial pinyon pine mortality. The 1994 Palm Fire reduced fuel hazard in Palm Canyon and some of the area near the community of Pinyon; however, additional fuels treatments are needed in this area to create a community defense zone that will continue to protect the Pinyon Community. Tamarisk (a nonnative invasive species) is encroaching in Palm Canyon and in the Santa Rosa Wilderness. Colonization by annual weeds along roadways is degrading the adjacent desert scrub communities.

Palm Canyon supports the largest California fan palm oasis in the United States and is recognized as an area of high ecological significance. Although the majority of Palm habitat occurs at lower elevations outside the national forest, a small amount is located on national forest land. Critical habitat needed for the recovery of the Peninsular Ranges bighorn sheep is also present within this Place. Sheep inhabit the steep, rocky terrain above the desert floor.

The Santa Rosa and San Jacinto Mountains were home to the Cahuilla Indians prior to European settlement and Santa Rosa Mountain is particularly significant to the Cahuilla people. Protection and interpretation of the heritage resources were a primary reason for the Monument designation. The San Bernardino National Forest maintains the Cahuilla Tewanet Interpretive Site and Overlook. The boundary of the Monument is located adjacent to the Agua Caliente, Morongo and Santa Rosa Indian Reservations, which raises concerns that trespass onto the reservations by visitors will increase. Agave, pinyon pine and other plants utilized by Native Americans are found within the Monument. Although numerous historic mining sites are located in the area, federal lands within the Monument are withdrawn from mineral entry.

The area remains sparsely populated, but high numbers of visitors travel the 'Palms to Pines Scenic Byway' from Palm Desert past Pinyon Flats and north to Banning. The Dunn Road (built without authorization in 1966) has always been closed to the public due to a lack of government rights-of-way across private land. Trespass onto national forest land is increasing, particularly in areas of intermixed land ownership. Unauthorized off-road driving is occurring, along with site looting, and dumping of trash and hazardous material, especially adjacent to communities.

Opportunities for remote recreation are abound in the Monument, as both the San Jacinto and Santa Rosa Wildernesses are located here. The San Jacinto Wilderness offers opportunities for rock climbing, hiking, backpacking, or riding horses. Visitors can also ride the famous Palm Springs Tramway from the desert floor to the alpine forest of Mt. San Jacinto State Park. Mountain biking opportunities exist outside the wilderness boundaries and winter brings nordic skiing and other snowplay opportunities at the higher elevations. The Pacific Crest National Scenic Trail traverses the crest of the San Jacinto Mountains attracting additional visitors to the area. No loop trails exist at the present time, and some trails are not entirely on national forest land. Developed camping opportunities within the Monument are limited. Pinyon Flat Campground located along Highway 74, and a handful of sites located along the Santa Rosa Truck Trail are in need of maintenance and reconstruction to meet accessibility standards. Ribbonwood Equestrian Campground is new and provides both individual and group camping opportunities. A Visitor Center located on BLM land along Highway 74 offers interpretive programs and visitor information.

Eligible Wild and Scenic Rivers:

- Palm Canyon 8.1 miles

Existing Wilderness:

- San Jacinto Wilderness 38,890
- Santa Rosa Wilderness 19,419 acres

Recommended Wilderness:

- Pyramid Peak B (San Jacinto Wilderness) 9,004
- Cactus Springs A (Santa Rosa Wilderness) (21 acres)

Special Interest Areas:

- Black Mountain 578 acres

Total national forest acres--The Monument Place: 63,726

Desired Condition: The Santa Rosa and San Jacinto Mountains National Monument is maintained as a natural appearing and naturally evolving landscape that functions as a rugged backdrop that provides remote recreation opportunities, and a refuge for unique plant and animal species. The valued landscape attributes to be preserved include the high-country conifer forests, live oak in deep canyons, a diverse cactus scrub community, pinyon juniper woodlands, and the fan palm oasis. Desert chaparral communities, pinyon juniper woodlands and timber stands are at pre-fire suppression era conditions. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Tamarisk and other nonnative species are reduced. Partnerships are in place with stakeholders, such as the Monument Advisory Committee, the Bureau of Land Management, Native American Tribes, surrounding communities, State Parks, volunteer associations and others to implement the Santa Rosa and San Jacinto Mountains National Monument Plan (Monument Plan).

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management. Community protection projects identified in the San Jacinto Wilderness may be implemented to reduce the risk of wildland fire to communities. Management will focus on maintaining the natural setting and unique biological and cultural resources found here. Forest health projects will be implemented to remove dead trees, reduce stand density, and promote pre-fire suppression era fire return intervals. Reforestation projects will maintain tree diversity.

The Monument Plan will be implemented with the BLM and numerous partners. Collaborative strategies will be developed and implemented for recreation and trails. Motorized and non-motorized opportunities to improve visitor access to remote areas of the Monument will be explored. Conservation education, with a focus on the demonstration and interpretation of healthy forests, heritage and biological resources at the Santa Rosa and San Jacinto Mountains National Monument Visitor Center will be emphasized to improve the visitor experience and promote stewardship.

Enhancement of wildlife habitat for threatened, endangered, proposed, candidate, and sensitive species (such as the Peninsular Ranges bighorn sheep) will be emphasized in all management activities. The habitat linkage from the Santa Rosa Mountains into the Anza Borrego State Park

for Peninsular Range bighorn sheep will be maintained. Removal of tamarisk will be emphasized in Palm Canyon and the Santa Rosa Wilderness. Native American tribes are partners and provide assistance with interpreting and managing the heritage resources sites and important gathering areas. Programs, such as the California State Site Steward and the USFS Passport in Time will be explored.

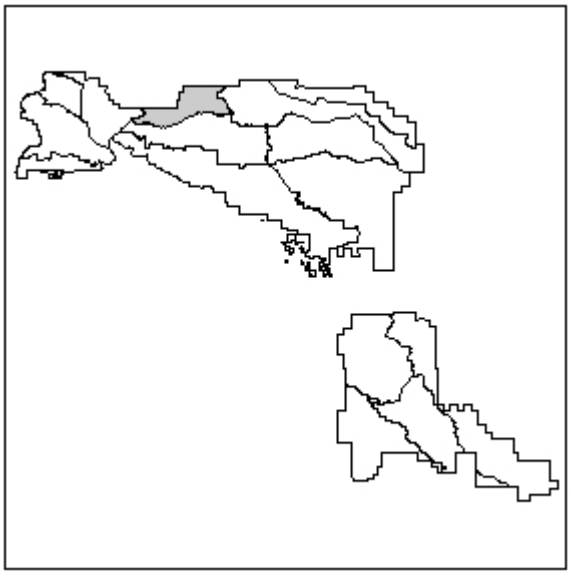
Acquisition of land from willing sellers will be emphasized where needed to maintain habitat linkages and improve public and administrative access. Trespass and encroachment will be reduced. Accurate national forest boundaries along the urban interface will be reestablished and maintained.

The Pacific Crest National Scenic Trail remains a priority for management and maintenance. Those portions of Forest Designated Trail 4E01 that intersect with the recommended San Jacinto Wilderness expansion boundary in Palm Canyon will be relocated over time to retain existing trail opportunities (including mountain biking) while preserving wilderness character.

Silverwood

Theme: The Silverwood Place is a landscape consisting of unique desert-influenced and riparian ecosystems, from the Mojave River to Silverwood Lake to Deep Creek. Rapidly growing, high desert urban communities flank the lower reaches sending visitors in search of leisure opportunities at the Silverwood Lake State Recreation Area. Important habitat exists here in the north-facing hillsides for the bald eagle and spotted owl.

Setting: The Silverwood Place is a land of unique desert-influenced ecosystems, extending from the intermittent Mojave River to the popular Silverwood Lake State Park over to the perennial Deep Creek watershed. Rising to the south of the desert communities of Victorville and Hesperia, the chaparral-covered mountains gradually climb in elevation to form rounded summits with patches of montane conifer and narrow canyons with critical riparian habitat. The diverse physical and biological resources found here are increasingly influenced by human activities. The primary access to Silverwood Place is California State Highway 138 (the Rim of the World Scenic Byway). The area is rich in heritage resources. The Deep Creek Grazing Allotment occurs here.



This Place has a diverse landscape. The climate varies from a warm temperate with marine influence (Mediterranean) to transitional high desert (Mojave) to a vertically differentiated complex mountain climate. Annual precipitation is as low as four inches of rain in the desert to as high as 10 to 25 inches of rain and snow at higher locations. The land has steep mountains with rounded summits and narrow canyons. Elevations range from 3,000 feet to 6,500 feet. The Mojave River, Silverwood Lake and Deep Creek are the dominant watershed features. Some surface and groundwater extraction occurs on and off the national forest. Oil and gas development occurs to the north of the Place, and there may be potential for future exploration and development within this Place. Utility rights-of-way cross National Forest System lands.

The Silverwood Place represents a transition zone from high desert chaparral to oak woodland to conifer forest. The vegetation ranges from sparse creosote, chamise and California buckwheat at lower elevations to oak and pinyon woodland and scattered mixed conifer, including important bigcone Douglas-fir stands. Healthy riparian habitats are also present. There is a risk of catastrophic fire, because of forest densification and drought and insect damaged forest. Portions of this unit burned with stand replacing wildland fire in the 2003 Old Fire, which demonstrates the fuels problem. Frequent wildland fires (typically caused by human activities) may result in type conversion from pinyon/juniper, Coulter pine and chaparral to grassland. Flooding and erosion that occurs when the vegetative cover has burned off usually follow wildland fires. Treating the watershed above Silverwood Lake was an extremely high priority after the Old Fire due to the fact that the water that runs through the lake provides drinking water to over 12 million residents of southern California.

The north-facing slope (south and east) of Silverwood Lake has a high density of spotted owl and bald eagle roosting and nesting areas. Occupied habitat (designated for the recovery of the arroyo toad) is present along the length of Deep Creek in the eastern portion of the Place. Occupied habitat is also designated in Little Horsethief Canyon, along the Mojave River north of Silverwood Lake, and along the west fork of the Mojave River west of Silverwood Lake. Critical habitat for southwestern willow flycatcher has been proposed for Deep Creek. Burnt Flats is a popular game hunting area and key winter deer range.

The Place includes opportunities for a mixture of motorized and non-motorized recreation. Scenery values are generally moderate, but are high along Deep Creek. There are few developed recreation sites in this Place, and relatively light recreation occurs here in dispersed settings. Visitor use varies by season. Popular activities include hiking, OHV use from the Pinnacles Staging Area, picnicking, soaking in the hot springs of Deep Creek, hunting, fishing, sightseeing, horseback riding and mountain biking. Deep Creek is the most popular (and environmentally sensitive) area. Occurrences of unlawful off-road vehicle use are low in areas that have designated OHV routes. Off-road vehicle use on unclassified or decommissioned roads into the Deep Creek drainage is an ongoing management difficulty and affects sensitive habitats and cultural resources.

The Pacific Crest National Scenic Trail is located in the northern tier of this Place, often shadowing Deep Creek. Silverwood Lake State Recreation Area serves as both a recreation and water storage area. Conservation education opportunities are limited, especially for OHV recreation. The history of human occupation here is rich. Significant heritage resources are located in the Deep Creek drainage and protection is an ongoing concern.

Although the Place itself is sparsely populated, substantial growth adjacent to the national forest boundary (especially Victorville and Hesperia) is anticipated during the next decade. Unlawful activities, such as trash dumping, travel off-road, use of campfires in undesignated locations, and property vandalism are reoccurring difficulties. Unlawful activities, such as marijuana cultivation, methamphetamine lab dumps, and abandonment of stolen vehicles are increasing as the urban areas along the northern rim of the national forest are developed.

Eligible Wild and Scenic Rivers:

- Deep Creek 9.0 miles

Critical Biological Land Use Zones (see table 527: San Bernardino NF Critical Biological Land Use Zones, page 9):

- Deep Creek

Desired Condition: Silverwood Place is maintained in a natural appearing condition so that it functions as a transition landscape from high desert to the higher-elevation conifer forests, and a recreation setting for motorized and non-motorized activities. The valued landscape attributes to be preserved over time include natural appearing views from the scenic byway and the Pacific Crest National Scenic Trail, bigcone Douglas-fir stands, oak woodlands, and an age-class mosaic in chaparral. Habitat conditions for threatened, endangered, proposed and sensitive species are improving over time; invasive nonnative species are reduced. Management of Deep Creek Hot Springs and Warm Springs is improved. A wide variety of dispersed recreation opportunities will be promoted where appropriate and environmentally sustainable. Accurate national forest boundaries are reestablished and maintained.

Program Emphasis: Community protection from wildland fire is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management. Forest health projects will be implemented to remove dead trees and reduce stand density that will result in a more natural pattern of low intensity fires and return intervals. In addition, these projects will focus on returning forest ecosystems to a more healthy condition. Reforestation projects will maintain tree diversity. Conservation education with a focus on the demonstration and interpretation of healthy forests will be emphasized to enhance the experience of visitors and promote stewardship. Building joint community based partnerships will be emphasized for resource protection and restoration.

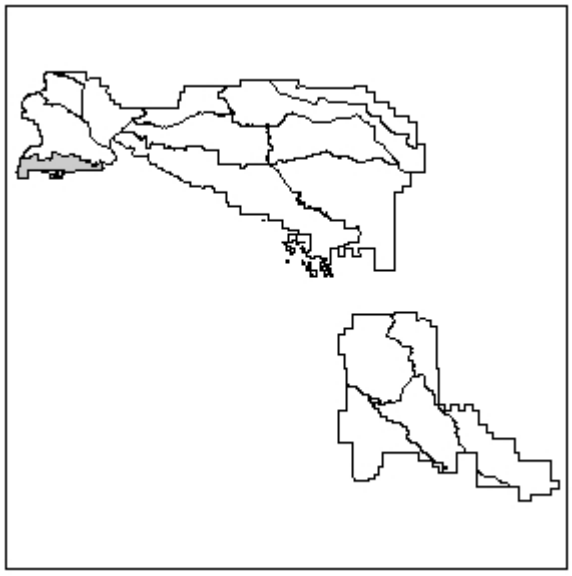
Management will focus on the maintenance of healthy forest and riparian habitats. Maintenance of plant and wildlife habitat for threatened, endangered, proposed, candidate, and sensitive species will be emphasized in all management activities. National Forest staff expect to minimize potential type conversion along the northern end of the Place by providing defensible corridors along roads for fire control. Management of Deep Creek will be emphasized for day-use recreation values, conservation education and riparian dependent resources, including the native trout fishery, the riparian habitat linkage and recovery of the arroyo southwestern toad. Removal of nonnative invasive species will be emphasized. Wherever possible, acquisition of land will be emphasized in order to improve public and administrative access, protect sensitive resources, and to maintain open space and scenic qualities.

A wide variety of dispersed recreation opportunities are maintained over time. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. The OHV route system is improved and unauthorized use is directed to National Forest System roads and trails. More intensive management of OHV recreation and increased opportunities will be emphasized. Improvement of motorized and non-motorized trail systems will continue, including incorporation of unclassified trails into the National Forest System of trails where appropriate.

Law enforcement activities will be coordinated with other functional areas for the protection of national forest resources and the safety of national forest visitors and employees. The identification, evaluation, interpretation and protection of heritage properties will be emphasized.

The Front Country (Within San Bernardino National Forest)

Theme: The scenic mountain backdrop for the greater Los Angeles area. The Front Country Place provides portals from the Los Angeles Basin and the San Bernardino Valley (with its 15 million plus population) to the national forests. This extensive 'backyard' landscape reaches 60 miles from Lytle Creek to Newhall Pass and is managed by both the San Bernardino and the Angeles National Forests.



Setting: The Front Country Place rises dramatically from the Los Angeles Basin from an elevation of approximately 2,500 feet to an elevation of approximately 6,000 feet. The communities that make up the urban interface of the San Bernardino and San Gabriel Valleys define the lower elevation edge of the Place. On the San Bernardino National Forest, public access is provided via San Savine Ridge Road from either Lytle Creek or Cucamonga Canyon.

Views include dramatic urban panoramas backed by rugged mountain backdrops. 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 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 along with bigcone Douglas-fir 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 and lower water quality. Invasive nonnative plants found in many locations need eradication.

There is a rich diversity of plant and animal species. Riparian areas along the streams include habitat for numerous riparian dependent 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 intensive recreation uses, invasive species, wildland fire, and flood control practices.

On the San Bernardino National Forest, there is proposed critical habitat for California gnatcatcher, and southwestern willow flycatchers nest here.

A portion of the landscape is characterized by urban influences from development right to the national forest boundary. In other locations within the Place, steep slopes limit access to remote areas. This combination results in recreation experiences that include hunting and fishing, and enjoyment for the hardy few that can access the hidden treasures of the springs and waterfalls found in remote locations. There is a network of user created trails affecting natural resources in many areas.

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. The San Bernardino National Forest has aggressively and successfully engaged with local, county and state planning agencies to keep such treatments within private developments. 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 fires. Wildland fires (including the 2003 Grand Prix Fire) have resulted in property and resource losses. A fire cycle that is too frequent is type-converting plant communities to nonnative annual grasslands creating the flashy fuel type that perpetuates frequent wildland fire.

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 governments. 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 Front Country 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.

Recommended Wilderness:

- Cucamonga B (Cucamonga Wilderness).

Total San Bernardino National Forest acres--The Front Country: 13,079

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/Rancho Cucamonga metropolitan area, and a national forest portal for its 15 million residents. The valued landscape attributes to be preserved over time include the rugged and wild appearing mountain silhouettes, dramatic undisturbed views to urban and mountain landscapes especially from trails and roads, coast live oaks and bigcone Douglas-fir along the shaded slopes of the canyons, and a well-defined age-class mosaic in chaparral. Vegetation characteristics provide high quality habitat for Nelson's bighorn sheep, deer and raptors. Property lines are located and managed.

Program Emphasis: Community protection from fire is of the highest priority. It will be emphasized through public education, fire prevention and fuels management in cooperation with city, county and state agencies.

Management will focus on community protection, dispersed recreation use, and national forest infrastructure that is sustainable, consistent with the natural setting and integrity, and has minimal effects to species of management concern and their habitat, including low elevation riparian areas. Forest health and water needs will be managed to provide for a healthy forest ecosystem with the in-stream flows 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.

There will be a focus on the development of low-elevation trails, interpretive opportunities, prescribed burning to improve bighorn sheep habitat, day-use recreation, and conservation with other agencies for management of coastal sage habitat. Monitoring bighorn sheep and sheep habitat response to the Grand Prix and Padua Fires of 2003 will be a priority, as well as building community relationships in the fire-affected communities. Law enforcement activities will be coordinated with other functional areas for the protection of national forest resources and the safety of national forest visitors and employees.

Forest-specific Design Criteria

Place Specific Standards

SBNF S1 - Avoid or minimize any activity that causes long-term damage to ashy-gray paintbrush host plants or host plant habitat in occupied paintbrush habitats (Arrowhead, Big Bear, Big Bear Back Country, Desert Rim, and San Gorgonio Places).

SBNF S2 - Avoid or minimize new ground disturbing activities that cause long-term damage to pebble plain habitat (Arrowhead, Big Bear, Big Bear Back Country, Desert Rim, and San Gorgonio Places).

SBNF S3 - In carbonate habitat, mine restoration prescriptions shall include the success criteria and provisions for effectiveness monitoring and reporting as described in the Carbonate Habitat Management Strategy (Big Bear Back Country and Desert Rim Places or other Places as needed).

SBNF S4 - Where available, in suitable southern rubber boa habitat retain a minimum of nine down logs per acre (minimum 12 inches diameter and 180 total linear feet) except in Wildland/Urban Interface Defense Zones and fuelbreaks. Give preference to large diameter logs (Arrowhead, Big Bear, Big Bear Back Country, Front Country, Garner Valley, Idyllwild, Silverwood, San Gorgonio, and Santa Rosa and San Jacinto National Monument Places).

SBNF S5 - Evaluate potential long-term impacts of new projects and activities on important landscape level habitats that are identified in the places. These include landscape linkages, wildlife movement corridors, key deer and bighorn sheep fawning and lambing areas, and winter ranges, and raptor nesting sites. Minimize or mitigate impacts to maintain their functionality over the long-term (all Places).

SBNF S6 - Provide compatible management on those portions of National Forest System land designated as being part of Multiple Species Habitat Conservation Plans (MSHCP) under the National Memorandum of Understanding with the U.S. Fish and Wildlife Service (Coachella Valley Plan: San Bernardino Front Country, San Gorgonio, and Santa Rosa and San Jacinto Mountains National Monument Places; Mojave Plan: Big Bear, Cajon, Desert Rim, Mojave Front Country, and Silverwood Places; and Western Riverside County Plan: Anza, Idyllwild, and San Bernardino Front Country Places).

SBNF S7- Pacific Crest National Scenic Trail - Protect scenic values in accordance with adopted scenic integrity objectives. Protect foreground views from the footpath, as well as designated viewpoints. Where practicable avoid establishing unconforming land uses within the viewshed of the trail (Arrowhead, Big Bear, Big Bear Back Country, Cajon, Garner Valley, Idyllwild, Lytle Creek, Mojave Front Country, San Gorgonio, Santa Rosa and San Jacinto Mountains National Monument, and Silverwood Places).

Wilderness Standards

SBNF S8 - The maximum visitor group size is 12 people. The San Gorgonio, Cucamonga and San Jacinto Wildernesses have permits, day and overnight use restrictions and quotas. The Santa Rosa Wilderness has visitor sign-in requirements. The San Gorgonio, San Jacinto and Cucamonga Wildernesses have designated campsites. District Rangers may modify or waive these restrictions for extraordinary circumstances.

SBNF S9 - Pack and saddle stock that travel and camp in the wilderness are limited to eight per permit. Goats are not permitted in wildernesses with bighorn sheep herds. Pack and saddle stock are not allowed to graze; their feed must be packed in. Dogs must be leashed at all times.

SBNF S10 - Open campfires are not allowed within wilderness, except those seasonally allowed at designated sites within the San Jacinto Wilderness. Visitors must use gas, jellied petroleum, pressurized liquid fuel, or other enclosed portable camp stoves to cook or heat. Glass containers are not allowed within any wilderness.

SBNF S11 - Fish stocking within wilderness lakes and streams is not allowed. Re-introduction of any plant or wildlife species is not allowed unless that species is indigenous and was extirpated by human induced events.

Forest-wide Guidance

Program 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 Management Strategies
- Scenic Byway Plans
- Species Guidance Documents (see Appendix H in Part 3)
- Transportation Plan
- Santa Rosa and San Jacinto Mountains National Monument Proposed Management Plan and Final Environmental Impact Statement

Habitats Specific to the SBNF: Description, Desired conditions, and Monitoring

Pebble plain habitat supports one of the most threatened and biologically rich plant communities within the San Bernardino National Forest. Seventeen plant and four butterfly at risk species are found within the 3,322 acres of habitat. Pebble plain habitat consists of small, treeless areas with clay/quartzite soils within lower montane forest and woodland vegetation often dominated by Jeffrey pine (*Pinus jeffreyi*), single leaf pinyon (*Pinus monophylla*), and junipers (*Juniperus occidentalis* ssp. *australis*, *J. osteosperma)*. The deep clay deposits support an assemblage of small cushion-forming plants, tiny annuals, grasses and succulents that are low growing, sun tolerant and well spaced. The high clay content of the soil make pebble plain habitat especially vulnerable to long-term damage from ground disturbing activities. Once disturbed, native vegetation recovery is exceedingly slow providing opportunities for invasive nonnative species establishment.

Research does not indicate to what extent fire has shaped the pebble plain community. The high percentage of rock cover in the habitat suggests fire may not have played a significant role. In well-conserved habitat, the interior of the plain is largely immune from high intensity burning due to the large percentage of bare ground, rock cover and limited and discontinuous fuels. In this situation, pebble plain habitat may function as a natural fuelbreak with fire carrying around

the margins of the plain through tree litter and shrubs. The presence of cheatgrass within pebble plain habitat is an increasing concern because it provides a continuous flashy fuelbed and has the potential to increase the fire return interval.

Road density, unauthorized off-road driving, emergency fuelbreak construction, recreation activities and invasive nonnative plants pose some of the greatest threats to this habitat. The potential for an increase in unauthorized off-road driving on habitat adjacent to proposed vegetation treatments is also a concern.

The desired condition is for pebble plain habitat to be conserved over the long-term. Incompatible uses are minimized. Pebble plain habitat degraded by past use is restored. Listed threatened species are recovered and delisted. Future listings are not needed.

Outcome Evaluation questions: Is pebble plain habitat being conserved over the long-term through the implementation of conservation strategies? Are resource conditions at pebble plain complexes indicating a stable or upward trend towards meeting desired conditions? (see implementation monitoring in San Bernardino National Forest- Part 2 of the forest plan).

Carbonate habitat is located on the northern and eastern flanks of the San Bernardino National Forest. The 48,670 acres of carbonate soils have developed from outcrops of limestone and dolomite bedrock. Like serpentine and gabbro soils, carbonate soils are low in nutrients and support an assortment of endemic plant species. Seventeen at risk species are found on this habitat. The principal threat to carbonate habitats has been mining for high-grade carbonate deposits. In fact, almost all of the habitat of the listed threatened and endangered carbonate endemic plants is under mining claim.

Carbonate habitats are highly sensitive to ground disturbance and vegetation removal. Once disturbed, vegetation recovery is exceedingly slow. Although unauthorized off-road driving is posing an increasing threat to these disturbance-sensitive areas, mining remains the primary threat to this habitat. An intensive collaborative effort led to the development of the Carbonate Habitat Management Strategy (CHMS) in 2003. The strategy is designed to provide long-term protection for the carbonate endemic plants and also provide for continued mining.

The desired condition is for the Carbonate Habitat Reserve (dedicated and managed as described in the Carbonate Habitat Management Strategy) to be protected in perpetuity from mining impacts. The Carbonate Habitat Reserve will be managed to allow public uses that are compatible with the conservation of the listed carbonate plants. Within the Carbonate Habitat Management Area, carbonate plants are likely to persist indefinitely by managing and maintaining geomorphic and ecological processes of the landscape in large, well-placed blocks of habitat. Destruction or modification of critical habitat is avoided. Listed species are recovered and delisted. Future listings are not needed. Areas disturbed through past activity are restored.

Outcome Evaluation questions: Is carbonate habitat being conserved over the long-term through the implementation of the Carbonate Habitat Management Strategy (CHMS) actions? (see implementation monitoring in San Bernardino Forest - Part 2 of the forest plan).

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. Attainment of the objectives shown above will be affected if events unfold in a manner that was not anticipated when this forest plan was prepared.

Risks Related to the Natural Environment

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

The national forest has experienced large wildland fires in the past. 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 – 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 - San Bernardino National Forest

Wilderness

Existing Wilderness

Bighorn Mountain Wilderness	Places: Desert Rim	11,905 Acres

Created in 1994 by the California Desert Protection Act, the Bighorn Mountain Wilderness is co-managed with the Bureau of Land Management. It is located on the northeast flank of the San Bernardino Mountains, east of Big Bear Lake. Access is from Long Valley on the west and Forest Road 3N03. Other access points are from Horsethief Flat in the north and Viscera Springs in the east.

Elevations range from 4,800 feet to 7,500 feet at the top of the Granite Peaks. This wilderness represents a transition zone from the Joshua trees and yucca of the high desert to scattered Jeffrey pine on the peaks. Mule deer, mountain lions, and bobcats dwell in the Bighorn Mountain Wilderness, while golden eagles may soar above. There are no established trails or campsites in the area, and permits are not required.

Cucamonga Wilderness	Places: Lytle Creek, The Front Country (Within San Bernardino National Forest)	8,509 Acres

Located on the eastern flank of the San Gabriel Mountains near the Cajon Pass, the Cucamonga Wilderness is adjacent to some of the most densely populated areas of southern California. It is jointly managed with the Angeles National Forest and may be reached 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 upper canyons and 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 Nelson's bighorn sheep inhabits the area. There are three dispersed campsites within this wilderness (two on the San Bernardino National Forest side, and one on the Angeles National Forest side), and human use of the area is moderate to heavy (Tilton).

San Gorgonio Wilderness	Places: San Gorgonio	56,628 Acres

The San Gorgonio Wilderness is one of the most heavily used in the nation. It is located on the southeast flanks of the San Bernardino Mountains and may be reached via Forest Roads 2S05, 1N60, 1N05 and Forest Falls Road, Angelus Oaks Trailhead Road, and Forsee Creek Trailhead Road.

The wilderness includes nine peaks over 10,000 feet (including the tallest peak south of the Sierra Nevada Range, San Gorgonio Mountain at 11,499 feet) and two lakes, Dollar and Dry. Examples of the arctic-alpine forest life zones and glacier-deposited moraines are evident in this area.

Two research natural areas are located within the San Gorgonio Wilderness: Horse Meadows for white-fir and Millard Canyon for interior live oak. The headwaters for the Santa Ana and Whitewater Rivers are located in this wilderness, along with habitat for a herd of Nelson's bighorn sheep. Day-use and overnight camping permits are required. There are 24 campsites within the wilderness. The San Gorgonio Wilderness is co-managed with the Bureau of Land Management.

San Jacinto Wilderness	Places: Idyllwild, Santa Rosa and San Jacinto Mountains National Monument, Garner Valley	32,096 Acres

The San Jacinto Wilderness is located in the east flanks of the San Jacinto Mountain Range, and is reached via the Palm Springs Aerial Tramway and Humber Park Road, which lead directly to the wilderness boundary. The Mt. San Jacinto Wilderness State Park manages most of the higher peaks along the ridge within the range, effectively dividing this wilderness into two distinct areas of very different character.

The northern potion of the wilderness, along with the Andreas and Murray desert canyons of the southern portion, include some of the steepest, most rugged terrain in the nation. The northern escarpment plunges dramatically in sheer cliffs and ridges to Banning Pass, nearly two miles below. Snow Creek and its tributaries have carved deep canyons into the escarpment face, affording excellent cross-country hiking and climbing opportunities. The area offers spectacular views of the surrounding desert valleys and mountain ranges.

The southern portion of the wilderness provides contrasting opportunities. This area contains a well-watered plateau area that harbors a number of stream-fed mountain meadows and a portion of the San Jacinto ridgetop known as the Desert Divide. To the east of the Desert Divide lie several deeply eroded, rugged desert canyons. The relatively flat terrain contains a number of very popular camping areas adjacent to streams and meadows and an extensive 26-mile trail network. The Pacific Crest National Scenic Trail traverses the Desert Divide through the wilderness. Permits are required for day-use and overnight camping.

Santa Rosa Wilderness	Places: Santa Rosa and San Jacinto Mountains National Monument	19,419 Acres

The Santa Rosa Wilderness was created in 1984 as part of the California Wilderness Act. In 1994, the wilderness was quadrupled by the addition of 64,340 acres of adjacent Bureau of Land Management lands in the California Desert Protection Act. It is located in the southeastern portion of the San Jacinto Ranger District, and can be accessed from Forest Road 7S01.

Elevations rise from the desert floor (sea level) to 8,000 feet at Toro Peak. The wilderness is comprised primarily of the Santa Rosa Mountains, which are rugged, boulder-strewn mountains

with highly eroded canyons and washes, valleys, steep cliffs and sheer surfaces. Vegetation ranges from desert agave, ocotillo and creosote to mountain pinyon and juniper.

Recreation opportunities mainly center on the Canyon Springs Trail (5E01) and in riparian areas. Wildlife consists of common desert species, such as deer, cougar, and quail. Eastern portions of the area are used by the largest herd of peninsular bighorn sheep in the United States. Much of the wilderness is within the boundaries of the Santa Rosa Mountains State Game Refuge. Human visitation is light.

Sheep Mountain Wilderness	Places: Lytle Creek	1,804 Acres

The Sheep Mountain Wilderness was added in 1984 as part of the California Wilderness Act. The wilderness stretches across the contiguous boundary between the Angeles and San Bernardino National Forests, and is administered by the Angeles National Forest.

Recommended Wilderness

Cucamonga B (Cucamonga Wilderness)	Places: Lytle Creek

The Cucamonga "B" Inventoried Roadless Area is located in the western portion of the Front Country Ranger District. The area lies west of the Lytle Creek Ranger Station and the Lytle Creek community, with the more urbanized Rancho Cucamonga and the Upland communities located five miles to the south.

The topography is characterized by the primarily steep, heavily dissected ridges within a dense chaparral ecosystem. Some riparian areas are found in the lower elevations and some mixed conifer in the upper elevations.

Recreation is primarily dispersed, including hiking, nature viewing, and hunting. The lower portion of Forest Trail 6W01 and the Stone House campsite lies within this Inventoried Roadless Area.

Heartbreak Ridge (Bighorn Mountain Wilderness)	Places: Big Bear Back Country

The Heartbreak Ridge Inventoried Roadless Area is located in the eastern corner of the Mountaintop Ranger District. It is an expansion of the Bighorn Mountains Wilderness; generally bounded on the east by the national forest boundary, on the west by Broom Flat and National Forest System road (NFSR) 2N01, on the north by several NFSRs and topography, and on the south by NFSR 1N01. This is the Antelope Creek and Pipes Canyon watershed, and Big Bear City is six miles west.

The topography is characterized by steep, dry, heavily dissected ridges. Pinyon juniper woodland, Joshua tree woodland, desert riparian and desert chaparral communities are present. Federally listed carbonate, pebble plain, and montane meadow plants are present as is modeled habitat for Least Bell's vireo. This area is also wild burro territory.

Recreation opportunities include hiking, horseback riding (including packing with stock), nature viewing, and hunting. Broom Flat (meadow area) and nearby Juniper Spring (unique water source) are special features.

Pyramid Peak B (San Jacinto Wilderness)	Places: Santa Rosa and San Jacinto Mountains National Monument, Garner Valley.

The Pyramid Peak Inventoried Roadless Area is located on the east side of the San Jacinto Ranger District. It is an expansion of the San Jacinto Wilderness; generally bounded on the north by the national forest boundary, the Pacific Crest National Scenic Trail on the west, Live Oak Canyon on the south, and Palm Canyon on the east. The area lies within the Santa Rosa and San Jacinto Mountains National Monument. Located nearby is the Pinyon Pines community, and the more urbanized Coachella Valley communities located 10 miles to the north. Agua Caliente Band of Cahuilla Indians' tribal lands are also in the vicinity.

The topography in this area is generally very steep. Vegetation is characterized by chaparral and desert ecosystems. Culturally sensitive plants also occur here and are gathered by the Cahuilla Indian people.

Over 5,000 acres of key peninsular bighorn sheep habitat area found in and near the Pyramid Peak Inventoried Roadless Area. In addition, modeled habitat for southwestern willow flycatcher, least Bell’s vireo, arroyo toad, and California red-legged frog and mountain yellow-legged frog is found within the area.

Recreation is primarily dispersed in nature and includes activities such as, hiking, camping, nature viewing, rock hounding, and horseback riding. Some mountain bike use occurs on Forest Designated Trail 4E01. A part of the Wellman Grazing Allotment is located here.

Raywood Flat B (San Gorgonio Wilderness)	Places: San Bernardino Front Country, San Gorgonio

The Raywood Flat Inventoried Roadless Area (two units) is located in the east side of the Front Country Ranger District. It is an expansion of the San Gorgonio Wilderness; bounded on the north and east by the San Gorgonio Wilderness, west by California State Highway 38 and National Forest System road 1S22, and south by Mill Creek and topography. Raywood Flat lies above the Oak Glen and Forest Falls communities, and the more urbanized Inland Empire communities located 10 miles to the southwest.

The topography is characterized by primarily very steep, heavily dissected slopes and ridgelines. Special features within the area include Little San Gorgonio Peak and portions of Sawmill Canyon.

Vegetation consists of a dense chaparral ecosystem at lower elevations and mixed conifer at higher elevations. Culturally sensitive plants that were traditionally gathered by the Serrano and Cahuilla Indian people occur in this area. The area contains modeled habitat for mountain yellow-legged frog, ashy-gray paintbrush, California dandelion, San Bernardino bluegrass, and southwestern willow flycatcher.

Dispersed recreation activities here include hiking, nature viewing, and hunting. Trail 1W08 lies within the Raywood Flat area, but access by the public is difficult, and visitation is light.

Sheep Mountain (Sheep Mountain Wilderness)	Places: Lytle Creek.

The Sheep Mountain, Other Undeveloped Area is not an Inventoried Roadless Area. It was, however, publicly proposed for evaluation in the Forest Plan Revision. It is an expansion of the existing Sheep Mountain Wilderness; bounded on the west by the national forest boundary with the Angeles National Forest, on the north by existing Sheep Mountain Wilderness, on the east by Stockton Flat, and on the south by National Forest System road 3N06. This area is comprised of the upper Lytle Creek watershed. It lies north of Mt. Baldy Village, south of Wrightwood and west of the Lytle Creek community.

The terrain is steep with heavily dissected ridges. Chaparral is abundant with mixed conifer forest occurring at the higher elevations. Riparian habitat is present at Stockton Flat.

Recreation opportunities include hiking, equestrian use, nature viewing, camping (Stockton Flat area) and hunting. A National Forest System trail lies within the area, the Devils Backbone 7W04.2, as well as the very popular Mt. San Antonio (Old Baldy) summit.

This is important California spotted owl and Nelson's bighorn sheep range, both Region 5 sensitive species.

Cactus Springs A (Santa Rosa Wilderness)	Places: Santa Rosa and San Jacinto Mountains National Monument

The Cactus Springs A Inventoried Roadless Area is a small 21 acre parcel near Virgin Spring and Forest Road 7S02, an expansion of the adjacent Santa Rosa Wilderness. The Santa Rosa Wilderness (created in 1984 as part of the California Wilderness Act) was quadrupled in 1994 by the addition of 64,340 acres of adjacent Bureau of Land Management lands in the California Desert Protection Act. It is located in the southeastern portion of the San Jacinto Ranger District.

The elevation of the Cactus Springs A unit is about 7,600 feet; elevations in the Santa Rosa Wilderness rise from the desert floor (sea level) to 8,000 feet at Toro Peak. These Santa Rosa Mountains are rugged, boulder-strewn mountains with highly eroded canyons and washes, valleys, steep cliffs and sheer surfaces. Vegetation ranges from desert agave, ocotillo and creosote to mountain pinyon and juniper.

Recreation opportunities in the Santa Rosa Wilderness mainly center on the Canyon Springs Trail (5E01) and in riparian areas. Wildlife consists of common desert species, such as deer, cougar, and quail. Eastern portions of the area are used by the largest herd of peninsular bighorn sheep in the United States. Much of the wilderness is within the boundaries of the Santa Rosa Mountains State Game Refuge. Human visitation is light.

Wild and Scenic Rivers

Eligible

Bautista Creek	Places: Anza, 11.7 miles

The entire length of Bautista Creek (13.4 miles) is eligible for classification as a recreational river. The creek has outstandingly remarkable values for wildlife, botany, prehistory and history. Wildlife values are based on the presence of several federally endangered species. Evidence of Native American use of Bautista Creek Canyon is present. This evidence reflects all aspects of Native American life, and has exceptional human interest value to the local Native American and Tribal community as well as scientific value. Ethnographic research has documented Native American place names for areas within the drainage. The Canyon meets standards for Traditional Cultural Property as highly significant. The creek's historic context relates to the passages of Juan Bautista de Anza in 1774 and again in 1776. The canyon was also used as a route in the earliest efforts to reach the San Francisco Bay area from 'Sonora Mexico.'

Bear Creek	Places: Big Bear, 8.9 miles

The Eligibility Study for Bear Creek cites that 8.9 miles possess outstandingly remarkable values in regards to recreation, wildlife and fisheries. Bear Creek is a renowned regional freshwater fishery resource and a designated State of California Wild Trout Program Stream. The creek offers numerous sightseeing and wildlife-viewing opportunities, giving it significant recreation value. Wildlife values are attributed to multiple and nesting pairs of the federally endangered southwestern willow flycatcher, and the several pairs of California spotted owls, which nest in the canyon. Most of it is eligible as a scenic river.

Fish Creek	Places: San Gorgonio, 3.6 miles

One 3.6-mile segment of Fish Creek (from the headwaters to the San Gorgonio Wilderness boundary) is eligible for classification as a wild river. The Fish Creek landscape supports rare, high altitude montane wet meadow habitat, and is home to both federally listed and Region 5 sensitive species. Its outstandingly remarkable botanical values, freedom from impoundments, inaccessibility except by non-motorized trail, location within an essentially primitive watershed, and unpolluted waters support its eligibility as a wild river.

Fuller Mill Creek	Places: Idyllwild, 3.4 miles

Fuller Mill Creek is free-flowing from its headwaters to the intersection with the North Fork of the San Jacinto River, and water flows intermittently for some of its length during the mid to late summer and fall. This creek exhibits outstandingly remarkable values pertaining to wildlife as it is home to a nationally significant population of mountain yellow-legged frog. It also supports one of the last remaining populations of this federally endangered species in southern California and the only known population on the San Jacinto Ranger District. Other Region 5 sensitive species (the California spotted owl and San Bernardino flying squirrel) are also present in the river corridor. It is eligible for classification as a recreational river, as it is mostly accessible by road or trail and has some development within the corridor.

Holcomb Creek	Places: Big Bear Back Country, 15.1 miles

Holcomb Creek is free-flowing from the Hitchcock Ranch impoundment to its confluence with Deep Creek, though much of the flow is intermittent. The scenery here is regionally impressive, while outstandingly remarkable wildlife values are based on the presence of multiple pairs of nesting willow flycatchers, a federally listed species, and regionally significant pairs of California spotted owls, a federal candidate species. The segment from the Hitchcock Ranch impoundment to Forest Road 3N16 is eligible for classification as a recreational river, as it is readily accessible by road and has some development. A second segment (5.8 miles from Forest Road 3N16 to the confluence with Deep Creek) is eligible for classification as a wild river. It is free of impoundments; has a largely primitive shoreline; accessed only by a non-motorized trail; and has unpolluted waters.

Lytle Creek - Middle Fork	Places: Lytle Creek, 2.4 miles

The Middle Fork of Lytle Creek, which originates at 8,600 feet on the northwest flank of Cucamonga Peak is eligible for classification as a scenic river, as it has outstandingly remarkable fisheries values, is free of impoundments, is in a largely primitive watershed with an undeveloped shoreline, and has access from a nearby road and non-motorized trail. A 2.4 mile segment of the Middle Fork of Lytle Creek (between the Commanche campsite and the Middle Fork Trailhead) sustains a naturally reproducing population of rainbow trout and has the potential to become designated as a State Wild Trout Stream. It is considered a regionally important resident fish stream with outstandingly remarkable values.

Palm Canyon	Places: Santa Rosa and San Jacinto Mountains National Monument, 8.1 miles

The deep, rugged, rocky canyons, thick riparian vegetation, and palm oasis found within the Palm Canyon landscape provides regionally spectacular scenery. Evidence of Native American use of Palm Canyon, especially for the last two thousand years is present. This evidence reflects all aspects of Native American life, and has exceptional human-interest value to the local Native American and Tribal community as well as scientific value. The Canyon is located in the heart of Cahuilla ethnographic territory, and the Cahuilla continue to use the area for traditional practices. The Canyon meets standards for Traditional Cultural Property as highly significant. The Palm Oasis within Palm Canyon is recognized as having outstandingly remarkable habitat value due to both a location that supports the largest California fan palm oasis in the United States and the abundance of these native palms (relics from millions of years ago that are nationally significant and unique). Approximately eight miles of Palm Creek (from the private land to the national forest boundary) is eligible for classification as a wild river. Also, it is free of impoundments, inaccessible except by trail, and in a primitive watershed with unpolluted waters.

San Jacinto River - North Fork	Places: Idyllwild, 11.4 miles

Of the two river segments in this area determined eligible, one is located within Mount San Jacinto State Park, the other within national forest jurisdiction. Both segments have

outstandingly remarkable values for scenery and wildlife. The scenery along the river is diverse, ranging from dramatic, high elevation, rocky alpine to middle elevation mixed conifer and oak woodland to lower elevation chaparral and grassland. Also, suitable habitat for mountain yellow-legged frog exists in the headwater tributaries. The State Park segment is free of impoundments, inaccessible except by trail, and is located in a primitive watershed with unpolluted waters; therefore making it eligible as a wild river. The segment lying within the national forest is readily accessible by road and trail and has some recreation improvements along its shore, which allows for its recreational river classification.

Santa Ana River	Places: San Gorgonio, 18.1 miles; San Bernardino Front Country, 1.7 miles

All three segments determined eligible have outstandingly remarkable values for scenery, recreation, fish and wildlife, and history. The South Fork segment within the San Gorgonio Wilderness is free of impoundments, inaccessible except by trail, in a primitive watershed with unpolluted waters, and eligible for classification as a wild river. The Santa Ana River from Big Meadows to Filaree Flat is readily accessible by road and trail, has significant recreation improvements (developed recreation sites, recreation residences, and organization camps) along its shore, and is eligible for classification as a recreation river. The segment of the Santa Ana River from Filaree Flat to the confluence with Bear Creek has a largely undeveloped shoreline, is accessible at one location by road, and is eligible for classification as a scenic river. Other segments studied were not eligible, because they are not free-flowing.

Siberia Creek	Places: Big Bear, 3.0 miles

Siberia Creek is eligible for classification as a scenic river, because of its outstandingly remarkable botanical values, free-flowing nature, location in a largely primitive watershed, and accessibility from non-motorized trails. Siberia Creek supports rare, high-altitude, montane wet meadow habitat, nationally significant occurrences of the pedate checker-mallow and California taraxacum, both federally listed species. The presence of the champion lodgepole pine within a quarter-mile of the stream corridor is nationally significant.

Whitewater River	Places: San Gorgonio, 24.2; San Bernardino Front Country, 1.2 miles

Based on outstandingly remarkable scenery and wildlife values, most of the Whitewater River, including portions of its various forks is eligible for classification as a wild river. The scenery here is highly diverse, colorful and striking, with regionally unique headwater springs and steep, textured canyon walls. The river corridor also supports a large amount of quality (remote, pristine, designated wilderness) and diverse habitat for regionally significant populations of Nelson's bighorn sheep (California rare), California spotted owl (Region 5 sensitive species, federal candidate), mule deer and black bear. Only a minor length of the river with diversions is not free-flowing and therefore ineligible for Wild and Scenic River designation. The remainder of the river is free of impoundments, inaccessible by road or trail, and located in a primitive watershed with unpolluted waters.

Deep Creek	Places: Arrowhead, 10.6 miles; Silverwood, 9 miles

The landscape surrounding Deep Creek is unique in a southern California context, and its recreation opportunities are valued at the regional and national levels. Thermal hot springs (found within the Deep Creek corridor) are unique and regionally important. Deep Creek supports the greatest diversity of wildlife habitats of any drainage on the San Bernardino National Forest and has earned the State designation of a Wild Trout Stream. It also represents some of the greatest diversity of vegetation communities of any drainage on the national forest. Approximately 11 miles of this river are eligible for designation as scenic and 9 miles are eligible for designation as wild, as they are free of impoundments, inaccessible except by non-motorized trail, and in a primitive watershed with unpolluted water.

Research Natural Areas

Established

Cahuilla Mountain	861 acres	Places: Anza

The 861-acre Cahuilla Mountain Research Natural Area (RNA) is located on the southern end of the San Jacinto Ranger District. Topography is mostly gentle to moderate upland that breaks off as an abrupt escarpment. Both black oak and Coulter pine are well-distributed, and occur in a variety of community states ranging from nearly pure stands to various mixtures with each other and with canyon live oak. Some individual black oak specimens are impressive in size and quality.

Fishermans Camp	412 acres	Places: Arrowhead

Located on the Mountaintop Ranger District, the 412-acre Fisherman's Camp RNA represents coulter pine (*Pinus coulteri*) forest vegetation and is located in the Deep Creek drainage. Deep Creek is eligible for Wild and Scenic River designation. The area also contains riparian vegetation, extensive areas of western Ponderosa pine forest, and an uncommon association of Coulter pine and canyon live oak. The area provides habitat for California spotted owls and southern rubber boas. There is public access to the RNA via hiking trails and administrative access via a gated national forest road.

Hall Canyon	671 acres	Places: Idyllwild

Located on the San Jacinto Ranger District, the 671-acre Hall Canyon RNA represents mixed conifer vegetation. Public access is restricted, because entry is through the University of California James Reserve in Hall Canyon, across private land. The watershed is relatively undisturbed, except for a wildland fire burn along the western and northern boundary (a small portion of which was replanted as a rehabilitation measure). Six conifer and two hardwood overstory species are well represented throughout the area. The RNA is within the Black Mountain Scenic Special Interest Area; however, the scenic designation is compatible with RNA designation.

Horse Meadow	935 acres	Places: San Gorgonio

The Horse Meadow RNA is located on the San Gorgonio Ranger District and lies entirely within the San Gorgonio Wilderness. This 935-acre RNA was established for its stands of white fir. It is one of the larger Research Natural Areas on the national forest, most of it very steep or partially stabalized talus. The stands of white fir are typical of southern California mountain areas. There are many seeps and springs on the slope, where riparian vegetation is common.

Millard Canyon	785 acres	Places: San Gorgonio

Located on the Front Country Ranger District, the 785-acre Millard Canyon RNA represents interior live oak (*Quercus wislizenii*) vegetation and is located on the eastern slope of the middle fork of Millard Canyon. The area also contains well-developed bigcone Douglas-fir (*Pseudotsuga macrocarpa*) and canyon live oak (*Quercus chrysolepis*). Other vegetation types represented include chaparral and sage scrub on the drier slopes, and canyon live oak, mixed conifer and rock outcrops at the highest elevations. Access to the Millard Canyon RNA is through the Morongo Indian Reservation. The watershed is relatively undisturbed vegetation that provides excellent wildlife habitat including one of the highest density black bear habitats in southern California. The RNA is entirely within the San Gorgonio Wilderness.

Recommended

Arrastre Flat	1,451 acres	Places: Big Bear Back Country, and Desert Rim

This area is located on the Mountaintop Ranger District approximately three miles north of Big Bear Valley, just east of Holcomb Valley in the San Bernardino Mountains. The area includes Arrastre, Union, and Burnt Flat. This area is approximately 1,143 acres and ranges from 6,000 feet above sea level at Mohawk Mine to 7,735 feet above sea level in Arrastre Flat.

The proposed Arrastre Flats RNA exemplifies the unique pebble plain habitat type and the many rare plant species it supports. The site includes pristine, characteristic examples of pebble plain habitat, as well as areas of habitat that were previously disturbed and are now being restored. The variety in the quality of habitat makes this RNA an excellent site for studying the 'real-life' situation and challenges of effectively conserving pebble plain habitat. The presence of National Forest System roads 3N16 and 3N02 would provide easy access for researchers into the RNA.

Blackhawk	1,561 acres	Places: Big Bear Back Country, Desert Rim

This area is located on the Mountaintop Ranger District approximately six miles northeast of Big Bear Valley in the northeastern San Bernardino Mountains, near Cushenbury Canyon and Cactus Flat. This area is 1,861 acres and ranges from 4,600 feet above sea level at Cushenbury Canyon to 6,756 feet above sea level at Silver Peak.

The recommended Blackhawk RNA includes outstanding populations of four federally listed plant species, which are endemic to limestone-derived substrates in the northeastern San Bernardino Mountains. These populations have been designated as critical habitat by the U.S.

Fish and Wildlife Service. The site is in very good ecological condition and provides an excellent example of the rare carbonate plant species and their habitat. Under the Carbonate Habitat Management Strategy (a multi-jurisdictional plan for conserving federally-listed limestone endemic plant species while preserving economic interests in the limestone), a portion of BLM land adjacent to the Blackhawk RNA would also be recommended as an RNA, effectively creating one large RNA managed by both agencies. The recommended RNA on BLM land would add approximately 995 acres to the Blackhawk RNA.

Broom Flat	417 acres	Places: Big Bear

This area is located on the Mountaintop Ranger District in the eastern San Bernardino Mountains, approximately three miles from eastern Big Bear Valley, southwest of Broom Flat and north of State Highway 38. This area is approximately 468 acres and ranges from 7,150 feet above sea level to 8,095 feet above sea level**.**

The Broom Flat RNA represents relatively homogenous stands of single-leaved pinyon, western juniper and curl-leaf mountain mahogany, some of which are notably large and long-lived on the San Bernardino National Forest. Although there is not a lot of habitat diversity, the RNA does provide a good representation of all age classes within the dominant pinyon/juniper woodland type. The aspen grove in the northeast corner is one of only two known groves in the San Bernardino Mountains and is a disjunct population 200 miles away from the nearest populations in the Sierra Nevada Range and Mexico. This RNA provides an opportunity to study both rare and widespread plant communities on the San Bernardino National Forest.

Cleghorn Canyon	1,662 acres	Places: Cajon

This area is located on the Front Country Ranger District in the Cajon Pass area in the western San Bernardino Mountains, and is approximately three miles north of the town of Devore. This area is approximately 1,880 acres and ranges from 2,920 feet above sea level to 5,280 feet above sea level.

The recommended Cleghorn Canyon RNA represents a mixture of natural communities and the target element is western sycamore-alder riparian forest. The canyon is relatively free of nonnative plant species and is essentially roadless. At least 20 special-status plant and wildlife species occur in Cleghorn Canyon, including federally threatened, endangered and Region 5 sensitive and watchlist species. Suitable habitat for several more species is also present. Cleghorn Canyon is also the best remaining corridor for wildlife movement between the San Gabriel and San Bernardino Mountains. Establishment of this RNA would allow for protection of a diverse array of plant communities and wildlife habitat and would also provide an opportunity to study the interactions between rare wildlife species and the habitats on which they depend.

Wildhorse Meadow	1,256 acres	Places: San Gorgonio

This area is located on the Mountaintop Ranger District between Wildhorse Creek and Lightning Gulch south and east of Sugarloaf Ridge in the San Bernardino Mountains. Approximately three miles south of Big Bear Valley, this area is approximately 1,256 acres and ranges from 8,400 feet above sea level to 9,465 feet above sea level.

The recommended Wildhorse RNA focuses on Wildhorse Meadow, which is highly representative of the rare montane meadow habitat type in the San Bernardino Mountains. The wet meadow habitat supports two federally endangered plant species, as well as several Region 5 sensitive and watchlist species. In addition, the recommended RNA includes several inclusions of undisturbed, characteristic pebble plain habitat, which also support federally listed species. National Forest System road 2N93 would provide easy access into the RNA for researchers.

Special Interest Areas

Baldwin Lake Holcomb Valley	Botanical, Zoological, Cultural	Places: Big Bear, Big Bear Back Country

Acres: 10,790

Located on the Mountaintop Ranger District, the North Baldwin Lake and Holcomb Valley Special Interest Area (SIA) is recognized for its unique botanical, zoological, pre-historical and historical values. The pebble plain and wet meadow habitat here support one of California's highest concentrations of threatened, endangered, rare and endemic plant species. Federally threatened bald eagles are present around Baldwin Lake in the winter months, and when full, this lake supports one of the largest concentrations of waterfowl in southern California. Other unique wildlife species such as the unarmored three-spine stickleback fish, southwestern willow flycatcher, California spotted owl, and Andrew's marble butterfly are also present within the SIA. Prehistoric and historic heritage resources are also found here and the area is highly valued by tribal members who regard Baldwin Lake as the epicenter of the Serrano creation. The remains of the Bairdstown (Doble) and Belleville mining towns (sites of the largest gold rush in southern California history) can be accessed via a motorized interpretive route in Holcomb Valley. Numerous other National Forest System roads and trails provide access throughout the SIA.

Black Mountain	Botanical and Scenic	Places: Idyllwild, Santa Rosa and San Jacinto Mountains National Monument

Acres: 6,606

The Black Mountain Scenic SIA (located on the north end of the San Jacinto Ranger District) is an area of old growth Jefferey and sugar pine with large, unique rock outcrops and scenic vistas, which makes it a popular vistor attraction. Fires have burned over a significant portion of the area, particularly on the steep slopes of the west and north sides of Black Mountain. California State Highway 243 and National Forest System roads provide access around and within the SIA.

Arrastre Creek	Botanical, Zoological, and Heritage Resources	**Places**: Big Bear Back Country, Big Bear, Desert Rim

Acres*:* 3,551 acres

Description of Values*:* The Arrastre Creek Special Interest Area (SIA) is notable for its high diversity and quality of biological resources, as well scenery and solitude. Arrastre Creek is one of only a few perennial streams on the desert side of the San Bernardino Mountains, and provides valuable habitat for many wildlife species. The riparian corridor of Arrastre Creek

serves as a wildlife linkage that connects the Cushenbury herd of rare Nelson's bighorn sheep to the San Gorgonio herd. In addition, Lone Valley is a nesting site for common nighthawks, gray vireos, and gray flycatchers. Other notable bird species in the area include the hepatic tanager, the calliope hummingbird, and Lewis' woodpecker. A 'blue' butterfly is also known from Arrastre Creek, which is considered to be a new species unique to the area. The Arrastre Creek SIA also supports three federally listed plant species that only occur on calcium carbonate/limestone soils in the San Bernardino Mountains (*Eriogonum ovalifolium* var. *vineum, Astragalus albens and Erigeron parishii*). Pebble plain habitat is also present. In addition, single-leaf pinyon pines and some of the largest known Joshua trees cover the landscape in Lone Valley, creating a scenic and botanically diverse area. There are also heritage resource values. The Pacific Crest National Scenic Trail, and Deer Springs (Arrastre) Trail Camp are located adjacent to the creek near its headwaters.

Description of Area*:* The Arrastre Creek Special Interest Area is located in the northeastern San Bernardino Mountains, beginning around 8,200 feet at the headwaters in T1N, R2E, S1 and continuing northward through T2N, R2E, Sections 2,3,11,14,23,26,35,36 and T3N, R2E, S 27,34 on the USGS 7.5-minute Onyx Peak, Moonridge, Big Bear City and Rattlesnake Canyon Quadrangles. This SIA extends 1/4 mile to either side of the creek. A small section of the southern portion is within the recommended Broom Flat Research Natural Area. The portion north of National Forest System road 3N03 to the national forest boundary is mostly within the existing Bighorn Mountain Wilderness. The creek exits the national forest on to BLM lands in the Horsethief Flat area, outside of the Wilderness at 4,600 feet. Notable landscape features include Arrastre Creek, Lone Valley, Granite Spring (a historic limestone mining operation), and the Horsethief Flat area. Geology in the area is composed of calcareous limestone outcrops, mixed alluvium, and fractured gneiss overlaid with coarse loam. Vegetation communities include single-leaf pinyon pine/western juniper woodland, Joshua tree woodland, and riparian woodland in Arrastre Creek.

Access*:* National Forest System roads 2N01, 2N02 and 3N03 provide access through portions of the Arrastre Creek Special Interest Area, as does the Pacific Crest National Scenic Trail. California State Highway 38 (the Rim of the World Scenic Byway) lies about 1/8 mile west of the headwaters.

Desired Condition*:* The Arrastre Creek Special Interest Area provides recreation opportunities and protection for endangered plants, native wildlife species and their movement corridors, and heritage resources. Natural disturbance processes function within historic range of variability. Conservation education improves visitor experience and promotes stewardship by focusing on the natural history and the unique resources that are present.

San Andreas	Cultural, Geological and Zoological	**Places**: Cajon, Mojave Front Country (Within San Bernardino National Forest).

Acres*:* 4,955

Description of Values*:* The San Andreas Special Interest Area (SIA) is located primarily within the Cajon Pass. This pass is a critical Regional Transportation and Utility Corridor, but also is a special place recognized for a multitude of natural values. It is one of the narrowest passes in southern California that connect the coastal climate, vegetation, and ecosystems to that of the

desert, and as such there is a tremendous variety of plants and wildlife. The Cajon Wash has one of a few undammed perennial streams on the national forest with native threatened and endangered species occurring there, because of the water and riparian habitat, as well as periodic flooding. Included in this list are the Federally endangered arroyo toad and San Bernardino kangaroo rat. Riparian willows support least Bell's vireos. The alluvial fan sage scrub present in the wash is one of the most endangered habitats in southern California, most of which is being developed or channelized, destroying biological values. This vegetation community supports one of the most important populations of short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), which is a Region 5 sensitive plant species. Other botanical features within the San Andreas SIA include occurrences of Plummer's mariposa lily (*Calochortus plummerae*) and Parry's spineflower (*Chorizanthe parryi* var. *parryi*), which are both Region 5 sensitive species, and suitable habitat for the federally and California state endangered slender-horned spineflower (*Dodecahema leptoceras*), which occurs outside of the SIA.

This area is also known for its heritage resource and paleontological values. Cajon Pass served as a corridor not only for Native Americans, but also by early historic explorers between the upper desert, cismontane and coastal areas. Later use included the migration of people from the Dust Bowl area to California via Route 66 in the 1920s and 1930s.

Within the SIA are many sensitive and significant paleontological remains. These deposits range from 100,000 to several million years old and represent invertebrate and vertebrate life forms.

Cajon Creek has one of the few native fisheries remaining on the national forest with Santa Ana speckled dace occupying suitable habitat. The stream and high water table results in the largest lush riparian stringer of willow and cottonwood within the national forest. Lost Lake, a small fault pond lined with cottonwood, willow and cattail provides high quality wildlife habitat, as well as recreation opportunities. This extremely valuable habitat supports nesting endangered least Bell's vireo and most likely southwestern willow flycatcher.

The Cajon Pass forms a critical landscape linkage for species survival and evolution by linking the desert and coastal species, as well as providing a linkage between the San Gabriel and San Bernardino Mountains. Large mammals (such as mountain lion) which need large tracts of land to survive in the long-term are dependent upon these linkages between large blocks of suitable habitat. The SIA is also located directly on top of the San Andreas Fault. There are striking geological formations that lend themselves to interpretation. The Mormon Rocks geological formations are excellent raptor nesting cliffs and have been used by peregrine and prairie falcons.

Access: The San Andreas Special Interest Area is very accessible with Interstate 15, historic Highway 66, and California State Highway 138 running much of its length. Freight trains rumble through the pass on several sets of tracks. The Pacific Crest National Scenic Trail crosses Cajon Wash at Crowder Canyon. Mormon Rocks Fire Station and nearby interpretive trail are in the northern section of the SIA.

Desired condition*:* The desired condition for the San Andreas Special Interest Area is to maintain the quality of the natural resources while continuing to provide use as a transportation and utility corridor. The management emphasis will promote protection of the unusual heritage characteristics of the area. Where appropriate, development and interpretation of the heritage values may be considered for public education. The unique habitats and wildlife, cultural and geological values of the area would also be featured in interpretive talks and presentations. Installation of additional interpretive signing and interpretation along nature trails and other

forms of environmental education would help to promote stewardship of the unique resources of the area. Establishment of an 'Earthquake Park' to describe the unique, active geologic setting may be considered in the future.

Childrens Forest	Recreation and Scenic	Places: Arrowhead

Acres: 3,395

Description of values: The National Children's Forest is an encapsulated, multiple-use working forest offering high quality youth development and conservation education programs in partnership with a nonprofit partner (the San Bernardino National Forest Association (SBNFA)). It is a unique place where youth are empowered to learn about the environment and then share that knowledge with visitors, partners and Forest Service staff as they help to guide and implement management decisions. The National Children's Forest has developed a strategic plan, as well as annual program plans. Major programs in education, ecosystem management, and interpretation at the Deer Lick Visitor Information Center are in operation year-round.

Description of area: Located in the Arrowhead Place. In November 1970, a large wildland fire burned 53,000 acres of national forest lands. Almost immediately, the Forest Service began the process of renewing the forest by salvaging dead trees, reseeding barren slopes to protect topsoil, and planting young trees. In partnership with Hunt-Wesson Foods, Inc. a campaign directed toward youth was started to help reforest this area. The overwhelming success of this project led to the creation of a new idea, the National Children's Forest. The original 20-acre site within the San Bernardino National Forest was one of three sites selected nationally. That small area grew into an expanded 3,395 acres during the early 1990s. It now consists of a distinctive Visitor Information Center shared with a Forest Service Fire Station at Deer Lick, portions of the Snow Valley Ski Resort, Shady Cove Group Campground, National Children's Forest Trailhead and Interpretive Trail, and Keller Peak Fire Lookout (where spectacular scenic views extend into much of southern California). Elevations range from 6,000 feet to 7,880 feet. The vegetation is primarily montane mixed conifer.

Access: California State Highway 18 (a leg of the Rim of the World Scenic Byway) leads through the communities of Running Springs, Deer Lick and Arrowbear Lake, and generally forms the northern boundary of the National Children's Forest. At the Deer Lick Fire Station and Children's Forest Visitor Information Center, Forest Road 1N96 leads into the National Children's Forest.

Desired condition: The National Children's Forest creates opportunities for visitors to learn how to enjoy a wildland setting and become an active stakeholder in their national forest; where youth may learn, participate and help make decisions about the stewardship of the national forest; and where a public land management agency can learn to work with partners to provide governance and support for this program, creating a model for others around the nation.

Appendix B - Program Strategies and Tactics

This section describes the detailed program strategies that the national forest may choose to make progress toward achieving the desired conditions and goals discussed in Part 1. The national forest will prioritize which strategies will be brought 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. **Please note, not all of the strategies are numbered consecutively. The strategies listed in Appendix B are those the San Bernardino National Forest managers intent to emphasize in the next 3-5 years (2006 through 2008-2010).**

Tribal 1 - Traditional and Contemporary Uses

Continue traditional uses and access to traditionally used areas (as well as contemporary uses and needs) by tribal and other Native American interests:

- Use opportunities during project planning and implementation to identify, enhance, and protect 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.
- 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 (i.e., 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 and non-federally recognized tribes:

- Develop protocols to promote collaborative partnerships for heritage resource management (e.g., inventory, monitoring and interpretation), ecosystem restoration, comprehensive fire planning, and to recognize historic Native American access rights to land areas and resources.
- 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.
- Improve tribal consultation by making concerted effort to reach tribes via initial and follow-up letters, phone calls, emails and meetings to obtain their concerns and opinions regarding proposed projects.

AM 1 - Land Management Plan Monitoring and Evaluation

Report the results of land and resource 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 forest 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, store, and analyze the scientific and technical information needed to address agency priorities including:

- Develop the capacity using existing federal (FGDC) databases and monitor the results to track and display the cumulative effects of forest plan implementation.
- Survey suitable habitat for presence or absence of federally listed and Region 5 sensitive species. Update all maps and databases as information is obtained.
- Identify and map all riparian areas as part of project analysis and enter into FGDC database.
- Inventory geologic resources (i.e., fossils, caves, groundwater basins and extractions, geologic special interest areas, geologic features along scenic corridors, etc.) that are accessible to the public, affecting other resource areas, or needing special management or protection.
- Identify geologic hazards (i.e., seismic activity, landslides, land subsidence, flooding and erosion) through landscape and watershed planning, sediment placement site planning, engineering design, reclamation and maintenance as part of landscape or project assessment.
- Inventory water extractions and diversions
- 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 for inclusion into Natural Resource Information System (NRIS) database.

- Work with the appropriate agencies and academic sources to develop protocols and survey guidelines, gather current information and identify research needs. Identified needs for study and research include:
- Techniques for successful revegetation and restoration of highly disturbed landscapes such as mines.
- Effects of nonnative species on threatened, endangered, proposed, candidate, and sensitive species habitat.
- Effects of management activities on threatened, endangered, proposed, candidate, and sensitive species.
- Effects of cowbird interactions on vireos and flycatchers .
- Improved methodology for removal of invasive nonnative species (i.e., bullfrog, etc.).
- Ecological effects of fuel treatments.
- Effects of off-highway vehicle disturbances and other recreation activities on wildlife.
- Validation of habitat linkage use by target species such as mountain lion.
- Effects of forest product removal on other resources.
- Effects of grazing and vegetation 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 5 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 1.

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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 recovery 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.

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 (San Bernardino NF Conservation Strategy, table 531).
- 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.
- Restore degraded habitats with cooperators.
- Recommend mineral withdrawal when needed to provide species protection over the long-term.
- Emphasize the following practices within carbonate, montane meadow and pebble plain habitat:
    - Develop and implement a transportation plan that results in the reduction in road density and no new roads or motorized trails within carbonate, montane and pebble plain habitat.
    - Develop and implement a facilities plan for carbonate, montane meadow, and pebble plain habitat that avoids construction of new recreation and administrative facilities within these habitats.
    - Amend/modify existing special-use authorizations to include provisions for minimizing impacts to carbonate, montane meadow and pebble plain habitat. Avoid new authorizations for special-uses in these habitats where the requested use would adversely affect habitat. In carbonate habitat, mining special-uses will be permitted consistent with the terms of the Carbonate Habitat Management Strategy.
    - Implement a program of land acquisition and land exchange that will contribute to the carbonate habitat reserve as described in the Carbonate Habitat Management Strategy.
    - Develop contingency plans that will minimize impacts to carbonate, montane meadow and pebble plain habitat from actions and activities that occur during emergencies.

- Develop and implement a monitoring plan that will provide early detection of downward trends in the quality of carbonate, montane meadow and pebble plain habitat.

Linked to National Strategic Plan,
Goal 5 - Improve watershed condition, and
Goal 6 - Mission related work in addition to that which supports the agency goals.

Table 531. San Bernardino NF Conservation Strategy

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

Strategy: Education/ Information/ Interpretation

Specific Species

Importance of riparian and aquatic species and habitat:

arroyo chub, Santa Ana speckled dace, unarmored three spined stickleback and other native fishes, arroyo toad, California red-legged frog, mountain yellow-legged frog, southern Pacific pond turtle, American dipper, southwestern willow flycatcher; montane meadow and vernal mesic habitat plant species

Value of vegetation management to species at risk:

Quino checkerspot butterfly, San Gabriel Mountains elfin butterfly, vernal blue butterfly, bald eagle, California spotted owl, flammulated owl, golden eagle, and long-eared owl

Importance of keeping vehicles on roads:

arroyo toad, southern rubber boa, *Galium californicum* ssp. *primum*; pebble plain and carbonate habitat plant species

Habitat fragmentation, species linkages and corridors and biological diversity:

American badger, mountain lion, Nelson's bighorn sheep, and Peninsular bighorn sheep

Strategy: Survey/ Inventory/ Increase Knowledge Base

Specific Species

Riparian and aquatic species:

aquatic invertebrates, arroyo chub, Santa Ana speckled dace, unarmored three spined stickleback and other native fishes, arroyo toad, California red-legged frog, mountain yellow-legged frog, western spadefoot, southern Pacific pond turtle, southwestern willow flycatcher; montane meadow and vernal mesic habitat plant species

Species with limited distribution:

California diplectronan caddisfly, Erlich's checkerspot butterfly, Quino checkerspot butterfly, San Gabriel Mountains elfin butterfly, vernal blue butterfly, *Gentiana fremontii*, and *Malaxis monophyllos* ssp. *brachypoda*

Terrestrial species:

southern rubber boa (San Jacinto Mtns), American badger, mountain lion, Nelson's bighorn sheep (San Gabriel Mtns), San Bernardino kangaroo rat, and San Bernardino flying squirrel (San Jacinto Mtns)

Upland plants:

Calyptridium pygmaeum, Galium californicum ssp. *primum,* and *Monardella macrantha* ssp. *hallii*

Strategy: Habitat Restoration/ Improvement

Specific Species

Streambank stabilization, riparian area plantings:

arroyo chub, Santa Ana speckled dace, Santa Ana sucker, unarmored threespine stickleback and other native fishes, and southwestern willow flycatcher

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 and other native fishes, arroyo toad, southern Pacific pond turtle and southwestern willow flycatcher

Control of feral animals--domestic sheep and dogs:

Nelson's bighorn sheep and Peninsular bighorn sheep

Vegetation and fuel treatments, prescribed burning:

Quino checkerspot butterfly, partially armored threespine stickleback, Santa Ana sucker and other native fishes, mountain yellow-legged frog, California spotted owl, flammulated owl, purple martin, Nelson's bighorn sheep, and Peninsular bighorn sheep

Strategy: Monitor/Study

Specific Species

Generally, focus on federally listed species:

Riparian or aquatic species:

Santa Ana speckled dace, Santa Ana sucker, unarmored three spined stickleback, arroyo toad, mountain yellow-legged frog, least Bell's vireo, and southwestern willow flycatcher

Species responsive to vegetation treatments:

California spotted owl and Nelson's bighorn sheep

Species recovery after wildfire (burned area monitoring):

Santa Ana speckled dace, mountain yellow-legged frog, California spotted owl, and *Sidlacea hickmanii* ssp. *parishii*

Upland plant species:

Arenaria lanuginosa ssp. *saxosa*, *Galium californicum* ssp. *primum*, *Taraxacum californicum*, *Poa atropurpurea*, pebble plain and carbonate habitat plant species

Strategy: Maintain/Improve Habitat over Long Term

Specific Species

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

Prescribed fire or vegetation treatment:

arroyo chub, partially armored threespine stickleback, Santa Ana speckled dace, Santa Ana sucker, Shay Creek unarmored threespine stickleback, arroyo toad, mountain yellow-legged frog, western spadefoot, mountain garter snake, south coast red-sided garter snake, southern rubber boa, American dipper, calliope hummingbird, California spotted owl, long-eared owl, purple martin, and southwestern willow flycatcher

Coordination with other agencies:

mountain yellow-legged frog, American badger, mountain lion, Nelson's bighorn sheep, San Bernardino kangaroo rat, California condor, California spotted owl; pebble plain, montane meadow and carbonate habitat plant species

Habitat acquisition:

western spadefoot, southern rubber boa, bald eagle, California spotted owl, flammulated owl, long-eared owl, southwestern willow flycatcher, American badger, mountain lion, Peninsular bighorn sheep; pebble plain, montane meadow, and carbonate habitat plant species, especially for the Carbonate Habitat Reserve

Restricted human access during critical life stages (barriers, gates, re-routes, etc. where appropriate):

bald eagle, California spotted owl, golden eagle,and prairie falcon

Prevent the spread of invasive nonnative species (plant and animal):

Santa Ana speckled dace and other native fishes, arroyo toad, mountain yellow-legged frog, southern Pacific pond turtle, southwestern willow flycatcher; pebble plain, montane meadow, and carbonate habitat plant species

Fire prevention and suppression:

vernal blue butterfly, arroyo toad, mountain yellow-legged frog, Belding's orange-throated whiptail, mountain garter snake, southern Pacific pond turtle, bald eagle, California spotted owl, flammulated owl, MacGillivray's warbler, southwestern willow flycatcher, American badger, mountain lion, Peninsular bighorn sheep, San Bernardino flying squirrel, and San Bernardino kangaroo rat

Upland plants:

Poa atropurpurea, *Sidalcea pedata*, *Taraxacum californicum*, *Thelypodium stenopetalum*; pebble plain, carbonate, montane meadow, and vernal mesic habitat plant species

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 (Bear and Deep Creek) 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 2 - Reduce the impacts from invasive species,
Goal 5 - Improve watershed condition, objective 3, and
Goal 6 - Mission related work in addition to that which supports the agency goals, objective 3.

FH 1 - Vegetation Restoration

Restore vegetation through reforestation and revegetation or other appropriate methods after stand replacing fires, drought, or other events or activities that degrade or cause a loss of plant communities. Post reforestation activities may require treatment of competing vegetation to ensure the ability of the planted trees to out-compete vegetation for moisture, nutrients and sunlight. Treatment may require use of pesticides including herbicides.

- Where needed, implement reforestation using native 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 revegetation and to improve restoration success where direct seeding is ineffective.
- Use noxious-weed-free seed in all plantings.
- Consider limited use of giant sequoia because of their resistance to air pollution and insects.

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 increased human caused 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.
- Use prescribed fire and other methods to protect subalpine forest and woodlands from stand replacing fires.
- Protect closed-cone woodlands and forests (Coulter) with developing seed (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.
- Emphasize fire prevention, strategically placed treatments, 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 ponderosa, Jeffrey,and Coulter 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 seed (cone) 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 these 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 life and property (e.g., the urban interface), to improve wildlife forage, and to protect watersheds from the adverse impacts of large, destructive, high intensity fires.
- Remove ladder fuels and forest floor fuel accumulations to protect stands of Parry pinyon from stand replacing crown fires. Reduce fuel loading in chaparral adjacent to these stands so that future wildland fires are less likely to initiate crown fires from surrounding shrublands.

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 at risk due to insect or disease loss at levels outside of the historic 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 staff responsible for forest health protection. Forest health protection staff will investigate reported vegetation concerns, and coordinate funding for pest prevention and suppression projects.
- Consider desired pest management suppression projects when economically viable, such as suppression of mistletoe in high value trees at developed recreation sites.
- Consider selected use of insecticides to prevent mortality due to insect infestation of high value trees at developed recreation sites or administration sites.
- Consider limited use of pesticides to prevent mortality of high value trees at developed recreation sites, administrative or other important 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 Emissions

Maintain and update the inventory for wildland fire emissions and other national forest resource management emissions within the current State Implementation Plan (SIP). The State Implementation Plan inventories establish levels of air pollution that meet the long-term federal air quality goals for bringing the nonattainment 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.
- Provide input to AQMD on regional air quality issues for forest protection.

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 the impacts of existing or proposed groundwater extraction and tunneling projects and proposals in order to assure that developments will not adversely affect aquatic, riparian or upland ecosystems.
- Restore, maintain and improve watershed conditions over the long-term. Assure that 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 (RCAs) to maintain or improve conditions for riparian dependent resources. Riparian conservation areas include aquatic and terrestrial ecosystems and lands adjacent to perennial and intermittent streams, as well as around meadows, lakes, reservoirs, ponds, wetlands, seeps, and springs and other water bodies. 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 principals and relationships into ecosystem management; reduce risks to people and resources; and interpret and protect unique values.
- Identify and prioritize based on risk, and mitigate impacts of abandoned and inactive landfills on water, soil and other resources. Stabilize and, where necessary, reclaim 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 replacing or 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 over the long-term:

- Assess impacts of existing and proposed groundwater extractions and tunneling projects and 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).
- 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. Include appropriate conservation and water quality mitigation measures in the review response when reviewing non-forest water-related projects that may affect forest resources.
- Conserve and protect high-quality water sources in quantities adequate to meet national forest needs.
- Take appropriate actions to meet Total Maximum Daily Load (TMDL) standards.
- Take corrective actions to eliminate the conditions leading to 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:

- Develop a 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 non-National Forest System 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 lands, 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; and provide habitat maps to response personnel for hazardous spills.

Link 1 - Landscape Linkages

Identify linkages to surrounding habitat reserves and other natural areas for maintenance of 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 maintenance of biodiversity.
- Work with land conservancies, local government and others to secure long-term habitat linkages.
- Manage national forest uses and activities to be compatible with maintenance of 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. Focus on the ecological, social, and managerial conditions within each wilderness.
- 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 and promote natural processes, or where community protection needs exist due to development on private lands near the wilderness.
- Emphasize Minimum Impact Suppression Tactics in all wilderness wildand fire responses (see Appendix B in Part 3 of the forest plan). Suppression operations in the six 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 proposed 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 recommended 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:

- If a wild and scenic river is designated prepare a Comprehensive River Management Plan and boundary declaration.
- For those recommended 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 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. Uses and management activities, including access, that complement or are subordinate to the values and features are allowed:

- Update existing and prepare new management plans, implementation schedules and monitoring protocols for SIAs as per Forest Service Manual and Handbook direction.

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 does 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, while focusing on those sites with recognized significance or are 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 and 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 re-use 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. High sensitivity is defined as land that is less than 15 percent slope or areas identified by tribes.

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 and comprehensive agreements.

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

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 appreciably affecting recreation experiences, public safety and environmental resources. Manage visitor use within the limits of identified capacities:

- Implement recreation capacity control measures in high use and/or concentrated 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. Ensure 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 meet current needs and future demand. As a priority compensate for opportunities lost due to closures.
- Inventory and analyze existing and potential dispersed use, including recreational target shooting, plinking, 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 the development of strong, well-supported conservation education partnerships with nonprofit groups, volunteer groups, communities, governments, organization camps, school districts, universities, colleges, and private entities, while 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, projects and visitor centers.

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 to harmonize changes in the landscape and advance environmentally sustainable design solutions.

LM 2 - Landscape Restoration

Restore landscapes to reduce visual effects of nonconforming features:

- Prioritize landscape restoration activities in key places (Arrowhead, Big Bear, Big Bear Back Country, Front Country, Garner Valley, Idyllwild, Lytle Creek, San Bernardino Front Country, San Gorgonio, and Santa Rosa and San Jacinto National Monument). Integrate restoration activities with other resource restoration.
- Restoration of landscape should consider not only the existing condition but the sustainable natural appearing landscape that is the desired condition of the mature forest.

LM 3 - Landscape Character

Maintain the character of "Key Places" (see LM2) 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 scenic travel routes.

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 - Facilities 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 facility needs of 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.
- 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.
- Obtain facilities necessary to accommodate the staff and equipment.

Trans 1 - Transportation Management

Plan, design, construct, and maintain the 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. Reduce the number of unnecessary unclassified roads and restore landscapes:

- Enhance user safety and provide 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 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 roads or trails when site-specific road analysis determines there is a public need.
- Decommission roads and trails that have been determined to be unnecessary and establish level of restoration during project planning.

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. Manage the Pacific Crest National Scenic Trail 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.

Off-Highway Vehicles

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

- Manage the National Forest System roads for a spectrum of 4-wheel drive opportunties in the easy, more difficult, and most difficult categories of route difficulty.
- Develop motorized trails that address the needs of off-highway vehicle enthusiasts in conjunction with the designation of low-maintenance standard roads.
- Submit candidate roads and trails to the state of California, Off-Highway Motor Vehicle Division, for designation as the California Backcountry Discovery Trail as opportunities to provide this experience are identified.

Linked to National Strategic Plan
Goal 3 - Provide outdoor recreation opportunities, objectives 1 and 2.

SFP 1 - Offer Special Forest Products

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

- Use Timber Information Management System (TIMS) 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.
- Encourage collection of woody species under miscellaneous forest product permits in fuel reduction treatment areas, road maintenance areas, or other project areas with completed environmental analysis.
- Develop consistent national forest policy for special forest products.

WP1 - Offer Wood Products

WP 1: Offer Wood Products

Offer wood products as a by-product of ecoysystem management, healthy forest restoration, fuels management and/or community protection projects.

- Offer wood products (saw timber, house logs, pulpwood, cull logs, utility poles, and wood chips) as by-products of thinning for forest restoration or fuel reduction projects.
- Use appropriate sales, contracts, or agreements as methods to reduce biomass or fund removal of biomass.

Lands 1 - Land Ownership Adjustment

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

- 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
- All special-uses comply with law, regulation, and policy. Upon termination restore areas to a specified condition. Administer existing SUAs in threatened, endangered, proposed, candidate, and sensitive species habitats to ensure they avoid or minimize impacts to threatened, endangered, proposed, candidate, and sensitive species and their habitats.
- 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 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.
- Develop operation and maintenance plans for special-use authorizations within threatened, endangered, proposed, candidate, and sensitive species habitats.
- For special-use authorization holders operating within threatened, endangered, proposed, candidate, and sensitive species occupied habitats 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.
- Use signing, barriers, or other suitable measures to protect threatened, endangered, proposed, candidate, and sensitive species occupied habitats within special-use authorization areas.
- Cooperate with other agencies to facilitate mass transit opportunities.
- Cell and communication sites, as well as other utilities should conform to Scenic Integrity Objectives by siting color and shape of structures without complete dependence on vegetation; site installations should also be sufficiently hardened to survive wildland fire burn-over and continue operations without removal of surrounding vegetation or structural protection.

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 backlog of landline posting and incidents of trespass:

- Survey and post key boundaries to eliminate occupancy trespass and encroachments.
- Survey and protect boundaries to support fuels treatment projects.

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 threatened, endangered, and proposed species habitat 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 threatened, endangered, and proposed species and 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

Administer minerals and energy resources to provide commodities for current and future generations commensurate with the need to sustain the long-term health and biological diversity of ecosystems:

- Use terms and conditions of the operating plan to offset the effects of mining consistent with conserving habitat for threatened, endangered, or sensitive species.
- Eliminate unapproved and noncompliant minerals operations.
- Facilitate environmentally and culturally sensitive exploration, development, and production of mineral and energy resources on National Forest System lands 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.
- Coordinate with the California Department of Fish and Game on applying and enforcing state suction dredge regulations. Participate with the state to identify for the public those sections of streams that are open or closed to suction 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.
- Require a Plan of Operation for suction dredging in threatened, endangered, proposed, candidate, and sensitive species habitat.
- Implement the Carbonate Habitat Management Strategy and the associated Memorandum of Understanding.

ME 2 - Biomass Utilization

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

- Design vegetation management projects where appropriate, to facilitate the use of biomass produced as a by-product of thinning for forest restoration or fuel reduction activities as an energy source.
- Cooperate amongst national forests and with other agencies to develop appropriate long-term infrastructure for biomass utilization.

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 every five years (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 every five years. 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.

LG 3 - Wildhorse and Burro Territories

Wildhorse and burro populations and distribution are managed as specified in the approved territory management plan. Wildhorse and burro territories remain suitable and sustainable over the long-term.

- Periodically review the approved territory management plan and the forest plan to assess whether desired conditions are being met or moving towards. If necessary amend the Wildhorse and Burro Territory Management Plan to meet the forest plan's desired conditions.

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.

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:

- Consider application of fire retardant along roads and adjacent to areas of high recreation use where human-caused wildland fires are frequent.
- Implement national forest use restrictions when there is a lack of firefighting resources or extreme weather and fuel conditions that would result in unstoppable wildland fires.
- Continue with environmental and fire prevention education in the classroom in local schools.
- Restrict vehicle use to National Forest System and non-forest system roads and trails that are designated for motorized use.

Linked to National Strategic Plan
Goal 1- Reduce the risk from catastrophic wildland fire, objective 2.

Fire 2 - Direct Community Protection

Reduce the fire threat to communities using mechanical treatments, prescribed fire and herbicides. Identify and schedule for treatment the high-risk and high-value acres near communities, including the installation of Wildland/Urban Interface (WUI) Defense and Threat Zone vegetation treatments. Highest priority should be given to those evacuation routes, Wildland/Urban Interface Community Defense and Threat Zones and communication site areas with substantial drought and insect-killed vegetation that present a significant threat to life and property in entire communities. Other general national forest priorities will be determined by a process such as fireshed assessment consistent with community protection plans.

Linked to National Strategic Plan
Goal 1- Reduce the risk from catastrophic wildland fire, objectives 1 and 3.

Fire 3 - Fire Suppression Emphasis

Improve wildland fire suppression capability when in proximity to communities or improvements. A full range of suppression strategies may be used elsewhere on the national forest. All human and natural ignitions will be suppressed using control, contain, confine strategies:

- Cross-train with other fire agencies to improve suppression coordination and performance on fires burning in the Wildland/Urban Interface Defense and Threat Zones or developed area interface.
- During periods of limited firefighter availability, communities within the national forest direct protection area should be the highest priority for initial attack coverage.

Linked to National Strategic Plan
Goal 1- Reduce the risk from catastrophic wildland fire, objective 2.

Fire 4 - Firefighter and Public Safety

Firefighter and public safety is the first priority in every fire management activity. Integrate all fire management activities with those of other government agencies and 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 community protection, evacuation, structure protection, and vegetation management plans that will enhance both firefighter and public safety.

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 areas that have burned, and wherever possible connect areas burned in wildland fires to forest health and wildlife habitat improvement projects, as well as fuelbreaks to maintain multiple lines of community defense and to minimize future wildland fire patch size.
- Reduce the fire threat to communities using mechanical treatments, prescribed fire and herbicides.
- Pre-plan fire suppression activities to minimize the use of locations with known invasive nonnative species.

Linked to National Strategic Plan
Goal 1- Reduce the risk from catastrophic wildland fire, objectives 1 and 3.

Appendix C. Maps

San Bernardino National Forest North

Land Use Zones
Recreation Opportunity Spectrum
Scenic Integrity Objectives
Inventoried Roadless Areas
Places

San Bernardino National Forest South

Land Use Zones
Recreation Opportunity Spectrum
Scenic Integrity Objectives
Inventoried Roadless Areas
Places