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Department of
Agriculture

**Forest
Service**

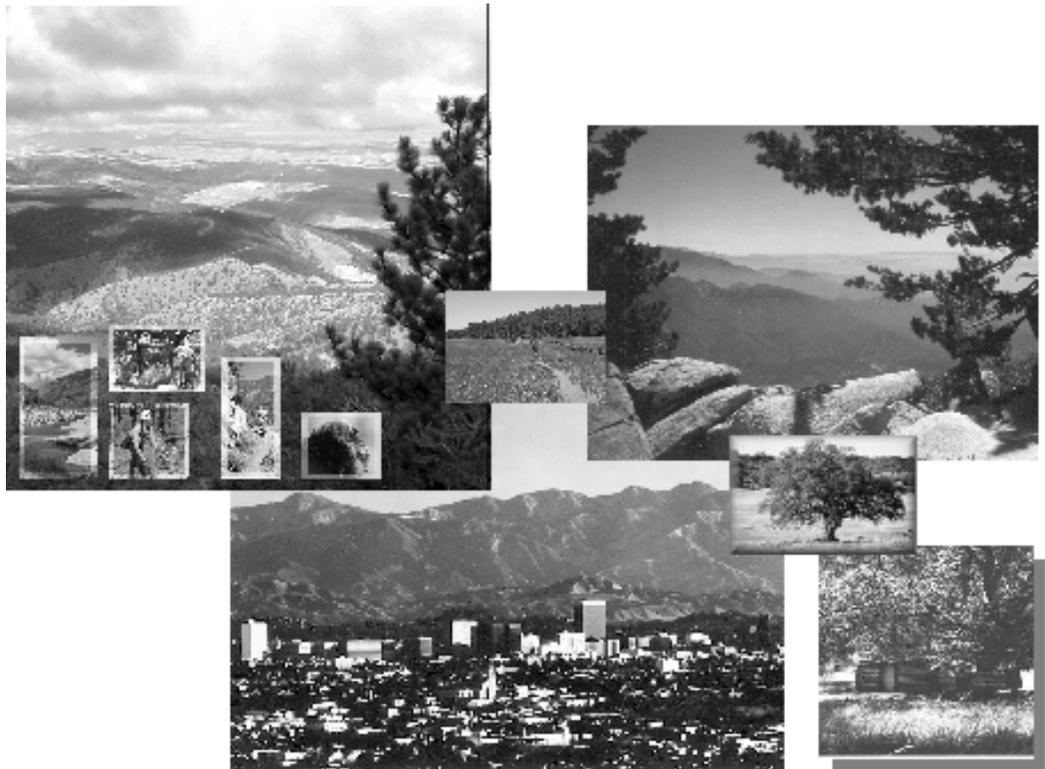
Pacific
Southwest
Region

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Draft Environmental Impact Statement for Revised Land Management Plans

Angeles National Forest Cleveland National Forest Los Padres National Forest San Bernardino National Forest



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Draft Environmental Impact Statement

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Table of Contents - Preface

Draft Environmental Impact Statement For Southern California National Forests Land Management Plans Revision..	Preface 1
Summary.....	Preface 2

Table of Contents - Chapter 1

Chapter 1. Purpose of and Need for Action.....	1-3
Document Structure.....	1-3
Background.....	1-4
Purpose and Need for Action.....	1-5
Proposed Action.....	1-5
Decision Framework.....	1-5
Public Involvement.....	1-6
Issues.....	1-6
Issues 1: Public Values and Uses (Public Use and Enjoyment, Facility Operation and Maintenance).....	1-7
Issue 2: Ecosystem Elements and Function (Resource Management).....	1-7
Issue 3: Commodity Values and Uses (Commercial Uses, Facility Operation and Maintenance).....	1-8
Issue 4: Urban Development and Forest Habitat Linkages (Resource Management, Commercial Uses, Fire).....	1-8
Issue 5: Special Area Designations (Public Use and Enjoyment, Resource Management).....	1-9
Other Issues and Concerns.....	1-9
Other Related Efforts.....	1-9

Table of Contents - Chapter 2

Chapter 2. Alternatives, Including the Proposed Action.....	2-3
Development of Alternatives.....	2-3
The Role of Science in Alternative Development and Environmental Consequences.....	2-3
Elements Common to All Alternatives.....	2-4
Land Use Zone Definitions and Comparison Tables.....	2-4
Alternatives Considered in Detail.....	2-5
Alternative 1.....	2-5
Alternative 2.....	2-6
Alternative 3.....	2-7
Alternative 4.....	2-8
Alternative 5.....	2-9
Alternative 6.....	2-10
The Preferred Alternative.....	2-11
Past Decisions Not Being Revisited in Plan Revision.....	2-12
Alternatives Considered but Eliminated from Detailed Study.....	2-12
Comparison of Alternatives.....	2-12
Resource Management.....	2-12
Special Designations.....	2-14
Public Use and Enjoyment.....	2-15
Management and Administration.....	2-16
Facility Operations and Maintenance.....	2-16
Commodity and Commercial Uses.....	2-17
Social and Economic Environment.....	2-18
Fire and Aviation Management.....	2-19

Table of Contents - Chapter 3

Chapter 3. Affected Environment and Environmental Consequences.....	3-14
Resource Management.....	3-14
Vegetation Condition and Forest Health.....	3-14
Affected Environment.....	3-16
Alpine and Subalpine Habitats.....	3-16
Chaparral.....	3-17
Coastal Sage Scrub.....	3-18
Desert Montane.....	3-19
Desert Scrub.....	3-19
Gabbro Outcrops.....	3-19
Limestone and Carbonate Outcrops.....	3-20
Lower Montane Forest.....	3-20
Montane Conifer Forest.....	3-21
Montane Meadows.....	3-22
Monterey Coastal Habitats.....	3-23
Oak Woodland, Savanna and Grassland.....	3-24
Pebble Plain.....	3-25
Riparian Habitats.....	3-25
Serpentine Outcrops.....	3-26
Key Indicators.....	3-26
Environmental Consequences.....	3-27
Direct and Indirect Effects (General).....	3-27
Alpine and Subalpine Habitats.....	3-27
Chaparral.....	3-28
Coastal Sage Scrub.....	3-30
Desert Montane.....	3-31
Desert Scrub.....	3-33
Gabbro Outcrops.....	3-33
Limestone and Carbonate Outcrops.....	3-34
Lower Montane Forest.....	3-34
Montane Conifer Forest.....	3-36
Montane Meadows.....	3-37
Monterey Coastal Habitats.....	3-39

Oak Woodland, Savanna and Grassland.....	3-40
Pebble Plain.....	3-42
Riparian Habitats.....	3-43
Serpentine Outcrops.....	3-46
Direct and Indirect Effects (Comparison of Key Indicators).....	3-47
Alpine and Subalpine Habitats.....	3-47
Chaparral.....	3-47
Coastal Sage Scrub.....	3-48
Desert Montane.....	3-48
Desert Scrub.....	3-48
Gabbro Outcrops.....	3-48
Limestone and Carbonate Outcrops.....	3-49
Lower Montane Forest.....	3-49
Montane Conifer Forest.....	3-50
Montane Meadows.....	3-51
Monterey Coastal Habitats.....	3-52
Oak Woodland, Savanna and Grassland.....	3-52
Pebble Plain.....	3-52
Riparian Habitats.....	3-52
Serpentine Outcrops.....	3-53
Cumulative Effects.....	3-53
Biological Diversity.....	3-55
Affected Environment.....	3-56
Terrestrial Species: Plants and Animals.....	3-57
Aquatic Species.....	3-59
Species at Risk.....	3-61
Game Species.....	3-62
Management Indicator Species.....	3-62
Key Indicators.....	3-68
Resource Protection Measures.....	3-68
Biological Diversity.....	3-70
Environmental Consequences.....	3-70
General Effects Similar in All Alternatives and All Species or Groups.....	3-72
Terrestrial Plants, Animals and Habitat.....	3-73
Aquatic Species and Habitat.....	3-75

Species at Risk.....	3-76
Resource Management.....	3-76
Public Use and Enjoyment.....	3-79
Facility Operations and Maintenance.....	3-82
Commodities and Commercial Use.....	3-84
Fire and Aviation.....	3-86
Combined Effects of Management Uses.....	3-87
Game Species.....	3-89
Management Indicator Species.....	3-90
Direct and Indirect Effects (Comparison of Key Indicators).....	3-95
Cumulative Effects to Biological Diversity.....	3-99
Invasive Nonnative Species.....	3-106
Affected Environment.....	3-106
Habitats At High Risk of Degradation by Invasive Species.....	3-108
Key Indicators.....	3-110
Resource Protection Measures.....	3-110
Environmental Consequences.....	3-111
Direct and Indirect Effects (General).....	3-111
Direct and Indirect Effects (Comparison of Key Indicators).....	3-112
Resource Management.....	3-112
Public Use and Enjoyment.....	3-113
Facility Operation and Maintenance.....	3-114
Commodity and Commercial Uses.....	3-116
Fire and Aviation Management.....	3-118
Risk Determination.....	3-120
Cumulative Effects.....	3-121
Watershed.....	3-121
Affected Environment.....	3-121
Surface Water.....	3-122
Surface Water - Quality.....	3-123
Surface Water - Uses.....	3-123
Riparian Ecosystems.....	3-124
Riparian - Quantity.....	3-125
Riparian - Quality.....	3-126
Riparian - Uses.....	3-126

Groundwater.....	3-127
Groundwater - Quantity.....	3-128
Groundwater - Quality.....	3-129
Groundwater - Uses.....	3-130
Key Indicators.....	3-131
Resource Protection Measures.....	3-131
Environmental Consequences.....	3-133
Assumptions Used in Analysis of Effects.....	3-134
Alternative Descriptions.....	3-134
Direct and Indirect Effects (General).....	3-135
Resource Management.....	3-136
Public Use and Enjoyment.....	3-137
Facility Operations and Maintenance.....	3-138
Commodity and Commercial Uses.....	3-139
Fire and Aviation Management.....	3-141
Direct and Indirect Effects (Comparison of Key Indicators).....	3-142
Resource Management.....	3-142
Public Use and Enjoyment.....	3-143
Management and Administration.....	3-144
Facility Operations and Maintenance.....	3-144
Commodity and Commercial Uses.....	3-144
Fire and Aviation Management.....	3-146
Cumulative Effects.....	3-146
Soils.....	3-148
Affected Environment.....	3-148
Key Indicators.....	3-148
Resource Protection Measures.....	3-149
Environmental Consequences.....	3-149
Direct and Indirect Effects (General).....	3-149
Resource Management.....	3-150
Public Use and Enjoyment.....	3-150
Facility Operations and Maintenance.....	3-150
Commodity and Commercial Uses.....	3-152
Fire and Aviation Management.....	3-152
Direct and Indirect Effects (Comparison of Key Indicators).....	3-153

Resource Management.....	3-153
Public Use and Enjoyment.....	3-153
Facility Operations and Maintenance.....	3-153
Commodity and Commercial Uses.....	3-154
Fire and Aviation Management.....	3-154
Cumulative Effects.....	3-155
Airshed.....	3-155
Affected Environment.....	3-155
Key Indicators.....	3-156
Resource Protection Measures.....	3-156
Environmental Consequences.....	3-157
Direct and Indirect Effects (General).....	3-157
Direct and Indirect Effects (Comparison of Key Indicators).....	3-157
Cumulative Effects.....	3-159
Geological Resources and Hazards.....	3-159
Affected Environment.....	3-159
Geologic Setting.....	3-160
Geologic Resources.....	3-162
Geologic Hazards.....	3-163
Key Indicators.....	3-165
Resource Protection Measures.....	3-165
Environmental Consequences.....	3-165
Direct and Indirect Effects (General).....	3-165
Resource Management.....	3-165
Public Use and Enjoyment.....	3-166
Facility Operations and Maintenance.....	3-166
Commodity and Commercial Uses.....	3-167
Fire and Aviation Management.....	3-167
Direct and Indirect Effects (Comparison of Key Indicators).....	3-167
Resource Management.....	3-168
Public Use and Enjoyment.....	3-169
Facility Operations and Maintenance.....	3-169
Commodity and Commercial Uses.....	3-170
Fire and Aviation Management.....	3-170
Cumulative Effects.....	3-170

Wilderness.....	3-171
Affected Environment.....	3-171
Wilderness Resources.....	3-171
Wilderness Recreation.....	3-172
Key Indicators.....	3-173
Resource Protection Measures.....	3-174
Environmental Consequences.....	3-174
Direct and Indirect Effects (General).....	3-174
Direct and Indirect Effects (Comparison of Key Indicators).....	3-174
Resource Management.....	3-174
Public Use and Enjoyment.....	3-175
Facility Operations and Maintenance.....	3-176
Commodity and Commercial Uses.....	3-176
Cumulative Effects.....	3-176
Lands (Real Estate).....	3-177
Affected Environment.....	3-177
Key Indicators.....	3-178
Resource Protection Measures.....	3-178
Environmental Consequences.....	3-178
Direct and Indirect Effects (General).....	3-178
Direct and Indirect Effects (Comparison of Key Indicators).....	3-179
Cumulative Effects.....	3-180
Heritage Resources.....	3-180
Affected Environment.....	3-180
Key Indicators.....	3-182
Resource Protection Measures.....	3-182
Environmental Consequences.....	3-182
Direct and Indirect Effects (General).....	3-182
Direct and Indirect Effects (Comparison of Key Indicators).....	3-184
Alternative Comparison.....	3-184
Resource Management.....	3-184
Public Use and Enjoyment.....	3-185
Management and Administration.....	3-187
Facility Operations and Maintenance.....	3-187
Commodity and Commercial Uses.....	3-189

Fire and Aviation Management.....	3-190
Cumulative Effects.....	3-191
Public Use and Enjoyment.....	3-192
Recreation.....	3-192
Affected Environment.....	3-192
Recreation Setting.....	3-193
Current Recreation Situation.....	3-194
Visitor Use, Participation and Satisfaction.....	3-194
Developed Recreation.....	3-195
Dispersed Recreation.....	3-196
Dispersed Camping.....	3-196
Driving for Pleasure.....	3-197
Wildlife and Nature Viewing.....	3-197
Snow Play.....	3-198
Water Play.....	3-198
Hang Gliding.....	3-198
Rock Climbing.....	3-198
Recreational Target Shooting.....	3-199
Hunting and Fishing.....	3-199
Recreation Special Use Authorizations.....	3-200
Recreation Residences.....	3-200
Winter Sports.....	3-200
Trends and Projections.....	3-201
Front Country, Upland and High Country Places, Angeles National Forest.....	3-202
Figueroa/Santa Ynez Place, Los Padres National Forest.....	3-202
Hungry Valley/Mutau Place, Los Padres National Forest.....	3-202
Laguna Place, Cleveland National Forest.....	3-202
San Bernardino Front Country Place, San Bernardino National Forest.....	3-202
Conservation Education, Volunteers and Partnerships.....	3-203
Key Indicators.....	3-204
Resource Protection Measures.....	3-204
Environmental Consequences.....	3-204
Direct and Indirect Effects (General).....	3-204
Recreation Setting.....	3-205
Visitor Use, Participation and Satisfaction.....	3-206

Developed Recreation.....	3-207
Dispersed Recreation.....	3-208
Driving for Pleasure.....	3-210
Wildlife and Nature Viewing, Snow Play, Water Play, Hang Gliding, Rock Climbing.....	3-210
Recreational Target Shooting.....	3-211
Hunting and Fishing.....	3-212
Recreation Residences.....	3-212
Winter Sports.....	3-212
Conservation Education and Partnerships.....	3-213
Direct and Indirect Effects (Comparison of Key Indicators).....	3-213
Resource Management.....	3-213
Management and Administration.....	3-215
Facility Operations and Maintenance.....	3-215
Commodity and Commercial Uses.....	3-215
Fire and Aviation Management.....	3-217
Cumulative Effects.....	3-217
Landscape Management.....	3-220
Affected Environment.....	3-220
Scenic Integrity Objectives.....	3-221
Key Indicators.....	3-221
Environmental Consequences.....	3-221
Direct and Indirect Effects (General).....	3-222
Resource Management.....	3-223
Commodities and Commercial Uses.....	3-223
Fire and Aviation Management.....	3-224
Communication Site Infrastructure and Utility Corridors.....	3-224
Direct and Indirect Effects (Comparison of Key Indicators).....	3-224
Cumulative Effects.....	3-225
Law Enforcement.....	3-227
Affected Environment.....	3-227
Law Enforcement Offenses and Incidents.....	3-228
Major Law Enforcement Violation Types.....	3-228
Contributing Factors in Southern California.....	3-228
Key Indicators.....	3-230
Resource Protection Measures.....	3-230

Environmental Consequences.....	3-230
Direct and Indirect Effects (General).....	3-230
Direct and Indirect Effects (Comparison of Key Indicators).....	3-231
Resource Management.....	3-231
Public Use and Enjoyment.....	3-232
Facility Operations and Maintenance.....	3-233
Cumulative Effects.....	3-234
Facility Operations and Maintenance.....	3-234
Administrative Facilities.....	3-234
Roads.....	3-234
Affected Environment.....	3-235
National Forest System Roads.....	3-235
Key Indicators.....	3-237
Environmental Consequences.....	3-238
Direct and Indirect Effects (General).....	3-238
Direct and Indirect Effects (Comparison of Key Indicators).....	3-238
Management and Administration.....	3-240
Resource Management.....	3-240
Public Uses and Enjoyment.....	3-241
Commodities and Commercial Uses.....	3-242
Cumulative Effects.....	3-242
Trails.....	3-243
Affected Environment.....	3-243
Non-motorized Trails.....	3-243
Pacific Crest National Scenic Trail.....	3-244
Unclassified Trails.....	3-244
Key Indicators.....	3-244
Resource Protection Measures.....	3-245
Environmental Consequences.....	3-245
Direct and Indirect Effects (General).....	3-245
Direct and Indirect Effects (Comparison of Key Indicators).....	3-246
Cumulative Effects.....	3-246
Motorized Trails: Off-Highway Vehicles.....	3-247
Affected Environment.....	3-247
Key Indicators.....	3-249

Resource Protection Measures.....	3-249
Environmental Consequences.....	3-250
Direct and Indirect Effects (General).....	3-250
Resource Management.....	3-253
Public Use and Enjoyment.....	3-254
Facility Operation and Maintenance.....	3-255
Fire and Aviation Management.....	3-255
Factors Considered in OHV Route Locations and Designation Changes.....	3-255
Direct and Indirect Effects (Comparison of Key Indicators).....	3-255
Cumulative Effects.....	3-257
Management and Administration.....	3-258
Social and Economic.....	3-258
Affected Environment.....	3-258
Population Trends and Urban Envelopment.....	3-258
Population Characteristics.....	3-261
Social and Economic Conditions.....	3-262
Key Indicators.....	3-264
Environmental Consequences.....	3-264
Direct and Indirect Effects (General).....	3-264
Direct and Indirect Effects (Comparison of Key Indicators).....	3-264
Economic Efficiency.....	3-267
Environmental Justice.....	3-269
Civil Rights Impact Analysis.....	3-269
Tribal Relations.....	3-269
Affected Environment.....	3-270
Key Indicators.....	3-271
Resource Protection Measures.....	3-271
Environmental Consequences.....	3-271
Direct and Indirect Effects (General).....	3-271
Activity Comparison.....	3-272
Resource Management.....	3-272
Public Uses and Designations.....	3-273
Management and Administration.....	3-274
Facility Operations and Maintenance.....	3-274
Commodity and Commercial Uses.....	3-275

Fire Management.....	3-276
Direct and Indirect Effects (Comparison of Key Indicators).....	3-276
Cumulative Effects.....	3-277
Commodity and Commercial Uses.....	3-277
Special Forest Products.....	3-277
Affected Environment.....	3-277
Key Indicators.....	3-278
Resource Protection Measures.....	3-279
Environmental Consequences.....	3-279
Direct and Indirect Effects (General).....	3-279
Direct and Indirect Effects (Comparison of Key Indicators).....	3-280
Cumulative Effects.....	3-281
Non-Recreation Special Uses.....	3-281
Affected Environment.....	3-281
Key Indicators.....	3-282
Resource Protection Measures.....	3-282
Environmental Consequences.....	3-282
Direct and Indirect Effects (General).....	3-282
Direct and Indirect Effects (Comparison of Key Indicators).....	3-283
Cumulative Effects.....	3-284
Minerals and Energy.....	3-284
Affected Environment.....	3-284
Key Indicators.....	3-290
Resource Protection Measures.....	3-290
Environmental Consequences.....	3-290
Direct and Indirect Effects (General).....	3-290
Resource Management.....	3-290
Public Uses and Designations.....	3-291
Commodity and Commercial Uses.....	3-291
Direct and Indirect Effects (Comparison of Key Indicators).....	3-293
Resource Management.....	3-293
Facility Operations and Maintenance.....	3-294
Cumulative Impacts.....	3-294
Livestock Grazing.....	3-94
Affected Environment.....	3-294

Key Indicators.....	3-296
Resource Protection Measures.....	3-296
Environmental Consequences.....	3-296
Direct and Indirect Effects (General).....	3-296
Direct and Indirect Effects (Comparison of Key Indicators).....	3-298
Cumulative Effects.....	3-301
Fire and Aviation Management.....	3-301
Fire Suppression and Hazardous Fuels Treatment.....	3-302
Affected Environment.....	3-302
Key Indicators.....	3-305
Environmental Consequences.....	3-306
Direct and Indirect Effects (General).....	3-306
Direct and Indirect Effects (Comparison of Key Indicators).....	3-307
Cumulative Effects.....	3-311
Short-term Uses and Long-term Productivity.....	3-311
Unavoidable Adverse Effects.....	3-311
Irreversible and Irretrievable Commitments of Resources.....	3-312

Table of Contents - Chapter 4

Chapter 4. Consultation and Coordination.....	4-3
List of Preparers.....	4-3
GIS Mapping.....	4-9
Editing Services and Administrative Support.....	4-9
Significant Contributors.....	4-9

List of Tables

Table-100-Forest Soil Productivity	Tables-1
Table-101-Air Pollution Control District Significance Criteria.....	Tables-1
Table-102-Estimated Annual Wildland Fire Emissions -- tons/year.....	Tables-2
Table-103-Suitability Study Summary for Candidate Wild and Scenic Rivers, LPNF.....	Tables-2
Table-104-Major Developed Recreation Sites Capacity.....	Tables-3
Table-105-Recreation Special Use Authorization Summary.....	Tables-3
Table-106-Miles of Inventoried Trails by Forest.....	Tables-3
Table-107-Designated Grazing Areas Status, Acreages, and Permitted AUMS by Forest	Tables-4
Table-108-Grazing Suitabilty by Forest by Alternative	Tables-4
Table-109-Vegetation (Uplands) and Riparian Conditions	Tables-4
Table-110-Cause of Fire Occurrence 1970-1999, by Forest.....	Tables-5
Table-111-Key Fire Management Issues Ranked by Alternative Under Current (CUR) and Enhanced (ENH) Budget Levels.....	Tables-5
Table-113-Results Of Threat Assessment For Animal Species Of Conservation Concern In The Plan Area, Number Of Species In Each Threat Category.....	Tables-5
Table-114-Results Of Threat Assessment For Plant Species Of Conservation Concern In The Plan Area, Number Of Species In Each Threat Category.....	Tables-6
Table-115-Threatened And Endangered Plant Species With No Substantial Threats To Persistence Or Distribution Identified From Forest Service Activities... ..	Tables-6
Table-116--Threatened and Endangered Animal Species with No Substantial Threats to Persistence or Distribution.....	Tables-7
Table-117-Road Density With Road Miles By Forest (NFSR, Temporary And Unclassified) Roads, And State And Count.....	Tables-8
Table-118-Conservation Emphasis.....	Tables-9
Table-123-Watershed Acreage, Land Ownership And Summary Of Watershed Condition Ratings By Forest.....	Tables-9
Table-124-Water Located Within The Southern California Planning Area.....	Tables-10
Table-125-Percentage Of Total Watersheds Allocated For Public Water Supplies.....	Tables-10
Table-126-Percent Of Modeled RCA Acreage Relative To Total NFS Land Base	Tables-10
Table-164-Eligibility Inventory Summary for Candidate Wild and Scenic Rivers, ANF.....	Tables-11
Table-165-Eligibility Inventory Summary for Candidate Wild and Scenic Rivers, CNF.....	Tables-12
Table-166-Eligibility Inventory Summary for Candidate Wild and Scenic Rivers, LPNF.....	Tables-13
Table-167-Eligibility Inventory Summary for Candidate Wild and Scenic Rivers, SBNF.....	Tables-15
Table-168-Population Characteristics Compared for the U.S., Calif, and So. Calif Assessment Areas in 1990 and 2000 (Part 1 of 2)	Tables-17

List of Tables (continued)

Table-169-Population Characteristics Compared for the U.S., Calif, and So. Calif Assessment Areas in 1990 and 2000 (Part 2 of 2)	Tables-18
Table-170-Language Spoken at Home, State of California, 2000)	Tables-18
Table-171-Comparative Median and Per Capita Income in 1999 Dollars	Tables-19
Table-172-Income and Employment Impacts.	Tables-19
Table-173-Regional Direct, Indirect, and Induced Employment Attributable to National Forests.....	Tables-20
Table-174-Regional Direct, Indirect, and Induced Labor Income Attributable to National Forests.....	Tables-21
Table-175-Forest Service-Related Contributions to the Four-Forest Economy.....	Tables-22
Table-176-Commodity Output Values Used for the Efficiency Analysis..	Tables-22
Table-177-Present Values of Costs and Benefits by Alternative.....	Tables-23
Table-178—Historical Grazing Use Trends for the Los Padres National Forest.....	Tables-23
Table-179—Acres Within Grazing Areas by Forest	Tables-23
Table-180—Number of Grazing Areas by Forest	Tables-24
Table-181—Land Acquisitions Analyzed as Grazing Areas, Los Padres National Forest.....	Tables-24
Table-182—Acres Capable of Supporting Livestock..	Tables-24
Table-183—Number of Vacant Grazing Areas Expected to be Available for Grazing by Alternative.	Tables-24
Table-184—Road Density (Miles Of Road Per Square Mile) By Forest Roads (National Forest System Roads, Temporary And Unclassified) And State And County Roads	Tables-24
Table-185—Percent Of Specific Habitat Types Within Dispersed Recreation Potential Area (Near Road, Less Than 15 Percent Slope, Not Chaparral)... ..	Tables-25
Table-186—Percentage Of National Forest System Lands That Consists Of Roads.....	Tables-25
Table-187—Threatened, Endangered And Sensitive (TES) Aquatic And Semi-Aquatic Species Associated With Low And High Elevation Streams On Southern California National Forests (Adapted From Stephenson And Calcaron).....	Tables-25
Table-188—Results Of Threat Assessment For Plant Species Of Conservation Concern In The Plan Area: Number Of Species In Each Threat Category.. ..	Tables-25
Table-189—Results Of Threat Assessment For Animal Species Of Conservation Concern In The Plan Area, Number Of Species In Each Threat Category.	Tables-26
Table-190—Percent Of Potential Species Of Conservation Concern Determined To Be At Risk On National Forest System Lands.....	Tables-26
Table-191—Percent Of Land With At Least 0.5 Miles Of Road Per Square Mile By Alternative For Each National Forest In Southern California.	Tables-26
Table-192—Acres Potentially Accessible For Dispersed Recreation In Major Land Use Zones By Alternative	Tables-27

List of Tables (continued)

Table-193—Miles Of Road Lost Due To Land Use Zoning By Alternative. This Specifically Relates To Those Land Use Zones With Fewer Allowable Uses (BCNM, CBZ, EF And RW).....	Tables-27
Table-194—Projected Acres Of Hazardous Fuel Treatment Per Decade By Budget Level..	Tables-27
Table-195—Changes in Acres Managed for Motorized Use by Alternative.....	Tables-27
Table-196—Acres Of Fuel Treatment Opportunity By Type Of Treatment — 15 Year Projection (Mechanical Treatments Subtotal In First Row Followed By Total Treatment Per Forest).	Tables-27
Table-197—Variation In Program Management Emphases By Alternative (Percent Change From Current Situation).....	Tables-28
Table-198—Distribution Of Plant Viability Outcomes On National Forest System Lands By Alternative.	Tables-28
Table-199—Distribution Of Invertebrate Animal Viability Outcomes On National Forest System Lands By Alternative	Tables-28
Table-200—Vertebrate Animals Viability Outcomes By Alternative On National Forest System Lands.....	Tables-28
Table-201—Key Indicators Of Effects From Management Actions To Biological Diversity.....	Tables-29
Table-202—Alternative Comparisons With Respect To Conservation Emphasis Areas	Tables-29
Table-203—Threats To Plant Species-At-Risk.....	Tables-30
Table-204—Plant Viability Outcomes For Eighty-Eight Species At Risk For All Lands Summed By Alternative.....	Tables-30
Table-205—Plant Viability Outcomes For Eight Species-At-Risk On All Lands.	Tables-30
Table-206—Plant Viability Outcomes For Eight Species-At-Risk On National Forest System Lands.....	Tables-31
Table-207—Invertebrate Animal Viability Outcomes For Ten Species At Risk For All Lands Summed By Alternative.....	Tables-31
Table-208—Invertebrate Viability Outcomes For Two Species-At-Risk On All Lands.	Tables-31
Table-209—Invertebrate Viability Outcomes For Two Species-At-Risk On National Forest System Lands.....	Tables-31
Table-210—Vertebrate Animal Viability Outcome For 56 Species At Risk For All Lands Summed By Alternative.....	Tables-31
Table-211—Vertebrate Animal Viability Outcomes For Four Species-At-Risk On All Lands.....	Tables-32
Table-212—Vertebrate Animal Viability Outcomes For Four Species-At-Risk On National Forest System Lands.....	Tables-32
Table-213—Viability Outcomes For Arroyo Toad For All Lands By Alternative	Tables-32
Table-214—Viability Outcomes For Mountain Lion For All Lands By Alternative (San Gabriel Mtns. South)	Tables-32
Table-215—Viability Outcomes For California Spotted Owl For All Lands By Alternative.	Tables-32

List of Tables (continued)

Table-216—Comparison Of Relative Potential Risks For Cumulative Effects To MIS By Alternative.....	Tables-33
Table-217—Summary Of The Number And Percent Of Species At-Risk From Activities And Uses On NFS Lands.....	Tables-33
Table-218—Potential Effects To Riparian Vegetation From Management Activities.....	Tables-34
Table-219—Potential Effects To Streambanks From Management Activities.....	Tables-34
Table-220—Potential Effects To Channel Morphology From Management Activities.....	Tables-35
Table-221—Potential Effects To The Ability Of The RCA To Catch Sediment Before It Enters The Stream From Management Activities.....	Tables-35
Table-222—Potential Effects To Water Quantity From Management Activities.....	Tables-36
Table-223—Potential Effects To Water Quality (From Toxins) From Management Activities.....	Tables-36
Table-224—Potential Loss Of NF Ownership Of RCAs From Management Activities.....	Tables-37
Table-225—Potential Effects To Watershed Conditions From Management Activities.....	Tables-37
Table-226—Activities With Potential To Affect Water Resources And Riparian Conservation Areas (RCAs).....	Tables-37
Table-227—Soils Found Within the EUI Area.....	Tables-38
Table-228—Landscape Soil Units And The Percentage Of Area That They Comprise In The Southern California National Forests.....	Tables-38
Table-229—Federal Attainment Status.....	Totals-39
Table-230—Southern California Counties With Nonattainment Status.....	Tables-39
Table-231—Class I Areas (Airshed).....	Tables-40
Table-232—Air Background Emissions.....	Tables-40
Table-233—General Comparison of Alternative Air Quality Emissions.....	Tables-40
Table-234—Estimated Daily Forest Visitor Mileage Driven Within The National Forests.....	Tables-41
Table-235—Estimated Percent Change in Unpaved Road Mileage from the Present.....	Tables-41
Table-236—Annual Wildfire Acres Burned.....	Tables-41
Table-237—Southern California National Forest Existing Wilderness.....	Tables-42
Table-238—Estimated Wilderness Visitors by Forest.....	Tables-42
Table-239—Official Land Ownership.....	Tables-43
Table-240—Important Land Adjustments.....	Tables-43
Table-241—Roads Rights-of-way Needs Summary.....	Tables-43
Table-242—Property Lines Surveyed.....	Tables-44
Table-243—Mineral Withdrawal Status.....	Tables-44
Table-244—Acres of Potential Increase to Mineral Withdrawal Status, by Alternative.....	Tables-44
Table-245—Heritage and Tribal Data for Southern California Forests.....	Tables-44
Table-246—National Register of Historic Places by Forest.....	Tables-45

List of Tables (continued)

Table-247—State Historic Landmarks by Forest.....	Tables-45
Table-248—Indigenous Groups at time of European Contact for Southern California Forests.	Tables-45
Table-249—Acres of Back Country Motorized by Alternative	Tables-46
Table-250—Back Country Motorized Acres in High Sensitivity Zone for Heritage Resources by Alternative	Tables-46
Table-251—Comparison of Heritage Resource Special Interest Area Acreage by Alternative	Tables-46
Table-252—High Sensitivity Heritage Acres in Wilderness (Existing and Recommended) by Alternative	Tables-46
Table-253—Alternative Comparison of Road Mileage Reduction.....	Tables-46
Table-254—Current Adopted Recreation Opportunity Spectrum (ROS) — Acres of NFS Lands by Forest	Tables-47
Table-255—Estimated Developed Sites Activity Participation Range by Forest	Tables-47
Table-256—Current Acres of Potential Dispersed Vehicle Camping by Forest	Tables-47
Table-257—Estimated Dispersed Camping Activity Participation Range by Forest.....	Tables-47
Table-258—Estimated Driving for Pleasure Activity Participation Range by Forest.....	Tables-48
Table-259—Estimated Wildlife and Nature Viewing Activity Participation Range by Forest.....	Tables-48
Table-260—Estimated Water Play Activity Participation Range.....	Tables-48
Table-261—Hang Gliding Take-Offs In Southern California National Forests.....	Tables-49
Table-262—Recreational Target Shooting	Tables-50
Table-263—Estimated Hunting and Fishing Activity Participation Range.	Tables-50
Table-264—Angeles National Forest Developed Ski Area Capacity (SAOT–Skiers At One Time).....	Tables-50
Table-265—San Bernardino National Forest Developed Ski Area Capacity (SAOT–Skiers At One Time).....	Tables-51
Table-266—Estimated Future Visitor Use	Tables-51
Table-267—Alternative 1 Acres of Potential Dispersed Vehicle Camping by Forest.....	Tables-51
Table-268—Alternative 2 Acres of Potential Dispersed Vehicle Camping by Forest.....	Tables-51
Table-269—Alternative 3 Acres of Potential Dispersed Vehicle Camping by Forest.....	Tables-52
Table-270—Alternative 4 Acres of Potential Dispersed Vehicle Camping by Forest.....	Tables-52
Table-271—Alternative 5 Acres of Potential Dispersed Vehicle Camping by Forest.....	Tables-52
Table-272—Alternative 6 Acres of Potential Dispersed Vehicle Camping by Forest.....	Tables-52
Table-273—Angeles National Forest Recreational Target Shooting by Alternative	Tables-53
Table-274—Cleveland National Forest Recreational Target Shooting by Alternative.	Tables-53
Table-275—Los Padres National Forest Recreational Target Shooting by Alternative.	Tables-53
Table-276—San Bernardino National Forest Recreational Target Shooting by Alternative.....	Tables-53
Table-277—Totals — Recreational Target Shooting by Alternative.	Tables-53

List of Tables (continued)

Table-278—Landscape Attractiveness — Acres and Percent of Total Acres, by Class and Forest.....	Tables-54
Table-279—Key Places Valued for Scenic Quality.....	Tables-54
Table-280—Scenic Integrity Objectives for Alternative 1 — Acres and Percent of Total, by SIO and Forest.	Tables-55
Table—281—Law Enforcement Offenses from Fiscal Year 2000 through Fiscal Year 2003	Tables-55
Table-282—Administrative Facilities by Forest	Tables-55
Table-283—Miles of Freeways, State Highways, County Roads, and Forest Highways by Forest.	Tables-55
Table-284—Miles of PFSR, Arterial, Collector, And Local Roads By Forest.....	Tables-56
Table-285—Miles of NFSR Level 1-5, Temporary, And Unclassified Roads By Forest.	Tables-56
Table-286—Acres Occupied By Roads, By Forest, And By Road Category	Tables-56
Table-287—Road Density by Forest.....	Tables-56
Table-288—Miles Of National Forest System Roads By Road Maintenance Levels.	Tables-57
Table-289—Road Miles By Objective Maintenance Level By Land Use Zone.	Tables-57
Table-290—Road Miles in Inventoried Roadless Areas.	Tables-57
Table-291—High-Risk Slope Zones 7 and 10, National Forest System Road miles by Forest.....	Tables-57
Table-292—Alternative 1 — Miles Of Roads And Land Use Zone By Objective Maintenance Level.....	Tables-58
Table-293—Alternative 2 — Miles Of Roads And Land Use Zone By Objective Maintenance Level.....	Tables-58
Table-294—Alternative 3 — Miles Of Roads And Land Use Zone By Objective Maintenance Level.....	Tables-58
Table-295—Alternative 4 — Miles Of Roads And Land Use Zone By Objective Maintenance Level.....	Tables-58
Table-296—Alternative 5 — Miles Of Roads And Land Use Zone By Objective Maintenance Level.....	Tables-59
Table-297—Alternative 6 — Miles Of Roads And Land Use Zone By Objective Maintenance Level.....	Tables-59
Table-298—Unclassified Road Miles By Land Use Zone By Alternative.	Tables-59
Table—299—Road Density by Acres.....	Tables-59
Table-300—High Risk Locations by Road Miles, by Forest..	Tables-60
Table-302—Federally Recognized Tribes Within Forest's Sphere Of Influence	Tables-61
Table-303—Non-Federally Recognized Tribes Within Forest's Sphere Of Influence	Tables-62
Table-304—Wilderness Acres (Existing and Recommended) by Alternative..	Tables-62
Table-305—Back Country Motorized Acres by Alternative.....	Tables-62

List of Tables (continued)

Table-306—Non-Recreation Special Use Authorizations, Number of Authorizations and Acres by Forest.....	Tables-62
Table-307—Utility and Transportation Corridors and Communication Sites (Currently Designated).	Tables-63
Table-308—Proposed Urban Rural Interface (URI), Developed Area Intermix (DAI), and Back Country Motorized (BCM) Acreage by Alternative and Forest.....	Tables-63
Table-309—Suitability of Western Regional Corridor Planning Partnership Corridors.....	Tables-63
Table-310—Acres Currently Withdrawn From Mineral Entry.	Tables-63
Table-311—Recommended Acres for Withdrawal from Mineral Entry in Critical Biological Zones by Forest and Alternative.	Tables-63
Table-312—Percent of Land Area Expected to be Withdrawn from Mineral Entry.....	Tables-64
Table—313—Ownership Complexity.....	Tables-64
Table-314—Estimated Percent of Forest Accessible by Road.....	Tables-64
Table-315—Estimated Percent of Forest Accessible by Road.....	Tables-64
Table-316—Off-Highway Vehicle Travel (4-Wheelers, Dirt Bikes, Etc.), Use By Forest	Tables-64
Table-317—20% Increase In OHV Use Projected by the Year 2020.....	Tables-65
Table-318—Cleveland National Forest Candidate Research Natural Areas Recommended By Alternative.....	Tables-65
Table-319—Los Padres National Forest Candidate Research Natural Areas Recommended By Alternative.....	Tables-65
Table-320—San Bernardino National Forest Candidate Research Natural Areas Recommended By Alternative.....	Tables-65
Table-321—Summary of Candidate Research Natural Areas Recommended By Alternative.....	Tables-66
Table-322—Established RNAs On The Southern California National Forests.	Tables-66
Table-323—Candidate RNAs On The Four Southern California National Forests.....	Tables-66
Table-324—Miles of ML 2 Road Opportunity for Non-Highway Licensed Vehicle Use.	Tables-67
Table-325—Miles of Trail Opportunity for Non-Highway Licensed Vehicles.....	Tables-67
Table-326—Summary of Roads and Trails Available for Non-Highway Licensed Vehicle Use.....	Tables-67
Table-327—Miles of ML2 Road Available as an Off-Highway Vehicle Opportunity for Highway Licensed Vehicles.....	Tables-68
Table-328—Miles of ML2 Road Managed as a 4WD Opportunity.....	Tables-68
Table-329—Acres Of Coastal Sage Scrub Expected To Be Grazed By Alternative.	Tables-68
Table-330—Acres Of Meadow Expected To Be Grazed By Alternative..	Tables-68
Table-331—Acres Of Oak Woodland Expected To Be Grazed By Alternative.....	Tables-69
Table-332—Acres Of Mapped Riparian Vegetation Expected To Be Grazed By Alternative.....	Tables-69
Table-333—Comparison Of Alternative Acres By Land Use Zone	Tables-69
Table-334—Percent Of Each Land Use Zone By Alternative.....	Tables-69

List of Tables (continued)

Table-335-Total Acres Of Recommended Wilderness, By Alternative, By Forest	Tables-70
Table-336-Recommended Wild And Scenic River Mileage By Classification And Alternative (Los Padres NF).....	Tables-70
Table-337-Summary of Candidate Special Interest Areas Recommended By Alternative.	Tables-70
Table-338-Established Special Interest Areas	Tables-71
Table-339-Angeles National Forest Candidate Special Interest Areas..	Tables-71
Table-340-Cleveland National Forest Candidate Special Interest Areas.	Tables-71
Table-341-Los Padres National Forest Candidate Special Interest Areas.....	Tables-72
Table-342-San Bernardino National Forest Candidate Special Interest Areas.....	Tables-72
Table-343-Angeles National Forest - Inventoried Roadless Areas Evaluated	Tables-73
Table-344-Angeles National Forest - Publicly Proposed Other Undeveloped Areas Evaluated.....	Tables-73
Table-345-Cleveland National Forest - Inventoried Roadless Areas Evaluated.	Tables-74
Table 346 - Cleveland National Forest - Publicly Proposed Other Undeveloped Areas Evaluated	Tables-74
Table-347-Los Padres National Forest - Inventoried Roadless Areas Evaluated.....	Tables-75
Table-348-Los Padres National Forest - Publicly Proposed Other Undeveloped Areas Evaluated	Tables-76
Table-349-San Bernardino National Forest - Inventoried Roadless Areas Evaluated.	Tables-76
Table-350-San Bernardino National Forest - Publicly Proposed Undeveloped Areas Evaluated.....	Tables-77
Table-351-Angeles National Forest Recommended Wilderness By Alternative..	Tables-78
Table-352-Cleveland National Forest Recommended Wilderness by Alternative.....	Tables-79
Table-353-Cleveland National Forest Recommended Wilderness by Alternative.....	Tables-80
Table-354-San Bernardino National Forest Recommended Wilderness by Alternative.	Tables-81
Table-355-Candidate Wild and Scenic Rivers - Angeles National Forest.....	Tables-81
Table-356-Candidate Wild and Scenic Rivers - Cleveland National Forest.	Tables-82
Table-357-Candidate Wild and Scenic Rivers - Los Padres National Forest.....	Tables-82
Table-358-Candidate Wild and Scenic Rivers - San Bernardino National Forest	Tables-82
Table-359-Acres Managed For Motorized Uses As Defined By Land Use Zone.....	Tables-83
Table-360-Plant Species Evaluated for Viability Concerns List (Species of Concern).	Tables-84
Table-361-Federally Listed Plant Species - Endangered, Threatened, Proposed or Candidate 28 TE species, 2 C species.....	Tables-95
Table-362-Federally Listed Animal Species - Endangered, Threatened, Proposed or Candidate....	Tables-97
Table-363-Sensitive Animal Species by Forest (known or potential) Updated as of 8 June 1998, Appended 6 March 2001 and 7 May 2003	Tables-99

List of Tables (continued)

Table-364—USDA Forest Service, Pacific Southwest Region Sensitive Plant Species by Forest	Tables-101
Table-365—Primary Species within Critical Biological Land Use Zones	Tables-104
Table-366—Proposed Critical Biological Land Use Zones for Riparian Dependent Species by Forest..	Tables-107
Table-367—Plant Species Determined To Be At Substantial Risk From Forest Service Activities With Types Of Threats That Affect Them. All Plants Are In Risk Category 5	Tables-109
Table-368—Viability Outcome Statements By Alternative For Plant Species-At-Risk.	Tables-114
Table-369-Animal Species Evaluated for Viability Concerns List (Species of Concern).....	Tables-118
Table-370-Animal Species at Risk List.....	Tables-126
Table-371-Viability Outcome Statements By Alternative For Vertebrate Animal Species-At-Risk.	Tables-130
Table-372-Viability Outcome Statements By Alternative For Invertebrate Animal Species-At-Risk	Tables-132
Table-373-Summary of Animal Threats by Vegetation Group.	Tables-133
Table-374-Summary of Plant Threats by Vegetation Group.	Tables-134
Table-375-Conservation Emphasis Areas, Priority Opportunities For The Next 3-5 Years.....	Tables-136
Table-376-Activities That Can Impact Habitat For 88 Plant Species-At-Risk And The Standards That Address The Threat Producing Activities.	Tables-139
Table-377-Animal Species Determined To Be At Substantial Risk From Forest Service Activities, The Types Of Threats That Affect Them, And The Standards That Address These Threats.....	Tables-140
Table-378-System Trail Miles by Erosion Hazard Rating	Tables-144
Table-379-Developed Recreation Site Occupancy and Estimated Visits – ANF.	Tables-145
Table-380-Developed Recreation Site Occupancy and Estimated Visits – CNF	Tables-146
Table-381-Developed Recreation Site Occupancy and Estimated Visits – LPNF	Tables-146
Table-382- Developed Recreation Site Occupancy and Estimated Visits – SBNF.....	Tables-147
Table-420-Special Forest Product Revenue FY2002.....	Tables-147
Table-421-Summary Of Current General Visitor Use By Forest.....	Tables-148
Table-422-Predominant Race/Ethnicity, Gender, and Age of Forest Visitors.....	Tables-148
Table-423-Five Most Popular Activities by Forest by Percent Participation.....	Tables-148
Table-425-Primary Purpose of Visit (% participation).	Tables-149
Table-426-Visit Characteristics.....	Tables-149
Table-432-Existing Management Indicator Species by National Forest.....	Tables-149
Table-433-Southern California Forest Plan Revision - Management Indicator Species.....	Tables-151
Table-434-Existing Management Indicator Species from the San Bernardino National Forest. ...	Tables-153

List of Tables (continued)

Table-436-Arroyo Seco River - Potential Classification by River Segment.....	Tables-154
Table-437-Arroyo Seco River - Segment Description.....	Tables-154
Table-438-Indian Creek - Potential Classification by River Segment.....	Tables-155
Table-439-Little Sur River - Potential Classification by River Segment.....	Tables-155
Table-440-Mono Creek - Potential Classification by River Segment.....	Tables-156
Table-441-Piru Creek - Potential Classification by River Segment.....	Tables-156
Table-442-Number of Incidents from 2000 through 2003, SBNF.....	Tables-157
Table-443-San Antonio River - Potential Classification by River Segment.....	Tables-157
Table-444-Upper Sespe Creek - Potential Classification by River Segment.....	Tables-158
Table-445-Indian Creek - Segment Description.....	Tables-158
Table-446-Little Sur River - Segment Description.....	Tables-158
Table-447-Mono Creek - Segment Description.....	Tables-159
Table-448-Piru Creek - Segment Description.....	Tables-159
Table-449-San Antonio River - Segment Description.....	Tables-159
Table-450-Upper Sespe Creek - Segment Description.....	Tables-159
Table-451-Angeles National Forest Candidate Special Interest Areas by Alternative.....	Tables-160
Table-452-Cleveland National Forest Candidate Special Interest Areas by Alternative.....	Tables-160
Table-453-Los Padres National Forest Candidate Special Interest Areas by Alternative.....	Tables-160
Table-454-San Bernardino National Forest Candidate Special Interest Areas by Alternative.....	Tables-160
Table-455-OHV Mileage by Forest.....	Tables-161
Table-456-Miles of ML2 Roads Open For OHV Use.....	Tables-161
Table-458-Acres Burned by Wildfire Annually.....	Tables-161
Table 459 - Predominate Categories of Offense Violations from FY 2001 through FY 2003.....	Table-161
Table 460 - Population Growth Trend, 1960 – 2020.....	Table-161
Table 461 – Ethnic Origins, Assessment Area 2000.....	Table-161
Table 462 – FS Generated Impacts.....	Table-161
Table 346 - Cleveland National Forest - Publicly Proposed Other Undeveloped Areas Evaluated.....	Table-162
Table-463—Invasive Nonnative Plant Species.....	Table-162
Table-464—Invasive Nonnative Animal Species.....	Table-173

Table of Contents - Appendices

Appendix A. Common Acronyms.....	Appendices 3
Appendix B. Species Viability.....	Appendices 7
Species Lists.....	Appendices 7
Species within Critical Biological Land Use Zones.....	Appendices 7
Viability Analysis.....	Appendices 7
Process for Evaluating Viability / Ecosystem Sustainability.....	Appendices 7
Process for Landscape Linkage.....	Appendices 18
Process for Evaluating Management Indicator Species.....	Appendices 19
General Direct and Indirect Effects to Plants and Animals.....	Appendices 28
Appendix C. Invasive Species.....	Appendices 55
Appendix D. Inventoried Roadless Areas (IRAs).....	Appendices 61
Introduction and Evaluation Process Summary.....	Appendices 61
Proposed Wilderness by Alternative.....	Appendices 62
Appendix E. Wild and Scenic Rivers.....	Appendices 63
Background and Study Process.....	Appendices 63
Summary of Wild and Scenic River Eligibility Inventory by Forest.....	Appendices 70
Recommended Wild and Scenic Rivers by Alternative.....	Appendices 70
Study Reports (Los Padres National Forest).....	Appendices 71
Arroyo Seco River.....	Appendices 71
Study Area Summary.....	Appendices 71
Eligibility Inventory.....	Appendices 71
Suitability Report.....	Appendices 75
Indian Creek.....	Appendices 80
Study Area Summary.....	Appendices 80
Eligibility Inventory.....	Appendices 80
Suitability Report.....	Appendices 83
Little Sur River.....	Appendices 86
Study Area Summary.....	Appendices 86
Eligibility Inventory.....	Appendices 87
Suitability Report.....	Appendices 90
Mono Creek.....	Appendices 93
Study Area Summary.....	Appendices 93
Eligibility Inventory.....	Appendices 93
Suitability Report.....	Appendices 97

Piru Creek.....	Appendices 99
Study Area Summary.....	Appendices 100
Eligibility Inventory.....	Appendices 100
Suitability Report.....	Appendices 107
San Antonio River.....	Appendices 112
Study Area Summary.....	Appendices 112
Eligibility Inventory.....	Appendices 112
Suitability Report.....	Appendices 114
Upper Sespe Creek.....	Appendices 117
Study Area Summary.....	Appendices 117
Eligibility Inventory.....	Appendices 118
Suitability Report.....	Appendices 122
Appendix F. Research Natural Areas.....	Appendices 129
Research Natural Areas Background and Status.....	Appendices 129
Recommended Research Natural Areas by Alternative.....	Appendices 129
Appendix G. Special Interest Areas.....	Appendices 131
Special Interest Areas Background and Status.....	Appendices 131
Recommended Special Interest Areas by Alternative.....	Appendices 132
Appendix H. Santa Rosa and San Jacinto Mountains National Monument.....	Appendices 133
National Monument Background and Status.....	Appendices 133
Appendix I. Oil and Gas Potential.....	Appendices 135
Appendix J. Glossary.....	Appendices 147
Appendix K. Bibliography.....	Appendices 171
Appendix L - Visitor Use and Participation (NVUM).....	Appendices 199
Appendix M - Civil Rights Impact Analysis.....	Appendices 203
Appendix N - San Dimas Experimental Forest.....	Appendices 205
Experimental Forest Background and Status.....	Appendices 205

Draft Environmental Impact Statement For Southern California National Forests Land Management Plans Revision

Angeles National Forest
Cleveland National Forest
Los Padres National Forest
San Bernardino National Forest

Lead Agency: USDA Forest Service

Cooperating Agencies: U.S. Fish and Wildlife Service

Responsible Official: Jack Blackwell, Regional Forester, Pacific Southwest Region, 1323 Club Drive, Vallejo, CA 94592.

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Abstract: This Draft Environmental Impact Statement documents the analysis of six alternative sets of management direction for the long-term management of the National Forests of southern California including disclosure of the environmental effects expected from implementing these alternatives. Each Forest has identified a preferred alternative that was used as the basis for development of four draft forest plans. This document is prepared under the 1982 Planning Regulations found in 36 CFR part 219 in partial fulfillment of the requirement to revise forest land and resource management plans at least every 15 years.

Reviewers should provide the Forest Service with their comments during the review period of the draft environmental impact statement. This will enable the Forest Service to analyze and respond to the comments at one time and to use information acquired in the preparation of the final environmental impact statement, thus avoiding undue delay in the decisionmaking process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to the reviewers' position and contentions. *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement. *City of Angoon v. Hodel* (9th Circuit, 1986) and *Wisconsin Heritages, Inc. v. Harris*, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Comments on the draft environmental impact statement should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

Comments may be submitted electronically at <http://www.fs.fed.us/r5/scfpr>.

Nonelectronic submissions may be sent to Southern California Forest Plan Revisions, Name of National Forest (*if comments apply to one specific National Forest*), USDA Forest Service Content Analysis Center, P.O. Box 22777, Salt Lake City UT 84122, or may be faxed to (801) 517-1015.

Date Comments Must Be Received: Within 90 days of publication in the Federal Register. Timeliness of receipt will be determined by the timestamp of electronic submissions or the postmark of postal submissions.

Summary

See Executive Summary R5-MB-051 <http://www.fs.fed.us/r5/scfpr>.

Chapter 1. Purpose of and Need for Action

This draft environmental impact statement (DEIS) documents the effects of applying alternative ways of managing the Angeles, Cleveland, Los Padres and San Bernardino National Forests in southern California. The DEIS provides information that helps determine what aspects of the current land management plans need change, alternatives to how they may be changed, and the effects of implementing each of the alternatives.

The companion documents to the DEIS are the draft land management plans. The National Forests of southern California are implementing a new format for displaying land management plan direction. Each plan is actually a series of documents that are related to each other, but each stands on its own. The core documents include three parts: Part 1 is the vision; Part 2 is the forest-specific strategy; and Part 3 includes the design criteria. Each part is found in a separate document. There is one document (Part 1) that covers all four forests, which documents the goals and desired conditions for management of forest resources. Each forest has a separate document for Part 2, the strategy, which is where the forest-specific program objectives and implementation strategies may be found. Finally, Part 3 is one document that lists the design criteria to be used by each forest in developing project plans and for implementing on-going activities.

The draft land management plans were developed based on the Regional Forester's "preferred alternatives." The preferred alternatives, one for each forest, were identified based on public input, legal requirements, resource needs, and the ability of the alternative to move the forest resources toward the realization of the desired conditions described in Part 1 of the draft land management plan. The final land management plan will guide all natural resource management activities toward achieving desired conditions, using the combination of objectives, suitable land uses, a prospectus of program objectives and design criteria. This DEIS and the draft land management plans have been developed based on the input from all public meetings and in cooperation with individuals, groups, organizations, adjacent landowners, tribal governments, communities and other resource management agencies.

Document Structure

The interdisciplinary planning team (IDT) for the four southern California National Forests prepared this DEIS to comply with the requirements of the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This DEIS describes and discloses the direct, indirect, and cumulative environmental effects or trends expected to result from implementing the preferred alternative for each forest and the alternatives to the preferred alternative.

The DEIS is organized within the framework of four chapters:

Chapter 1: Purpose of and Need for Action. This chapter includes a description of the proposed action and a brief summary of the information relevant to the proposal, including a description of the purpose of and need for the land management plan revisions and a description of the action proposed by the Forest Service to accomplish the purpose and need. This chapter also describes how the Forest Service informed people about the proposal.

Chapter 2: Alternatives, Including the Proposed Action. This chapter includes a description of six alternative ways to accomplish the proposed action. Development of these alternatives was based on the significant issues identified by the Forest Service as a result of internal Forest Service review, public involvement and consultation with other state and federal agencies. The chapter concludes with a comparison of the six alternatives and the environmental consequences or trends that are expected if the alternative were to be implemented.

Chapter 3: Affected Environment and Environmental Consequences. Chapter 3 describes in detail the existing conditions and the anticipated environmental effects of implementing the alternatives. The description of the analysis and environmental consequences is organized by resource groups. The sections include resource management, public use and enjoyment, management and administration, facility operations and maintenance, commodity and commercial uses, and fire and aviation management. Each section addresses the effects on resources listed in that section; for example, the vegetation condition and forest health section addresses effects

from all activities that are expected to have an impact on vegetation. It does not address the effect of vegetation management on other resources such as wildlife; effects on wildlife would be found in the biodiversity section.

Each resource section is made up of two parts:

- **Affected Environment (including Key Indicators):** Describes the existing condition of the resource and a short list of those factors that are most likely to indicate movement either toward or away from desired resource conditions over time.
- **Environmental Consequences:** Direct and indirect effects that can generally be expected when activities are implemented are discussed first. Resource protection measures designed to mitigate these expected effects are also discussed in this section. Because land management plans are strategic documents that do not authorize site-specific activities or designations, effects analysis is by necessity general in nature; specific projects are not analyzed. Following the discussion of general types of effects is a comparison of future scenarios; these suggest trends in the key indicators that can be expected under the emphasis and management direction described for each alternative. Finally, cumulative effects are discussed, including, where appropriate, how regional trends such as land development may affect the resource.

Chapter 4: Consultation and Coordination. This chapter includes a list of the people responsible for the preparation of the DEIS and agencies that were consulted during the development of the DEIS.

Appendices. The appendices provide supplemental, detailed information used in the analysis of the alternatives.

Additional information, including more detailed analytical components of forest resources, is located in the project record located at the Supervisor's Office of the Cleveland National Forest in San Diego, California.

Background

Between 1995 and 1999, the four southern California National Forests began a large-scale analysis of the ongoing (day-to-day) activities of forest management and the potential effects of those activities on plant and animal species and their habitats. The analysis was initiated because of numerous changes that had occurred with respect to resource demands and the condition of the forests since the land management plans were originally approved for implementation. This analysis concluded with the publication of a comprehensive habitat conservation assessment, the *Southern California Mountains and Foothills Assessment (SCMFA)* (Stephenson and Calcarone 1999).

An interdisciplinary planning team, made up of resource specialists from the four southern California National Forests and the Pacific Southwest Research Station, used the SCMFA and other forest documents to review the land management plans and the ability of the plans to deal with current conditions, including 60 federally listed threatened and endangered species. The team's analysis was published in the *Province Forest Plan Monitoring and Evaluation Report (M&E Report)* (USDA Forest Service February 2000). The M&E Report identified a number of areas where the land management plans do not include adequate management direction for riparian areas, ongoing activities and habitat conservation. The M&E Report concluded with a recommendation that the four land management plans be revised. At this point, the four Forest Supervisors decided to initiate a combined revision of their respective land management plans. The objectives of the revisions are to describe up-to-date strategic direction and to have more consistent management direction across the four forests.

In 1999, a 13-member Committee of Scientists evaluated the 1982 Planning Regulation (36 CFR 219) that guides the development and revision of land management plans. The committee issued a report, *Sustaining the People's Lands* (March 1999), with the results of their evaluation and recommendations for land management planning in the future. Based on many of the committee's recommendations, the 2000 Planning Rule was published in the *Federal Register* in October 1999 and was adopted by the Forest Service in November 2000. At about the same time, the four southern California National Forests formed the interdisciplinary planning team and started work following the requirements of the 2000 Planning Rule.

After the 2000 Planning Rule was adopted, internal and external concern for the complexity of the rule and the agency's ability to implement it resulted in a review of the rule and a recommendation that it be simplified. The Chief of the Forest Service directed that the 2000 Planning Rule be revised, and an Interim Planning Regulation was published in the *Federal Register* on May 17, 2001. The interim regulation included managerial discretion to

complete land management plan revisions initiated prior to May 9, 2002 using either the 1982 or the 2000 Planning Regulation. The southern California Forest Supervisors elected to complete the plan revisions using the 1982 Planning Rule.

Purpose and Need for Action

The purpose of this proposed action is to develop revised land management plans for the four southern California National Forests that will:

1. Guide all natural resource management activities on the forests;
2. Address changed conditions and direction that have occurred since the original plans were adopted; and
3. Meet the objectives of federal laws, regulations and policies.

Specifically, the revised land management plans will provide forest-wide strategic direction for each of the southern California National Forests.

The development of the revised land management plans and this draft environmental impact statement (DEIS) are required to satisfy regulatory requirements and to address new and changing information regarding the forests and their uses.

The land management plans include the provisions of the National Forest Management Act, the implementing regulations, and other guiding documents. Multiple-use desired conditions and objectives, land use zoning, and design criteria (standards) all work together to define management direction for the four forests. However, successful implementation of the direction included in the four land management plans depends on the congressional budget process and other factors.

In 1982, instructions to revise land management plans and the basis for revision were described in the Code of Federal Regulations (CFR) at 36 CFR 219.10(g):

"A forest plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed significantly or when changes in Resource Policy Act policies, goals or objectives would have a significant effect on forest level programs."

Not only have conditions and expectations changed significantly on the forests, but all of the current land management plans are at least 14 years old. Current plans for the four forests were approved between 1986 and 1989.

Proposed Action

The Forest Service proposes to revise the land and resource management plans (land management plans) for the Angeles, Cleveland, Los Padres and San Bernardino National Forests. The strategic direction included in the revised plans will be used to guide all natural resource management activities on the four southern California National Forests to meet the objectives of federal law, regulation, policy and the Forest Service mission:

"To sustain the health, diversity and productivity of the Nation's Forests and Grasslands to meet the needs of present and future generations."

Decision Framework

The adoption of a land management plan establishes key decisions for the long-term management of a National Forest. These decisions are:

1. Establishment of forest-wide multiple-use objectives, including a description of the desired condition of the southern California National Forests as required by 36 CFR 219.11(b). The desired conditions are described in part 1 of the land management plan and objectives are described in part 2 of the land management plan.

2. Establishment of forest-wide standards to fulfill the requirements of 36 CFR 219.11(c) and 36 CFR 219.13 through 219.27. Forest-wide standards are listed in the design criteria section in part 3 of the land management plan.
3. Identification of suitable uses to fulfill the requirements of 36 CFR 219.11(c). Suitable uses are shown in the land use zone table and accompanying maps and appendices in part 2 of the land management plan.
4. Establishment of monitoring and evaluation requirements for implementation of the revised land management plans as required by 36 CFR 219.11(d). Monitoring and evaluation requirements are listed under each desired condition in part 1 of the land management plan and in a separate monitoring section in parts 2 and 3.
5. Recommendations to Congress of areas eligible for wilderness designation as required by 36 CFR 219.17(a) and rivers eligible for inclusion in the Wild and Scenic River System as described by 16 USC 1271-1287 and 36 CFR 297. Recommendations to Congress for establishing wilderness and other special designations will be made in the record of decision (ROD) for the final Environmental Impact Statement (FEIS) for the revised land management plans.
6. Determination of suitability and potential capability of lands for resource production (timber, grazing and oil and gas leasing), as required by 36 CFR 219.14 through 36 CFR 219.26.

Land management plans do not make any decisions regarding site-specific project proposals for implementing the land management plans. Project-level environmental analysis would still need to be completed and a project must be consistent with the revised land management plans.

Public Involvement

The Notice of Intent (NOI) to prepare this Environmental Impact Statement was published in the *Federal Register* on September 24, 2001. The NOI asked for public comment on the proposal from September 24 through December 31, 2001. Comments have also been accepted throughout the process and requested at the public meetings and workshops.

Four rounds of public meetings and open houses were held in various locations across southern California. At the first series, held from January through March 2001, people were asked to develop a list of values and visions for the forests. A second round of public meetings ran from March through May 2001. At these meetings, we presented our preliminary significant issues and a range of background data and information. The third round of public meetings was held from October through December 2001. At that time, people were asked for comments on the proposed action. A fourth round of public workshops held in February and March 2003 showed people the range of alternatives being considered to address the issues; people were asked if their concerns were addressed by at least one of the alternatives. In addition, newsletters were mailed periodically to all parties who had expressed interest, and information was posted on the land management planning website <http://www.fs.fed.us/r5/scfpr> to keep people informed and involved in the planning process.

Issues

The interdisciplinary planning team identified the following five issues after a review of the comments that were received in response to the public meetings and the notice of intent. The comments touched on every aspect of forest management and were grouped into issues. The issues were separated into two groups: significant and non-significant. Significant issues are defined as those directly or indirectly caused by implementing the proposed action. A significant issue is one that suggests different actions among the alternatives. These different ways of addressing an issue are reflected in the six alternatives. Non-significant issues are characterized as those:

- That require a solution that is outside the scope of decisions made in a land management plan or is the responsibility of another agency;
- Already decided by law, regulation, or other higher level decision;
- Not relevant to the decision to be made; or

- Conjectural and not supported by scientific or factual evidence.

The Council on Environmental Quality (CEQ) NEPA regulations explain this delineation in Sec.1501.17: "... identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review... (Sec. 1506.3)."

The significant issues identified by the Forest Service are discussed in the following sections. The phrases in parentheses following the title of the issue refer the reader to one or more functional areas of operation. These terms describe the areas of business for which the forests are responsible and are described in part 2 of the land management plans.

Issues 1: Public Values and Uses (Public Use and Enjoyment, Facility Operation and Maintenance)

Public use and enjoyment of the National Forests is affected by intense competition among an increasing number of people for a finite amount of resources.

This issue is focused on the ability of the four southern California National Forests to continue to offer a variety of opportunities, experiences, uses and forest access to an expanding and increasingly diverse population, while continuing to provide resource protection.

The rugged, wildland landscapes of southern California are valued for the visual contrast they provide in this rapidly urbanizing region. As the population continues to increase, so too, does the desire to conserve these remaining vestiges of regional open space and scenic heritage in a natural-appearing condition.

The public expects management of forest heritage resources in a manner that will protect and enhance those resources. The public also has an interest in increased cooperation between the forests and Native Americans in management issues of mutual concern. These issues include the use of the forests for traditional, ceremonial or cultural concerns; and the availability of access to resources for American Indians and other cultural groups.

The transportation system is valued for providing forest access, delivering goods and services, wildfire protection and recreation opportunities. Forest road managers recognize that additional segments may be needed to increase the system's effectiveness, that other segments may require attention to resolve resource concerns, and that urbanization of land along the forest boundaries has closed off customary points of access to the forests. The condition of existing recreation and administrative facilities has continued to decline because of diminishing budgets, which greatly increases the facility maintenance backlog. At the same time, additional facility improvements are needed to address increased visitor demand.

These challenges require new considerations of our land-management role, the manner in which we communicate with forest visitors, and the uses desired by people.

Issue 2: Ecosystem Elements and Function (Resource Management)

The trend of increased listing of threatened, endangered and sensitive species and the consequences of management actions on these species must be addressed.

This issue focuses on the restoration and maintenance of habitats for all native species, particularly the habitats needed for the conservation and recovery of threatened and endangered plant and animal species. Habitats for species considered sensitive must also be protected, so that these species are not elevated to the threatened or endangered categories. The four southern California National Forests include areas that have been described as "hotspots" of biological diversity. Approximately 3,400 species of plants and animals are known to occur on or adjacent to the four forests. Of these, more than 470 species are identified as threatened, endangered, sensitive or species of concern. When the last of the four land management plans was approved in 1989, 18 federally listed endangered or threatened species (under the Endangered Species Act) were known or had the potential to occur on the four forests. Since then, an additional 45 plants and animals with known presence or potential to occur on or near the southern California National Forests have been listed or are candidates for listing. Some of the factors

influencing this trend include historical and ongoing activities on the forests, rapid urbanization and habitat loss outside the forests' boundaries and increased attention to the issue due to higher public interest in biodiversity.

The present fire regime is out of balance, and the threat of wildfire and risks to humans are increasing.

Wildfire is a critical issue on the four forests. We agree with the public that community protection needs should be a priority. As demonstrated by the wildfires of October 2003, the risk of wildfire has increased dramatically because of the bark beetle epidemic occurring on portions of the San Bernardino, Cleveland and Angeles National Forests. More than 100 years of fire suppression have resulted in dense stands of trees. The past four years of unprecedented drought in these dense stands stressed the trees, which then became very susceptible to bark beetle attack. More than 500,000 acres have beetle-killed trees and many more acres are still at risk to bark beetle attack.

Fuel reduction treatments are needed not only to protect human communities but also to minimize or prevent catastrophic wildfire effects on listed species and their habitats. Fire suppression has modified the structure and composition of some stands and in some cases has changed the stand from one vegetative type to another. Frequent burning is also causing impacts, especially along urban interface areas in coastal sage scrub and chaparral habitats.

A balance needs to be defined between the quantity of water extracted from forest lands for human uses and the amount retained for ecosystem sustainability.

The four forests include watersheds that are critical to providing the quality and quantity of water needed for the support of trees, plants and wildlife, as well as for drinking water. The relationship between ground water extraction, water diversions and instream flow requirements to support aquatic species and riparian habitat is critical to the proper functioning of sustainable forest ecosystems and the recovery of listed species. The challenge is to balance the needs of water users with resource needs for the maintenance or improvement of riparian and wetland habitat.

Invasive nonnative animal and plant species are threatening ecosystems.

The infestation and spread of invasive nonnative animal and plant species threatens the health of many forest ecosystems, particularly riparian habitats; reduces biological diversity; and affects threatened, endangered and sensitive species on the forests.

Issue 3: Commodity Values and Uses (Commercial Uses, Facility Operation and Maintenance)

The increased demand for uses and products such as water extraction, oil and gas development and special forest products has intensified human pressure on the forests.

This issue focuses on traditional, current and future commodity values, uses and levels of outputs of the forests. These products or uses include livestock forage; gathering forest products for personal, traditional, or commercial uses; collecting fuelwood; hunting and fishing; mineral exploration and development; oil and gas production; extraction of groundwater; and surface water diversion. The challenge for the forests is to meet local and national demand while protecting other forest resources.

Issue 4: Urban Development and Forest Habitat Linkages (Resource Management, Commercial Uses, Fire)

Growing populations and expanding urban development are increasing pressure on forest resources.

This issue looks at the effects of urbanization on the forests. Maintaining open space and the natural setting of the forests while accommodating urban infrastructure needs is a challenge. More than 20 million people live in southern California and this number is expected to increase over the life of the revised land management plans. The forests routinely receive requests to locate special-use sites, communication facilities and urban infrastructure--including highway corridors, communication sites and utility routes--on National Forest System lands. The trend toward development of private land within the forest boundaries also creates a need for increased infrastructure across the forests.

Private land development both within and outside the forest boundaries is steadily reducing the habitat linkages that wildlife species need to connect large blocks of forest lands with other public and private open space and habitat reserves. In the past decade, the forests acquired about 30,000 acres of private land. Continued acquisitions of private land within forest boundaries would be beneficial, especially given the effect that development of private land has on the surrounding forest land. In addition, some people would like the forests to pursue acquisition of land outside National Forest boundaries that are important for species habitat linkages.

There is a need for increased coordination with adjacent community, county, state and tribal governments and other federal agencies to help ensure coordinated land management.

Issue 5: Special Area Designations (Public Use and Enjoyment, Resource Management)

The designation of "special areas" offers protection of resources but can result in the reduction of current opportunities, experiences or uses.

Some areas of the forests may be given formal recognition as special areas based on their unique or outstanding physical features, environmental values or social significance. The designations impart long-term protection to these special resources. The special areas include recommendations to Congress for wilderness, wild and scenic rivers, and administrative designations that include research natural areas and special interest areas. Compatible uses are retained to the maximum extent possible; however, the designations can result in the reduction of some level of opportunity, experience or use that may have been occurring in the area.

Other Issues and Concerns

Some concerns did not meet the criteria for being considered significant but are nevertheless important. These appear in the revised land management plans and are addressed through adjustment of design criteria (standards), land use zones or procedural adjustments. Examples include the topics of air quality, geologic resources and hazards, law enforcement, soils and heritage resources.

A number of other interests and issues raised by the public and other agencies are not addressed by the alternatives described in this document. Some of the concerns that were raised - such as the Adventure Pass, grazing fee levels, and global warming - require a solution that is outside the scope of decisions made in a land management plan or are the responsibility of another agency.

Other Related Efforts

Additional public environmental assessments and environmental impact statements which are being or will be prepared that are related to but are not part of the scope of this DEIS include:

- The Oil and Gas EIS on the Los Padres National Forest;
- The joint Bureau of Land Management and Forest Service Santa Rosa and San Jacinto Mountains National Monument Management Plan EIS;
- The Bureau of Land Management Off-shore Monument EIS;

- The National Oceanic and Atmospheric Agency Monterey Bay Marine Sanctuary EIS.

Chapter 2. Alternatives, Including the Proposed Action

This chapter describes and compares the alternatives being considered for the revision of land management plans for southern California National Forests. The chapter includes a full description of each alternative considered. The chapter also compares the alternatives, defining their differences and providing a clear basis for choice by the decision maker and for understanding by the public. These alternatives provide a range of forest management options for the next 10 to 15 years; each alternative is a potential land management plan that can be implemented if selected.

Development of Alternatives

This plan revision process started with the determination that there is a need to change current land management plans, which were approved in the 1980s. Four revised land management plans were formulated. Potential changes to the land management plans are identified in the significant issues described in chapter 1.

As required by National Environmental Policy Act (NEPA) regulations, we used an interdisciplinary process to develop alternatives. Public comments received during the scoping phase of the process were combined with the significant issues and used as the basis for the development of six different alternatives. Each alternative has been designed to respond to comments and significant issues in a different way, thus providing a range of possible management approaches from which to choose.

To encourage participation by local and national audiences, four primary communication techniques were used:

- Periodic newsletters sent to those who expressed an interest;
- Numerous open houses and meetings held in various communities in southern California;
- A website, developed and maintained to disseminate information and provide further opportunities for participation; and
- One-on-one meetings requested by individuals and specific groups.

Using these communication techniques, local communities and people from across the country participated in the alternative development process.

The Role of Science in Alternative Development and Environmental Consequences

The integration of science has been a critical component in developing alternatives and in analyzing the expected effects of implementing the alternatives. The benefits of this integration result in: (1) an improved set of options for decisions, (2) a clear display of the uncertainty and risk associated with proposed courses of action, (3) increased clarity with which scientific evidence and rationales are expressed, and (4) enhanced insights into choices that are made, thereby strengthening possibilities for more effective adaptive management.

Existing data and knowledge were augmented by several major scientific assessments, including: *Southern California Mountains and Foothills Assessment* (Stephenson and Calcarone 1999); *Socioeconomic Assessment of Southern California Publics* (Struglia, Winter and Meyer 2001); *Atlas of Social and Economic Conditions and Change in Southern California* (Raettig, Elmer and Christensen 2001); *Southern California Socioeconomic Assessment: Sociodemographic Conditions, Projections, and Quality of Life* (Struglia, Winter and Meyer 2001); *Managing Outdoor Recreation in California: Visitor Contact Studies, 1989-1998* (Chavez 2001); *Missing Linkages: Restoring Connectivity to the California Landscape, Conference Proceedings* (Penrod, Hunter, and

Merrifield 2001); *An Exploration of Recreation and Management Preferences Related to Threatened and Endangered Species: Final Report for the Angeles, Cleveland, Los Padres and San Bernardino National Forests* (Winter and Knap 2001); and *Social Trust and the Management of Threatened and Endangered Species: An Investigation of Communities of Interest and Place* (Cvetkovich and Winter 2001).

Scientists and researchers have contributed to the land management plan revision process by helping to:

- Gather, synthesize, and validate information;
- Identify and quantify risk without recommending what level of risk is appropriate;
- Assure the quality of information by following scientific protocols, including peer review; and
- Establish evaluation criteria.

Elements Common to All Alternatives

Forest plans do not create, authorize or execute any site-specific ground-disturbing activities.

All alternatives adhere to the concepts of multiple use and ecosystem management, ensure the protection of forest resources, and comply with applicable laws, regulations and manuals.

Safety is the number one priority in every management situation.

All alternatives emphasize National Fire Plan implementation in wildland-urban interface areas.

Rangeland type conversion where increased forage is the primary objective is not suitable on National Forests of Southern California.

Lands with a timber management objective are not suitable on National Forests of Southern California.

Mechanized vehicular uses are restricted to designated roads and trails.

Motorized use off Forest System Roads is suitable only in designated open areas and on designated motorized trails.

Current designated wilderness, national scenic and recreational trails, monuments, scenic byways and wild and scenic rivers will not be reduced or eliminated.

Land Use Zone Definitions and Comparison Tables

Eight land use zones (LUZs) are used in different combinations under each alternative. Each zone includes a range of uses that are suitable, giving a clear indication of management emphasis. The zones include:

Urban and Rural Interface (URI): URI includes land that is adjacent to communities with consolidated infrastructure. There is a high intensity of human use and a high level of dependence on roads. Resource use and development are expected.

Developed Areas Intermix (DAI): DAI includes land that is adjacent to communities or concentrated areas with more scattered or isolated community infrastructures. Although there is a high level of human use and roads, the environment is more natural appearing and motorized use is less intensive than in the URI zone. Resource uses and development may generally occur.

Backcountry Motorized (BCM): BCM includes largely undeveloped, natural or natural appearing areas where motorized use may occur. The intensity of human use is low to moderate. Facilities may exist.

Backcountry Non-Motorized (BCNM): BCNM includes the same backcountry environment as BCM but motorized use is not allowed. The intensity of human use is lower than in BCM, with expectations for more user challenge and solitude. Facilities, if any, are primitive.

Critical Biological (CB): CB includes lands that are considered the most important areas on the four southern California National Forests to manage for the protection of many imperiled species. Facilities are minimal to

discourage human use. Activities and modification to existing infrastructure are allowed if they are beneficial or neutral to the species. Dispersed use such as hiking and hunting is generally allowed. Use of adjacent National Forest System roads is allowed.

Existing Wilderness (EW): This zone includes existing designated wildernesses.

Recommended Wilderness (RW): RW includes land that the Forest Service is recommending to Congress for wilderness designation.

Experimental Forest (EF): This zone serves as a research and demonstration area and is generally closed to the public except by permit. This zone occurs only on the San Dimas Experimental Forest on the Angeles National Forest.

The following tables give an overall comparison by alternative of the varying acres offered in each land use zone.

- Table 333: Comparison of Alternative Acres by Land Use Zone
- Table 334: Percent of Each Land Use Zone by Alternative

Note that the number of experimental forest (EF) acres decreases in alternatives 2 and 3 because recommended wilderness (RW) overlaps EF in these two alternatives and the overlap acres were assigned to the RW land use zone.

Alternatives Considered in Detail

This section describes each alternative that has been analyzed in detail. Following this section is a comparison of alternatives, which describes the similarities and differences among the alternatives.

Alternative 1

No Action

Alternative 1, an updated form of the no-action alternative, reflects current forest-wide management direction and emphasis. It meets the NEPA requirement (36 CFR 219.12(f)(7)) specifying that a no-action alternative be considered. "No Action" means that current management allocations, activities and management direction found in the existing land management plans would continue, as amended, with certain exceptions as discussed in the 2001 programmatic biological opinion from the U.S. Department of the Interior (USDI) Fish and Wildlife Service (USFWS). In addition, terms and conditions of programmatic and other "high priority" consultations done with the USFWS would continue. For comparison with other alternatives, management areas in the 1980s plans have been translated to the land use zones being used now, described by the same terms, outcomes and outputs.

The theme of this alternative is to provide a mix of recreational opportunities and commodities while maintaining biological diversity and ecological integrity. The current mix of motorized/non-motorized land use zones is maintained. Compared to other alternatives, there is a higher level of investment in:

- Intensive control strategies at a few key locations, including closure and/or removal of sites and the reconstruction of others, to protect sensitive resources. Existing facilities would continue to operate. Current levels of conservation education programs and partnerships would continue.
- Actions needed to avoid and minimize effects on species-at-risk. Current conservation efforts would continue.

Roads and Trails: The emphasis for roads is on deferred maintenance. Miles of current open roads are expected to decrease. Motorized trail mileages and four-wheel-drive (4WD) opportunities are expected to remain the same. Current levels of non-motorized trails, unclassified trails and mileage available for mechanized use are not expected to change.

Unclassified roads are decommissioned or converted to trails overtime as budget allows.

Community Protection and Vegetation Management: All six alternatives emphasize implementation of the National Fire Plan in wildland-urban interface areas. Mechanical treatments are used in combination with

prescribed fire to reduce fire hazard in the urban-rural interface land use zone and the developed area intermix land use zone. All wildfires are suppressed because they present either a direct or future threat to communities.

In alternatives 1 through 5, the vegetation management program consists of mortality (dead tree) removal, buffers, fuelbreak maintenance, fuelbreak construction, tree thinning and prescribed fire. Mortality removal is planned on National Forest System lands within one mile of threatened communities and also along evacuation routes, within one-third of a mile of government and permitted facilities, and in or around developed recreation sites. Dense stands of mixed conifer forests would be thinned and then fire would be reintroduced. Prescribed burns in chaparral would be designed to treat areas up to 5,000 acres in size, both in high hazard areas and as a strategic tool to limit wildfire spread in other areas of the forest.

Watersheds: Emphasis is on the prevention of watershed degradation and the maintenance of water quality and quantity by continuing to avoid aquatic environments and by mitigating effects from projects.

Commodity Values and Uses: All active grazing areas are retained. Acres suitable for grazing and vacant grazing areas are expected to decrease to protect critical habitats and bighorn sheep.

Most areas remain available for mineral and energy development.

Urban Development and Forest Habitat Linkages: Existing designated communication sites and utility corridors would continue to be used. Land use zoning includes the opportunity for new utility corridors after site-specific analysis and environmental review. The area suitable for special uses is unchanged from existing land management plans.

The land adjustment strategy would continue to focus on consolidation, habitat improvement, better access, acceptance of donations and publicly initiated cases. Nearly all rights-of-way would be acquired through land adjustment.

Special Area Designations: No inventoried roadless areas are recommended for wilderness. No new wild and scenic rivers are recommended for designation. Research natural areas that were proposed under existing plans and have establishment records prepared for them become established. No new special interest areas are created.

The summary and comparison of the percentages of land use zones under alternative 1 can be found in the land use zone definition and comparison tables section of chapter 2.

Alternative 2

Alternative 2 was originally developed as the "Proposed Action" for the land management plan revisions and was available for public comment in 2001. Alternative 2 has been modified from earlier versions to provide additional protection for species-at-risk through species management strategies and land management plan standards.

The primary theme of this alternative is to maintain biological diversity and ecological integrity while accommodating a gradual increase in recreation opportunities. Land use zones are similar to those in alternative 1, with the addition of some special area designations. Compared to other alternatives, there is a higher level of investment in:

- The reconstruction of existing degraded facilities and the construction of new facilities to accommodate projected recreation demand in an environmentally sustainable way. More intensive user controls are designed to minimize conflicts between users and with sensitive environmental resources. Investments in mitigation increase so that use levels can continue. Conservation education and partnerships are used effectively; National Forest staff members would enlist the support of local communities, partners and volunteers to promote a stewardship ethic and enhance visitor services.
- Avoidance or minimization of effects on species-at-risk by providing little focus on the restoration of habitats. A conservation strategy focuses on the use of an adaptive management approach to meet conservation objectives in species-at-risk habitat.

Roads and Trails: The emphasis for roads is on deferred maintenance. The current road system decreases slightly. The motorized trail system is improved in some locations through the designation of maintenance level (ML) 2 roads that provide additional off-highway vehicle (OHV) opportunities. Disconnected trails and ML 2 roads are linked in some cases to form loop trails. Four-wheel-drive (4WD) opportunities remain at current use

levels. A system of environmentally sustainable non-motorized trails is retained.

Some of the unclassified roads that are environmentally sustainable may be converted to non-motorized or motorized trails. All others are decommissioned over time as budgets allow.

Community Protection and Vegetation Management: Same as alternative 1.

Watersheds: Emphasis is on the prevention of watershed degradation and the sustainability of water quality and quantity. An adaptive management approach is used to protect watershed resources, which receive additional protection through the designation or recommendation of some special areas. Conservation education and the development of partnerships are emphasized, with a focus on understanding and protecting watershed dynamics and functions.

Commodity Values and Uses: All active grazing areas are retained but the acres suitable for grazing are reduced. Portions of or entire vacant grazing areas are recommended for closure.

A moderate amount of land remains available for mineral and energy development.

Urban Development and Forest Habitat Linkages: Existing designated communication sites and utility corridors would continue to be used. Land use zoning provides the opportunity for some new utility corridors, after site-specific analysis and environmental review. The area suitable for special uses is less than in existing land management plans.

Existing land adjustment strategies would continue at present levels, with an increased focus on protection of species habitat and preservation of wildlife corridors needed to better protect sensitive resources.

Special Area Designations: Key inventoried roadless areas that offer a balance of recreation and scenery values plus protection of open areas for the conservation of biodiversity are recommended for wilderness designation. Additionally, key wild and scenic rivers that provide the best balance of recreation and scenic values with the need to protect and enhance the river's resource values are recommended for designation. Some research natural areas are established to conserve a broad range of areas with unmodified conditions and natural processes for research needs. A few new special interest areas are created to conserve those areas of unique special values.

The summary and comparison of the percentages of land use zones under alternative 2 can be found in the land use zone definition and comparison tables section of chapter 2.

Alternative 3

The theme of alternative 3 is to maintain and protect biological diversity and ecological integrity and to maximize special area designations. Developed recreation and other uses of the forests are continued but at a lower level, with increased controls. More area is added in the recommended wilderness and backcountry non-motorized land use zones than any alternative except for alternative 6. Compared to other alternatives, there is a higher level of investment in:

- Modification of existing facilities to better protect sensitive resources, including an emphasis on decommissioning recreation facilities and individual sites that are affecting sensitive resources. *Maximum* visitor capacity controls and proactive environmental designs are implemented to minimize effects. Alternative 3 maximizes the use of conservation education and partnerships, and National Forest staff members promote a stewardship ethic focused on biodiversity. No new recreation facilities are planned to replace those decommissioned.
- Proactive habitat improvement and surveys. A stronger focus is on habitat restoration compared to the avoidance of habitat degradation. There is greater emphasis on the protection of biodiversity.

Roads and Trails: Motorized and mechanized travel is limited to designated routes. The road emphasis is on deferred maintenance. The current road system is expected to decrease. Motorized trail mileage and four-wheel-drive (4WD) opportunities are reduced. A system of environmentally sustainable non-motorized trails is retained. Some unclassified trails may be rehabilitated and converted to system trails.

Some of the unclassified roads that are environmentally sustainable may be converted to non-motorized trails. The others are decommissioned over time as budgets allow.

Community Protection and Vegetation Management: Same as alternative 1.

Watersheds: There is a continued emphasis on the prevention of watershed degradation and an increased emphasis on watershed restoration and improvement. A priority is to improve water quality and maintain or increase water quantity in support of threatened, endangered, proposed, candidate, and sensitive (TEPCS) species and their habitats.

Commodity Values and Uses: All active grazing areas are retained but the acres suitable for grazing decrease. Portions of or entire vacant grazing areas are recommended for closure.

Because of increased acreage placed in recommended wilderness and backcountry non-motorized land use zones, large areas of forest are recommended to be withdrawn from future mineral entry.

Urban Development and Forest Habitat Linkages: Existing designated communication sites and utility corridors would continue. New utility corridors are not emphasized. The area suitable for special uses is less than under existing land management plans.

This alternative continues existing land adjustment strategies, with the highest priority given to protection of species habitat and preservation of wildlife corridors to better protect sensitive resources. The acquisition of parcels within wilderness, wild and scenic river corridors and important biological areas is emphasized. There is some emphasis, but less than in alternative 6, on acquisition of lands that fall outside National Forest System boundaries.

Special Area Designations: A number of inventoried roadless areas are recommended for wilderness designation. These recommendations focus on conservation for a wide range of wildlife and plant species (especially threatened, endangered and sensitive) and habitats; biodiversity; linkages; and corridors. Those areas that require active management with motorized or mechanized tools to sustain species are not recommended for wilderness. All eligible wild and scenic rivers are recommended for designation. All proposed research natural areas are established to conserve the widest possible range of areas with unmodified conditions and natural processes, for research needs. All proposed special interest areas are created to conserve the widest possible range of areas with special values.

The summary and comparison of the percentages of land use zones under alternative 3 can be found in the land use zone definition and comparison tables section of chapter 2.

Alternative 4

The theme of alternative 4 is to emphasize recreation, with intensive levels of management controls and mitigation of effects on biological diversity and ecological integrity. A wide range of recreation opportunities is emphasized. Fewer areas are added for recommended wilderness than under alternatives 2, 3 and 5. Alternative 4 includes the most backcountry motorized acres, except for alternative 2, and more backcountry non-motorized acres than alternatives 2 and 5. Compared to other alternatives, there is a higher level of investment in:

- Reconstruction or replacement of facilities where problems exist. New facilities are designed to endure the projected heavy levels of use. There is a more intensive level of recreation management and enforcement, and users are directed away from sensitive areas. There are increased investments in mitigation so that use levels can remain high. There is an increased focus on and investment in monitoring to ensure that mitigation measures are working. Alternative 4 would substantially increase the effective use of public conservation education programs and partnerships, and the forests would enhance visitor services while also promoting a stewardship ethic.
- The management of natural resources at a sustainable level is emphasized, including proactive management for biodiversity through surveys and implementation of recovery plans for federally listed species.

Roads and Trails: Motorized and mechanical travel would be restricted to designated routes. The emphasis for roads is on upgrading primary access routes that lead to recreation facilities and popular dispersed recreation destinations. Some increase in the current road system mileage is expected. Motorized and non-motorized recreation opportunities are well balanced. An environmentally sustainable off-highway vehicle (OHV) system is developed to improve overall riding opportunities. The provision of additional OHV experiences is emphasized

by linking disconnected trails and maintenance level (ML) 2 roads together to form loop trails. Four-wheel-drive (4WD) opportunities increase slightly. Environmentally sustainable non-motorized system trails are retained and may be expanded.

Most unclassified roads and trails that are outside of environmentally sensitive areas are candidates for conversion to National Forest System roads or motorized or non-motorized trail systems. Others will be decommissioned over time as budgets allow.

Community Protection and Vegetation Management: Same as alternative 1.

Watersheds: Watershed management focuses on the maintenance of water quality and quantity and the protection of watershed health from the effects of increased recreation uses, with a priority given to those areas where detrimental effects are occurring or could occur. Similar to alternative 2, an adaptive management approach is used to protect watershed resources. Restoration activities are accomplished primarily at prioritized recreational use areas in association with environmental education and interpretation, hardening of recreation sites, increased Forest Service presence and restriction of unauthorized uses.

Commodity Values and Uses: All active grazing areas are retained but the acres suitable for grazing decrease. Portions of or entire vacant grazing areas are recommended for closure.

A moderate amount of land remains available for minerals and energy development.

Urban Development and Forest Habitat Linkages: Existing designated communication sites and utility corridors would continue. Land use zoning provides the opportunity for new utility corridors, after site-specific analysis and environmental review. The area suitable for special uses is less than under existing land management plans.

For public access to existing National Forest System land, alternative 4 emphasizes acquisition of road and trail rights-of-way over acquisition of additional parcels. Land adjustment strategies support recreation use and visitor access to accommodate recreation demand. Priorities for acquisition are: wilderness, land with high scenic integrity, important heritage resources and land with dispersed recreation opportunities.

Special Area Designations: A few inventoried roadless areas are recommended for wilderness, focusing on those areas that emphasize recreation and scenic values. A few wild and scenic rivers are recommended for designation, with an emphasis on those areas that provide protection from development while providing scenery and recreational uses. Research natural areas that were proposed under existing plans and have establishment records prepared for them become established. A few special interest areas are created, focusing on only those with special recreational and cultural values.

The summary and comparison of the percentages of land use zones under alternative 4 can be found in the land use zone definition and comparison tables section of chapter 2.

Alternative 5

Alternative 5 was developed in response to public comments from groups and individuals who would like increased motorized access to and within the forests with fewer user restrictions.

The theme of this alternative is to emphasize land use zones compatible with forest resource development. Acres in backcountry motorized land use zones increase, and no acres are provided in recommended wilderness or backcountry non-motorized land use zones. Compared to other alternatives, there is a higher level of investment in:

- The retention and improvement of access for all uses, including motorized, mountain bike, equestrian and commodity uses. Investments would be made reactively to allow recreation use to continue as fully as possible with few restrictions. The reconstruction of existing degraded campgrounds and picnic areas and the construction of new campgrounds and picnic areas are featured to fully accommodate the projected demand for motorized recreation use. Little new road construction is planned but the use of more roads is anticipated because some unclassified roads would be incorporated into the National Forest transportation system. A minimal use of conservation education emphasizes reaching those visitors who participate in motorized recreation.

- Intensive monitoring of resource activities is necessary to maintain a high level of use without resource damage. Conservation efforts consist of mitigating impacts, including off-site mitigation. Habitat restoration, proactive surveys, and recovery objectives for federally listed species are not emphasized.
- Land use zoning provides opportunities to increase commodity uses of the forests.

Roads and Trails: Emphasis is on motorized use of all system and unclassified roads, except those in locations of extreme environmental risk. Some increase in the current road system mileage is expected. Four-wheel-drive (4WD) opportunities would increase. The provision of additional OHV experiences is emphasized by linking disconnected trails and maintenance level (ML) 2 roads to form loop trails. A system of environmentally sustainable non-motorized system trails is retained.

Use is accepted on unclassified roads outside of environmentally sensitive areas. Unclassified roads and trails are available for potential addition to the classified road or trail systems. The reconstruction of some unclassified roads to meet minimum Forest Service standards may occur.

Community Protection and Vegetation: Same as alternative 1.

Watersheds: Watershed management focuses on reactively protecting watershed health from the effects of increased motorized recreation uses and commodity developments such as water diversions. The maintenance of water quality and quantity for recreation and commodity uses is a priority.

Commodity Values and Uses: All active grazing areas are retained but some acres suitable for grazing decrease. Portions of or entire vacant grazing areas are recommended for closure, but fewer than in alternatives 2, 3, 4, and 6.

The most amount of land would be available for mineral and energy development. The fewest restrictions and stipulations would apply to existing and proposed developments.

Urban Development and Forest Habitat Linkages: Existing designated communication sites and utility corridors would continue to be used. Land use zoning provides the opportunity for new utility corridors, after site-specific analysis and environmental review. The area suitable for special uses is greatest in alternative 5. It is anticipated that more applications for urban infrastructure would be accepted.

Land adjustments are not emphasized. Lands acquired would be encouraged to be accepted without attached use restrictions. Acquisitions that are made would emphasize the accommodation of projected demand for motorized recreation and remote area camping.

Special Area Designations: No inventoried roadless areas are recommended for wilderness. No wild and scenic rivers are recommended for designation. One research natural area is established and no special interest areas are established.

The summary and comparison of the percentages of land use zones under alternative 5 can be found in the land use zone definition and comparison tables section of chapter 2.

Alternative 6

Alternative 6 was developed in response to public comments from groups and individuals who would like increased protection of all forest resources.

The theme of the alternative is to protect and restore biological diversity and ecological function and to mitigate existing impacts from all uses on National Forest System lands. The most acres of backcountry non-motorized land use zones are added, as well as the second highest acres of recommended wilderness. Compared to other alternatives, there is a higher level of investment in:

- Low-impact recreation and a transportation system that is reduced to a core system of highly maintained roads. Unclassified roads are closed and then decommissioned over time as budgets allow.
- No new facilities are constructed and existing facilities are modified or decommissioned to better protect sensitive resources. There is a maximum use of visitor capacity controls and proactive environmental designs to minimize impacts. Conservation education and partnerships would create an effective and

wide-ranging program, including an expansion of partnerships, targeted youth programs and a promotion of multilingual environmental education.

- **Habitat restoration.** A focus is on increasing the knowledge base about species through surveys and studies, and then using this knowledge to benefit wildlife with proactive wildlife management.

Roads and Trails: The emphasis is on a high level of maintenance for maintenance level (ML) 3-5 roads. Environmentally sustainable ML 1 and 2 roads are either converted to non-motorized trails or closed and decommissioned. ML 2 roads that access communication sites, recreation residences and special-use sites are closed to the public but open to the permittee. The current road system decreases by approximately 67% over time. Off-highway vehicle (OHV) and four-wheel-drive (4WD) opportunities decrease. An environmentally sustainable non-motorized trails system is retained.

Most unclassified roads and trails are decommissioned and obliterated over time.

Community Protection and Vegetation Management: Alternative 6 differs from the other alternatives by restoring fire's role in the ecosystem through the creation of a mosaic of wildfires and prescribed burns. Prescribed burns are used more frequently than in other alternatives, to maintain a younger age class that could help stop the spread of wildfires. Tree thinning and buffers are also used more than in alternatives 1 through 5, while dead tree removal and fuelbreak maintenance and construction are used on fewer acres.

Watersheds: A strong emphasis is on the prevention of watershed degradation. Three key goals are to protect remaining high quality areas, prevent further degradation of any area on the forests, and, over time, restore the ecological condition and function of the watersheds. A high priority is the improvement of water quality and the maintenance or increase of water quantity to support threatened, endangered, proposed, candidate or sensitive (TEPCS) species and overall ecosystem health.

Commodity Values and Uses: Grazing suitability criteria under alternative 6 render all grazing areas unsuitable. They are expected to be closed over time.

Less land is available for commodity products because more land is recommended for congressional designations such as wilderness. Alternative 6 has the lowest level of commodity development among the alternatives because of the decreased road system miles.

Urban Development and Forest Habitat Linkages: Existing designated communication sites and utility corridors would continue to be used. The area suitable for new utility corridors and special uses is lower than in the other alternatives. Stringent requirements and restrictions would be applied for new uses.

Alternative 6 emphasizes land adjustment strategies, with a high priority on the acquisition of land for protection of species habitat and preservation of wildlife corridors. Land needed to protect environmentally sensitive species and riparian ecosystems is a focus. Stress is on the acquisition of parcels within wildernesses, wild and scenic river corridors and land important for ecosystem protection. Land outside National Forest System boundaries that would generally benefit species and their habitats receives more emphasis for acquisition than in the other alternatives.

Special Area Designations: All the inventoried roadless areas are recommended for wilderness to protect and enhance species conservation, biodiversity, open space, natural beauty, recreation and research. All eligible wild and scenic rivers are recommended for designation to protect and enhance a similar wide range of values and features. All proposed research natural areas are established to conserve the widest possible range of areas with unmodified conditions and natural processes for research needs. All proposed special interest areas are created to conserve the broadest possible range of areas with special values.

The summary and comparison of the percentages of land use zones under alternative 6 can be found in the land use zone definition and comparison tables section of Chapter 2.

The Preferred Alternative

At this draft stage, the preferred alternative for the Angeles, Los Padres, and San Bernardino National Forests is **Alternative 4**. The preferred alternative for the Cleveland National Forest is **Alternative 2**. The preferred alternatives are not legally binding. After public comments on the draft environmental impact statement are

received and analyzed, the selected alternative will be identified for each forest in the final environmental impact statement (FEIS). Reasons for those choices will be explained in a record of decision that accompanies the release of the FEIS. The preferred alternative at this stage represents the agency position for the 90-day DEIS comment period and is NOT a decision.

Alternative 4 is the preferred alternative for three of the forests because it gives management the flexibility to respond to the variety and level of recreation expected from a growing urban and culturally diverse population. It retains the option for motorized access in many locations, thus allowing flexibility for fire suppression, community protection, and forest health projects. Alternative 4 also gives management the choice of retaining non-motorized areas in motorized land use zones. Although recreation use is emphasized, alternative 4 includes a commitment that activities be conducted in an environmentally sustainable way to continue the protection and recovery of species-at-risk. There is also a greater focus on education and interpretation to help prevent fire starts and to protect species, habitats and recreation facilities.

Alternative 2 is the preferred alternative for the Cleveland National Forest because it provides multiple-use benefits through balanced land use zoning. It retains the healthy natural environments that are valued for habitats, biodiversity and special ecosystems. The forest's open space is valued as development continues to move closer. Alternative 2 also retains the option for motorized access in many locations where it is needed for fire suppression, community protection and forest health projects. Alternative 2 provides some opportunity for increased recreation to complement the extensive public recreation opportunities found on other public lands near the forest. Alternative 2 also gives management flexibility for prioritizing program funding.

Past Decisions Not Being Revisited in Plan Revision

Adventure Pass. The Adventure Pass was developed under the Recreation Fee Demonstration Project to collect recreation fees at dispersed recreation sites throughout the forests. The fees collected are retained locally and used for recreation improvement projects on the four forests. The decision to continue this program is administrative and is not a land management plan revision decision.

Alternatives Considered but Eliminated from Detailed Study

No Change - Continue existing land management plans with no modifications.

This alternative is similar to alternative 1, except that modifications such as those made in response to the 2001 programmatic biological opinion from the USFWS are not incorporated. This alternative was considered but dropped from detailed consideration because it does not meet the purpose and need stated in chapter 1 and is not in compliance with the Endangered Species Act.

Comparison of Alternatives

This summary of environmental and economic effects shows the differences among alternatives and aids in the comparison of the effects each alternative is expected to have on the environment. The summary is presented by issue in order of the business management categories. For a complete disclosure of environmental effects, consult chapter 3 of the draft environmental impact statement (Affected Environment and Environmental Consequences). Tables listing the acres by land use zone for each alternative may be found in the beginning of this chapter, in the land use zone definitions and comparison tables section.

Resource Management

Species-at-Risk. Fifty-six animal species and 88 plant species face substantial threats from human activities and are referred to as "species-at-risk." With its emphasis on access and recreation, alternative 5 presents the greatest threat to species-at-risk. This alternative would result in the greatest amount of area being susceptible to disturbance; the frequency and intensity of disturbance would often be moderate to high. Alternative 4 is similar

to alternative 5 in the degree of threat that would result, although the threat is slightly lower in alternative 4 because of less emphasis on motorized recreation opportunities and increased emphasis on managing developed recreation in a sustainable manner. Properly located and designed, new developed recreation facilities could result in directing recreation use to areas that are less likely to impact species-at-risk.

Alternative 6 would create the least threat to species-at-risk. The smallest area would be disturbed under this alternative; the frequency and intensity of disturbance would be low in most areas, although areas of concentrated use would be highly disturbed. Threats that would occur under alternative 3 are less than what would occur under alternatives 1, 2, 4 and 5 but are higher than in alternative 6. Alternatives 1 and 2 are both intermediate in the degree of threat that they present to species-at-risk.

Insects and Diseases. The historically unprecedented drought in southern California has weakened trees, increasing their vulnerability to attack by insects and disease. Alternatives 1 through 5 have opportunities to minimize the effects of future outbreaks by thinning overstocked stands; however, the current infestation is not likely to abate until there have been several years of abundant moisture to allow the trees' natural defenses to recover. Less preventive thinning is likely to occur in alternative 6 because 67% of the forest road system is eliminated over time.

Vegetation Management. Tree and chaparral mortality currently affects more than 500,000 acres on the San Bernardino, Angeles and Cleveland National Forests. Alternatives 1 through 5 treat the same number of acres through mortality treatments, buffers, fuelbreak maintenance, fuelbreak construction, tree thinning and prescribed fire. Alternative 6 treats fewer acres through mortality treatments and fuelbreak maintenance and construction, and it treats more acres than alternatives 1 through 5 in buffers, tree thinning and prescribed fire projects.

Alternatives 1 through 5 address the vegetative condition of chaparral to a higher degree than alternative 6. At current budget levels, alternative 6 addresses the vegetative condition in forested areas to a higher degree than do alternatives 1 through 5; at the enhanced budget level, alternative 6 addresses the vegetative condition in forested areas to the same degree as the other alternatives.

Invasive Nonnative Species. Alternatives 1 and 5 have the most potential for the spread of invasive nonnatives, while alternatives 3 and 6 have the least. Alternatives 1 through 3 focus on early detection to contain and control weeds in TEPCS and riparian habitats. Alternative 4 focuses on early detection to contain and control weeds in developed and dispersed sites. Alternative 5 focuses on early detection to contain and control weeds along roads, trails and grazing allotments. Alternative 6 focuses on early detection to contain and control weeds in wilderness and other large blocks of pristine land.

Watersheds. The watershed resource consists of surface water, groundwater and riparian areas. Generally, adverse impacts on watersheds can be minimized or eliminated when all applicable measures as described under the resource protection measures are effectively applied. Alternative 6 has the lowest risk to watershed resources and involves the most diverse types of restoration efforts. Watershed resources quantity and quality are also expected to increase under alternative 3. Because alternative 4 is proactive in response to possible detrimental effects through mitigation and an adaptive management approach, watershed resources are at less risk than under alternatives 1, 2 and 5. Under alternative 2, watershed resources are sustained at slightly above the level that is found in alternative 1, which would not substantially change the current risk to watershed resources. Alternative 5 has the highest risk to water resources quantity and quality and to aquifer integrity because of its increased land disturbance and increased pressure to develop water sources on the forests.

Soils. Disturbance to soils was estimated by analyzing the potential disturbance under each alternative. Alternative 5 estimates about a 25% increase in disturbance due to more access and use. Alternative 4 would have the next greatest amount of estimated disturbance, with about a 20% increase in activity. In contrast, alternative 6 would have the least amount of estimated disturbance, with about a 20% decrease in activity. The level of estimated disturbance for alternatives 1, 2 and 3 would fall in-between, with no change, an estimated increase of 5% and an estimated decrease of 10%, respectively.

Air. Management activities would not significantly change existing air quality at the forest-wide scale in any alternative.

Geologic Resources and Hazards. Alternatives 1, 2, 3 and 6 would increase protection and interpretation of geologic resources and decrease risks to humans, facilities, and other resources from geologic hazards because they emphasize watershed restoration and lower surface disturbance and they increase special area designation

and environmental education. When visitor use is increased, which is more likely to occur in alternatives 4 and 5, risk of damage to geologic resources and exacerbation of geologic hazards is increased.

Lands (Real Estate). The mixed ownership pattern of the forests presents many opportunities for land ownership adjustment to improve administrative efficiency and the function of forest programs. The emphasis of each alternative influences which parcels are selected for adjustment. The total acres adjusted are not expected to vary much by alternative. In all alternatives, the overall National Forest System land base would increase and consolidate.

Special Designations

Inventoried Roadless Areas. One hundred eighteen roadless areas were inventoried within the southern California National Forests, totaling approximately 1.1 million acres, which is about 32% of the total National Forest System lands in southern California. Areas recommended to Congress for wilderness designation in the record of decision (ROD) would be managed to maintain their wilderness character until final congressional action on the recommendations. Any recommendation for wilderness designation is a preliminary administrative recommendation that would receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture and the President of the United States. Congress has reserved the authority to make final decisions on wilderness designation.

The number of acres of recommended wilderness varies depending on the wilderness evaluation and the theme of each alternative (see table 335: Total acres of recommended wilderness, by alternative, by forest). Alternative 3 recommends the largest number of wilderness acres for the Cleveland and San Bernardino National Forests. Alternative 6 recommends the largest number of wilderness acres for the Angeles and Los Padres National Forests, as well as the largest new wilderness acreage overall. Alternative 2 recommends the next highest acreage followed by alternative 4. Alternatives 1 and 5 recommend no roadless areas for wilderness designation. If an area is not recommended for wilderness designation, it would be allocated to one of the other available land use zones. For details, see Appendix D. Inventoried Roadless Areas (IRAs).

Existing Wilderness. There are 21 designated wilderness areas on the southern California National Forests, totaling over 1 million acres, or 32% of the total National Forest System lands in southern California. Visitation in most of the wildernesses is expected to increase regardless of alternative, mostly in the form of day hiking, backpacking and equestrian use. Corresponding increases in recreation-associated impacts on sensitive wilderness resources at popular trail and camping areas can be expected, especially in the more heavily visited wildernesses near urban areas. Most of the wilderness backcountry would remain unvisited because of steep terrain and dense vegetation.

Wild and Scenic Rivers (WSR). The National WSR system is a network of free-flowing rivers designated by Congress. No alternative recommends a reduction in length or the elimination of any of the three existing wild and scenic river designations on the Los Padres National Forest. National Forests are directed to evaluate their rivers during plan revision for inclusion in the WSR system. The forests evaluated all of their rivers, including 48 in detail, and found 26 rivers, totaling 344 miles to be eligible as WSR.

For the Angeles, Cleveland, and San Bernardino National Forests, alternatives 2 through 6 are the same because all of the 19 rivers identified as eligible for inclusion in the WSR system are protected to maintain their highest potential classification until suitability studies are completed at a later date.

The seven eligible rivers on the Los Padres National Forest were further evaluated for suitability under the alternatives developed for this plan revision, resulting in varying miles of river recommended for designation by alternative (see table 336: Recommended Wild and Scenic River Mileage by Classification and Alternative (Los Padres NF)). Alternative 6 not only recommends all eligible rivers for designation, but also recommends the highest percentage of mileage in the "wild river" classification, the class with the highest level of protection. Alternative 3 recommends slightly fewer eligible river miles for designation, followed by alternatives 2 and 4. Alternatives 1 and 5 recommend no rivers for designation. Wild and scenic river designations are similar to wilderness designations in that Congress has reserved the authority to make final decisions on the designations. For details, see Appendix E. Wild and Scenic Rivers.

Research Natural Areas (RNAs). Research natural areas are established by the Regional Forester to maintain areas of natural ecosystems and areas of special ecological significance. There are currently 14 RNAs on the

southern California National Forests, totaling 14,330 acres. Fifteen potential RNAs have been identified for possible inclusion in the system (see table 321: Summary of Candidate Research Natural Areas Recommended By Alternative). The number of proposed RNAs varies depending on the theme of each alternative. Alternative 6 recommends carrying forward the greatest number of RNAs and acres and would make the greatest contribution to the Forest Service Pacific Southwest Region (R5) and national RNA network. Alternative 3 recommends the next highest number of new RNAs and acres, followed by alternative 2. Alternatives 4 and 1 recommend substantially fewer new RNAs and acres. Alternative 5 recommends only 1 new RNA and the fewest acres. For details, see Appendix F. Research Natural Areas

Special Interest Areas (SIAs). Special interest areas may be designated by the Regional Forester to protect and manage for public use and enjoyment those special recreation areas with scenic, geological, botanical, zoological, paleontological, archaeological or other special characteristics or unique values. There are currently 15 SIAs totaling 27,809 acres on the southern California National Forests. Twenty-seven additional areas with special and unique resources are proposed for designation under some alternatives (see table 337: Summary of Candidate Special Interest Areas Recommended By Alternative). The number of proposed SIAs varies depending on the theme of each alternative. Alternatives 3 and 6 provide for the widest variety of new SIAs and types. Alternatives 2 and 4 propose some additional SIAs. Alternative 5 proposes very few and alternative 1 proposes no new SIAs. No alternative recommends a reduction in size or the elimination of any existing SIAs. In alternatives 2, 3, 4 and 6 there is an increase in SIAs focusing on heritage resources, which would increase the opportunities for the protection, enhancement and public enjoyment of heritage resources. For details, see Appendix G. Special Interest Areas.

National Monuments. The Santa Rosa and San Jacinto Mountains National Monument (SRSJMNM) is the only national monument within the southern California National Forests. No alternative recommends the reduction or elimination of the monument. Because no new national monuments are being proposed or analyzed in any alternative of the land management plan revision, the environmental consequences described in Chapter 3 refer only to the National Forest System lands within the SRSJMNM. Administration will not vary by alternative because direction for the SRSJMNM is detailed in law, regulation, agency policy and a specific management plan.

Public Use and Enjoyment

Recreation Use. Recreation visitation and use are expected to increase in all alternatives; however, the location, type, rate and intensity are expected to vary. Some peak-season visitors would be displaced or would be unable to find their desired recreation setting or opportunity, especially in popular high-use places. Because desired uses vary considerably, each alternative has general advantages for certain groups of users while being less desirable for other groups. Conflicts among uses and natural resources protected by existing legislation (such as the Endangered Species Act) are expected to occur. Alternatives differ in their resolution of these conflicts by varying where and when activities are allowed.

Most visitors now participate in recreation activities that involve driving for pleasure, viewing natural features and wildlife, walking and general relaxation. These activities would generally remain the same for alternative 1; there would be a greater emphasis on motorized recreation in alternative 5 and a greater emphasis on non-motorized recreation in alternatives 3 and 6. Alternative 4 provides the most emphasis on accommodating recreation demand and use, and alternative 2 emphasizes continuing a mixture or range of recreation opportunities. Some motorized and developed recreation opportunities would be lost or foregone in alternatives 3 and 6 if road systems are reduced or if campgrounds and picnic areas are closed to reduce resource impacts. Satisfaction throughout all alternatives would be mixed, mostly depending on which activities are available to which user groups and how well the forests accommodate increased visitation. The broadest range of recreation opportunities is expected in alternatives 4 and 5, and to some degree alternative 2. The range of opportunities is less in alternatives 3 and 6.

Developed Recreation. Operational capacities are being reached and exceeded at some popular facilities now. Many more facilities (especially large, more developed sites near urban areas during the summer season, weekends and holidays) would reach and exceed this limit over the next 15 years, especially in alternatives 1, 2, 3 and 6. Alternative 4 is the only alternative that is projected to meet most future recreation demands. Alternative 5 focuses primarily on accommodating the increased demand for motorized uses.

Dispersed Vehicle Camping. Dispersed vehicle camping offers a unique recreation opportunity to visitors from

heavily urbanized areas in southern California. Resource impacts result not only from the dispersed campsite location and associated activities but also from off-road driving and creation of roads to the campsite. Dispersed vehicle camping impacts pose a major threat to the viability of a number of plant and wildlife species and their habitats, riparian areas and water quality. These concerns are the greatest in alternative 5 and the least in alternatives 3 and 6; alternatives 1, 2 and 4 are in between primarily because of accessible acreage according to land use zones. Specific forest policies would continue to differ in each alternative.

Conservation Education and Partnerships. Conservation education and partnership programs and projects would continue to be an emphasis in all alternatives at varying levels. These programs and projects remain beneficial to the Forest Service, partners and the public, varying by alternative theme.

Wilderness education is emphasized in alternatives 2, 3, 4 and 6 in an effort to protect wilderness values. In all of the alternatives, information, management and regulation enforcement are also expected to help protect wilderness values.

Alternative 1 continues the current minimal level of programs and projects. Alternatives 2 and 4 would increase conservation education and partnerships and focus on recreation. Alternatives 3 and 6 would develop a maximum use of a focused and coordinated conservation education program and partnerships. Alternative 5 would minimally use conservation education and would focus on motorized activities.

Landscape Management. Currently, forest landscapes are largely natural or natural-appearing, except for a few areas that have been noticeably altered. The most obvious general effects on scenic resources are derived from unplanned natural occurrences, such as wildfire, and from vegetation and landform alterations associated with management activities to address tree mortality, forest health, fire suppression, road construction and utility and communication-site infrastructure. Landscape management strives to meet the public's scenery expectations for the management of national forest landscapes.

The Scenery Management System recognizes the interdependence of aesthetics and ecological systems and promotes natural-appearing landscapes. In most alternatives, landscapes would be managed to maintain a natural appearance, characterized by with scenic integrity objectives of high and very high.

Percentage of land area where change from a natural-appearing landscape would not be allowed. *

Alternative	1	2	3	4	5	6
Percentage	50%	95%	99%	95%	71% - 90%	99%

** Note: The above figures do not represent the existing condition*

Landscape restoration, which creates movement toward the desired landscape character, would change depending on the theme of the alternative.

Management and Administration

Tribal Relations. All alternatives accommodate traditional and contemporary uses of the National Forests. Government-to-government collaborative relations with Tribes and Native Americans are expected to increase in alternatives 2 through 6.

Alternatives 3 and 6 have the fewest backcountry motorized acres and would therefore have the least risk of affecting Native American values, while alternative 5 would potentially have the greatest direct effect. The differences between alternatives 1, 2 and 4 are negligible. In alternatives 2, 3, 4 and 6, there would be an increase of special interest areas focusing on heritage resources values. This would increase the opportunities for the protection, enhancement and interpretation of values that concern the Native American community.

Facility Operations and Maintenance

Non-motorized Trails. Under alternatives 2 through 6, existing environmentally sustainable non-motorized

system trails are retained. All system trails are retained under alternative 1.

Mechanized trail-based opportunities remain the same under alternatives 1 and 5, decrease under alternative 4, and decrease the most under alternatives 3 and 6. Alternative 2 falls between alternative 4 and alternatives 3 and 6; the differences result from the varying amounts of land use zoning recommended for wilderness.

National Trails. The southern California National Forests manage 324 miles of the Pacific Crest National Scenic Trail and 109 miles of national recreation trails. Other trails of national or regional significance either cross or are proposed to cross the forests. All of these trails provide trail-related recreation in systems that reach beyond the forest boundaries. Effects on national trails are expected to be minimal and do not vary significantly among alternatives.

Motorized Trails. Off-highway vehicle (OHV) and four-wheel-drive (4WD) opportunities increase slightly in alternative 2; more opportunities would be available in alternative 4 and the most opportunities would result from alternative 5. Trail design in alternatives 4 and 5 emphasizes linkage of existing trails and creation of loop trails. OHV and 4WD opportunities decrease to about the same degree in alternatives 3 and 6.

Roads. Overall open road mileage will be least in alternatives 3 and 6. Alternatives 1 and 2 have about the same mileage of open roads, greater than alternatives 3 and 6. Alternatives 4 and 5 may incorporate unclassified roads available for conversion to National Forest System roads and therefore have the most road mileage.

Rights-of-Way Acquisition. Legal access to National Forest System land increases from the acquisition of additional and official rights-of-way as the result of land ownership adjustment. However, overall loss of access may still occur because of rapid development along the forest boundaries. Alternatives 4 and 5 emphasize rights-of-way acquisition to be able to offer more miles for public use.

Commodity and Commercial Uses

Livestock Grazing. All grazing areas were determined to be unsuitable in alternative 6. All grazing areas were determined to be suitable in alternatives 1 through 5, although the number of suitable grazing acres varies by alternative, as illustrated in see table 108: Grazing Suitability by Forest by Alternative.

All alternatives recommend closure of some vacant grazing areas or portions of some vacant grazing areas. Suitability criteria applied for alternative 6 result in no suitable grazing areas under that alternative. See table 183: Number of Vacant Grazing Areas Expected to be Available for Grazing by Alternative.

Mineral and Energy Resources. In all alternatives, 51,200 acres are identified as available for oil and gas (leasable) development on the Angeles National Forest; suitability for development has not been determined. Activities in the area may be restricted under alternatives 2 through 6 because the available acres include a portion of a river eligible for wild and scenic river designation. Suitability of the river has not been determined. No available areas are identified for oil and gas development on the Cleveland or San Bernardino National Forests in any alternative. The available and suitable areas on the Los Padres are identified in the DEIS for the Los Padres forest-wide leasing analysis (2004).

The level of mineral exploration activity is driven by geology and public demand and is administered with available funds. The amount of land available for mineral and energy development is highest in alternative 5, followed by alternative 1, primarily because of lands recommended for wilderness. The least amount of land available for mineral exploration activity is in alternative 6, followed by alternative 3. Alternatives 2 and 4 have a moderate amount of land available for mineral and energy development.

Mineral Withdrawals. Reserving and withdrawing land from mineral entry affect management of locatable, leasable and mineral materials. Because designated wildernesses and other special land use reservations (research natural areas, wild and scenic rivers, and critical biological zones) are generally considered unsuitable or unavailable for mineral uses, alternatives 3 and 6 consistently anticipate larger acreages of mineral withdrawals, and alternatives 1 and 5 anticipate the fewest mineral withdrawals. See table 312: Percent of Land Area Expected to be Withdrawn from Mineral Entry compares the alternatives.

Special Forest Products. Fuelwood and non-convertible products such as foods, herbs, medicinals, decorative products and specialty items are the major sources of special forest products (SFP) revenue. American Indians collect SFPs for subsistence, trade, tools and ceremonies. The continuation of the fuelwood program is critical to

the removal of beetle-killed trees in fire hazard areas.

All alternatives that promote activities resulting in ground disturbance have the potential to affect the availability of SFP. However, those same alternatives also retain a larger road system, which would improve access to SFPs and thereby help meet the demand. Alternative 5 has the highest potential to allow activities that directly affect SFPs but it also has the potential for the most motorized access. Alternatives 3 and 6 have the potential to limit the amount of ground-disturbing activities that could directly affect SFPs but these alternatives are the most restrictive with regard to motorized access; such restrictions have the potential to prevent meeting the demand and perhaps concentrate use or overuse on fewer acres. Alternatives 1, 2 and 4 fall between the other alternatives and are similar.

Lands Special Uses. The southern California National Forests currently have approximately 2,250 lands special uses authorized to use and occupy nearly 37,000 acres of National Forest System land. The acreage suitable for lands special uses remains unchanged under alternative 1, decreases slightly under alternatives 2 and 4, and decreases by an estimated 43% and 62% under alternatives 3 and 6 respectively. Alternative 5 anticipates 27% more acreage available for lands special-use authorizations. See table 308: Proposed Urban Rural Interface, Developed Area Intermix, and Back Country Motorized Acreage by Alternative and Forest provides a comparison of acres available for lands special-use authorizations.

Utility and Transportation Corridors and Communication Sites. In all alternatives, utility and transportation corridors and communication sites that are designated in the current land management plans would continue to be used. New utility corridors, transportation corridors and communication sites are limited to suitable land use zones and can be designated only after specific analysis and environmental review are completed.

The Western Regional Corridor Planning Partnership (WRCPP) has identified two new unoccupied utility corridor segments on the Cleveland National Forest: the Elsinore Mountain to San Mateo corridor, and the El Cajon Mountain corridor. They would be zoned as suitable and may be designated in the future under some alternatives: Elsinore/San Mateo suitable alternatives are 1, 4 and 5; El Cajon Mountain suitable alternatives are 1, 2, 4 and 5.

Social and Economic Environment

Forest Contributions to Area Economy. The regional economic activity of southern California is immense and dwarfs the economic activity generated by the National Forests. Total jobs supported by the Forest Service amount to 0.12% of the area total; annual labor income is 0.10% of the area total.

Another measure of economic impact is the Forest Service contribution to county tax revenues. While these payments are used for worthy purposes, they are small in comparison to total county tax collections and are less than 0.10% for both the central and south coast counties.

However, local impacts can be quite profound. The community of Big Bear on the San Bernardino National Forest depends on forest management of the surrounding landscape to maintain the ambience that supports a predominantly recreational destination economy. The aquifers of the area around Arrowhead, also on the San Bernardino, are a source of commercially valuable bottled spring water. National Forest budget expenditures, special uses and fees collected, and forest visits to recreate and to hunt and fish all contribute to regional employment and personal income. The forests also figure prominently in southern California as a source of undeveloped land, plant and animal species habitat and a place for people to enjoy the outdoors. The value of undeveloped land in economic terms is very difficult to estimate.

On all four forests, alternative 4 results in the highest number of jobs and labor income, with alternative 5 running a close second. Recreation is a major output of the forests of southern California and contributes value to the area economy in the form of both primary (direct fees paid for the experience) and secondary (related expenses such as food) expenditures.

Effects on Economic Efficiency. Economic efficiency measures the cost effectiveness of the alternatives via the computation of present net worth (value). This is determined by projected costs as represented by the projected forest budgets for each alternative. The budgets vary by alternative relative to program emphasis as defined by the alternative theme. The total present net value of alternative 4 is highest, followed closely by alternative 5, with a larger gap between these and the rest of the alternatives. Alternative 4 has greater economic benefits to the local

economies in terms of personal income and jobs supported by the National Forests of southern California and is most efficient in terms of the value of its commodities relative to its costs.

Fire and Aviation Management

Fire and Vegetation Management. Implementing the National Fire Plan in wildland-urban interface areas will increase community protection effectiveness. All alternatives will result in at least a temporary increase in acres burned due to the abundance of dead timber and brush caused by drought and insects.

Fire suppression effectiveness and firefighter access to roads and fuelbreaks are similar in alternatives 1 through 5. Fire suppression effectiveness and firefighter access to roads and fuelbreaks are decreased in alternative 6 because of road closures. Larger human and lightning-caused fires are expected in alternative 6 because of road closures and greater dependence on aerial support for initial attack.

