S SUMMARY

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S SUMMARY

S.1. PROPOSED ACTION

The Forest Supervisor proposes to make a portion of Los Padres National Forest (LPNF) lands available for oil and gas exploration, development, and production by selecting among alternative leasing scenarios, which vary in the amount of area available for leasing as well as the conditions (stipulations) under which the lands would be leased.

Figure S-1 shows which parts of LPNF are currently "withdrawn from mineral entry" and which parts can be considered for oil and gas leasing availability.

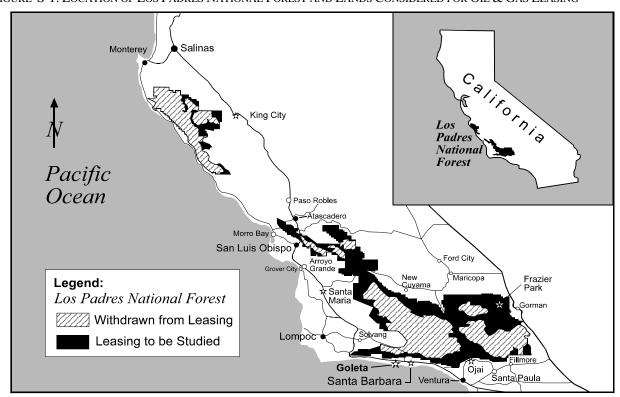


FIGURE S-1: LOCATION OF LOS PADRES NATIONAL FOREST AND LANDS CONSIDERED FOR OIL & GAS LEASING

Subsequent to the Forest Supervisor's decisions the Regional Forester will notify the U. S. Department of Interior, Bureau of Land Management (BLM) that specific National Forest System (NFS) lands have been identified for lease along with required lease stipulations. BLM will decide which of these specific NFS lands to offer for lease sale.

S.1.1. <u>Lands Included in This Analysis</u>

The LPNF is located along the central California coast (Figure S-1). All NFS lands within the boundaries of the Forest that are not withdrawn from mineral entry are being considered in this analysis. The areas withdrawn from mineral entry consist of all Wilderness areas, the Santa Ynez watershed, and the Big Sur Coastal Zone. All areas of LPNF are considered in the analysis of effects. Forest acreage, including areas withdrawn from mineral development, is shown in Table S-1.

(NOTE: Table S-1 does not include 54,165 acres added to the Ventana and Silver Peak wildernesses on the Monterey District in 2002. Therefore, the total acres withdrawn are somewhat more and the study area somewhat less than that shown in the table. This adjustment in acres occurred after the release of the oil and gas leasing draft EIS (DEIS). Acreage adjustments are not being made for this addition of wilderness because none of the Monterey District is identified as available for lease in the new preferred alternative and the recalculation of acreages would require an extensive and costly geographical information system (GIS) effort.)

TICKES OF ELTIT TIVILENDELTON OF & GIB BEIDE CONSIDERATION						
Area	National Forest System Land	Private Land Within LPNF Boundary	Total			
Within LPNF Boundary	1,775,744	193,776	1,969,520			
Withdrawn Areas						
Coast Zone	42,089	9,891	51,980			
Santa Ynez Watershed *	152,228	10,184	162,412			
Wilderness Areas	814,560	4,724	819,284			
Total Withdrawn Areas	1,008,877	24,799	1,033,676			
Lease Study Area	766,867	168,977	935,844			

TABLE S-1: ACRES OF LPNF AVAILABLE FOR OIL & GAS LEASE CONSIDERATION

S.2. GENERAL BACKGROUND

Extraction of minerals, including oil and gas, is recognized in the Multiple Use-Sustained Yield Act of 1960 as one of the several resources and activities to be managed on national forests. The mission of the Forest Service in relation to minerals management is to support, facilitate, and administer the orderly exploration, development, and production of mineral and energy resources on National Forest System lands to help meet the present and future needs of the Nation (Mining and Minerals Policy Act [1970] and Forest Service Manual (FSM 2802).

The Forest Service is the manager of the surface resources on NFS lands and the BLM is the manager of Federal subsurface minerals.

The Mineral Leasing Act of 1920, as amended, provides that all public lands are open to oil and gas leasing, unless a specific land order has been issued to close an area. Prior to 1987, to lease a parcel of land administered by the Forest Service, a request would be submitted to the BLM, Department of Interior. The Forest Service would be asked for a recommendation regarding the offering of a lease tract and appropriate stipulations to protect the surface resources. However, the

^{*} A portion of the Santa Ynez watershed withdrawal is included in the "Wilderness Areas" acres.

primary authority and responsibility for determinations regarding leasing remained with the Secretary of the Interior and the BLM.

S.2.1. <u>Leasing Reform Act And Regulations</u>

In 1987, Congress passed the Federal Onshore Oil and Gas Leasing Reform Act (Leasing Reform Act). This resulted in modifying the authorities of the Secretary of the Interior and Secretary of Agriculture by increasing the role of the Forest Service in the leasing process. The Leasing Reform Act gave the Forest Service approval authority for leasing public domain minerals on National Forest System lands. The Act changed the analysis process from "responsive", reacting to an application for leasing specific lands, to "proactive", analyzing lands for leasing and then offering them for lease through competitive bidding. The leasing decision is based on an environmental analysis in accord with the requirements of the National Environmental Policy Act (NEPA, 40 CFR part 1502) that identifies stipulations needed to protect the environment.

In March of 1990, the Forest Service developed new regulations (oil and gas regulations, 36 CFR Part 228) to implement the Leasing Reform Act, and to provide guidance for oil and gas leasing and surface-use management on NFS land. Before a lessee can drill an exploratory well or extract oil or gas from NFS lands, the Forest Service must first identify available lands and authorize sale of a lease. At a later time, when a lessee submits an Application for Permit to Drill (APD), the Forest Service must approve or disapprove a site-specific Surface Use Plan of Operations (SUPO). Each of these decisions is based on environmental analysis and disclosure of the probable effects in accordance with NEPA.

This environmental analysis and EIS addresses impacts of leasing lands for potential oil and gas development. If LPNF lands were leased, lessees would submit proposals for development of the leases through the required APDs and SUPOs, and an environmental analysis would be conducted based on site-specific details contained in the SUPO. (This staged decision process is described in detail in Appendix A of the FEIS.)

S.2.2. <u>History and Present Status of Oil and Gas Activities</u>

Oil and gas operations have been taking place on Los Padres National Forest, north of Fillmore, since before the land was designated as a National Forest. Oil was discovered in Tar Creek in the late 1880s. The Sespe oil fields have been producing commercial quantities of oil and gas since that time. Currently, there are about 200 producing wells inside the Forest boundary in the Sespe oil fields, about half of which are on NFS land and half on private land. Oil is also being produced from one well northeast of Ojai and from 97 wells on two separate NFS parcels in the Cuyama Valley, north of the main division of the Forest. LPNF currently (August 2003) has 21 existing oil and gas leases on 4,863 acres. (See the DEIS map packet and the LPNF web site for locations of the existing leases on LPNF.)

In the early 1980s, LPNF had a backlog of several hundred applications for oil and gas leasing, which had not been acted upon, i.e. the Forest had not made a recommendation to the BLM on

whether or not leases should be issued on the lands covered by these applications. LPNF completed three separate environmental analyses, which addressed most of these applications. Applications, which were within Roadless Area Review and Evaluation II (RARE II) "further planning areas" (areas being considered for designation as wilderness), were not analyzed. They were kept on file for later analysis. BLM was given a recommendation to issue leases on about 90% of the applications studied. BLM actually issued leases on about 5% of them.

S.2.3. Forest Plan Direction

The 1987 Forest Plan predates the Leasing Reform Act. It incorporates by reference the oil and gas leasing Environmental Assessments (EAs) and related decisions regarding leasing applications made in the 1980's. The Forest Plan also directs that an EIS be prepared to address any future applications and the existing applications which were not addressed in the EAs. This direction was given just prior to the Leasing Reform Act. (Los Padres Land and Resource Management Plan, Sec. 4.3.2.4, page 4-8.)

S.2.4. <u>National Priority And Scheduling Of This Leasing Analysis</u>

The Leasing Reform Act regulations require the Forest Supervisor to develop a schedule for conducting an oil and gas leasing analysis on the Forest. In 1990, after issuance of these regulations, the Forest Service identified LPNF as a high national priority for completion of this leasing analysis. This was because of past and current production of oil and gas on the Forest and the potential for occurrence of additional hydrocarbon resources underlying LPNF. It was directed that a Forest-wide analysis be done, i.e. all lands would be studied for possible leasing except for those withdrawn from mineral entry.

Los Padres National Forest currently (Feb. 2004) has a backlog of 29 oil and gas lease applications covering some 25,000 acres. The Forest needs to determine which of these lands are available for leasing, and which, if any, of the outstanding requests should be authorized. BLM also has received six expressions of interest to lease additional lands totaling 5,640 acres on Los Padres NF.

The existing leases are included in this analysis so that, if and when they terminate, the decision can be been made whether or not to offer the lands for lease again. Also, the required lease stipulations to be applied to the previously leased lands, should they be leased again, will be known. It is entirely possible that currently leased lands would not be available for lease or would be available only with new stipulations.

The Forest Supervisor, through the BLM, may receive additional requests for leases. This conclusion is based on past experience and the potential for yielding additional oil and gas on LPNF. Current and any additional requests will be evaluated in the context of the lands identified as available for leasing in the amended Forest Plan based on this analysis.

S.3. NEEDS FOR THIS ACTION

The needs for this proposal are threefold:

S.3.1. Identify LPNF Lands Available for Oil and Gas Leasing

The Leasing Reform Act regulations (36 CFR 228) require the Forest Service to be pro-active in identifying: lands available for leasing, specific lands to be authorized to BLM for leasing, and appropriate lease stipulations to avoid or mitigate impacts to other resources and the environment.

National policy calls for development of mineral resources, including oil and gas. This policy is stated in <u>The National Materials and Minerals Policy Research and Development Act</u> (30 USC Sec. 1602), which reads:

"The Congress declares that it is the continuing policy of the United States to promote an adequate and stable supply of materials necessary to maintain national security, economic well-being and industrial production ---".

S.3.2. <u>Decide on Outstanding Lease Requests</u>

Potential oil and gas lessees have expressed interest in leasing LPNF lands. Federal law requires that leasing requests submitted prior to 1987 be considered by the Forest Service. Los Padres National Forest currently has a backlog of 29 oil and gas lease applications covering 25,000 acres. The Forest must determine which of these lands are available for leasing, and which, if any, of the outstanding requests should be authorized by the BLM. Federal energy policy is to "...expedite permits and other federal actions necessary for energy-related project approvals..." (National Energy Policy, Chapter 3)

S.3.3. <u>Determine Future Availability of Currently Leased Land</u>

Currently, there are 21 existing oil and gas leases on LPNF lands totaling 4,863 acres. If the lessees do not act upon their leases, or if the production of oil and gas ceases, the leases will terminate. When any existing lease terminates, a decision must be made whether or not to offer the land for lease again and if so, which lease stipulations should be applied. It is possible that currently leased lands would not be available for lease or would be available with stipulations applied that are not in the current leases.

S.4. PURPOSE OF THIS ACTION

Forest Service plans to meet the needs for the proposed action in a manner that minimizes impacts to and maintains long-term environmental health and meets Forest Plan direction.

S.4.1. Minimize Impacts to and Maintains Long-Term Environmental Health

The vast natural setting of LPNF includes many natural resources that are enjoyed and valued by the people of Southern California and beyond. These important resources include, but are not limited to: threatened, endangered and sensitive wildlife and plant species, cultural resources, clean water, scenery, and recreation.

Direction from Congress and Forest Service policy mentions "a healthy environment", "in an environmentally sound manner", and the sustenance of the "long term health and biological diversity of ecosystems." This means that it is important that minerals development, including oil and gas, be done in a manner that minimizes impacts to natural resources and maintains the long-term health of the environment.

The LPNF Forest Supervisor has directed that potentially significant impacts be avoided or mitigated wherever feasible.

S.4.2. Meet Forest Plan Direction

Notwithstanding that the proposed action is implemented through a Forest Plan amendment, there is otherwise a need to meet forest plan direction. The Forest Plan directs that an EIS be prepared to address the outstanding lease requests. The Reform Act requires that a decision be made regarding lands available for leasing, which requires a plan amendment to implement.

S.5. PUBLIC INVOLVEMENT

Various federal, state, county, and local agencies, as well as interested organizations and individuals have been involved with scoping activities and review of the DEIS.

S.5.1. Scoping Activities

Scoping was conducted in the fall of 1995. Scoping activities consisted of various notices and meetings. Notices for the project included an initial informational package, the Notice of Intent to produce an EIS, a news release, and various project newsletters. A series of five public meetings were held throughout the Los Padres National Forest area of influence. Participants were asked to provide comments concerning several possible oil and gas leasing scenarios for the LPNF.

The interdisciplinary team identified the following significant issues that resulted from the scoping effort.

Physical Environment

- 1. Air Quality
- 2. Watersheds, Wetlands & Riparian

Biological Environment

3. Wildlife, Fisheries and Vegetation

Social Environment

- 4. Heritage Resources
- 5. Socioeconomic Impacts/Growth
- 6. Social Impacts
 - a. private property
 - b. local resident impacts
 - c. local community impacts
 - d. noise
- 7. Access and Traffic

Social Environment (continued)

- 8. Land and Resource Management Plans
 - a. Forest Plan
 - b. community plans
- 9. Oil & Gas Development
 - a. constraints on development
 - b. industrial infrastructure
- 10. Scenic Resources
- 11. Safety and Hazards
 - a. fire
 - b. geologic (landslides, earthquakes)
 - c. spills (surface water/groundwater)
- 12. Recreation
 - a. off road use
 - b. developed sites
 - c. primitive use
 - d. wilderness areas
 - e. roadless areas

In addition to the significant issue categories identified above, many people expressed concerns about oil and gas development in specific areas on the Forest and requested that no leasing be allowed on many areas.

S.5.2. DEIS Review & Comments Received

In November 2001 draft environmental impact statements were sent to federal, state, county, and local agencies, as well as interested organizations and individuals. Five public meetings were held in communities surrounding LPNF to explain the DEIS, including the alternative leasing scenarios, and requesting public comment on potential future leasing in the Forest.

The number of comments received in response to the DEIS was voluminous. Some 7,830 written comments were received in the form of letters, e-mails, postcards, and petitions. Most of this correspondence contained numerous comments and many had more than one signature. Thousands of e-mail responses were received, including several form letters.

Table S-2 identifies the types of respondents and the number of each type.

TABLE S-2: TYPES AND NUMBER OF RESPONDENTS

Individual Respondent Type	Number of Respondents	Form Letter Respondents	Number of Respondents
Federal Elected Officials	2	Form Letter 1	5837
Federal Agencies	2	Form Letter 2	22
State Elected Officials	2	Form Letter 3	5
State Agencies	2	Form Letter 4	5
Local Elected Officials	2	Form Letter 5	19
Local Agencies	3	Form Letter 6	5
Environmental Orgs.	24	Form Letter 7	66
Industry	5	Form Letter 8	7
Individuals	588	Form Letter 9	26
		Form Letter 10	93
		Form Letter 11	796
		Form Letter 12	69
		Form Letter 13	250
Individuals Total	630	Form Letter Totals	7200

In order to respond to the comments in an organized manner, the comments were grouped into the following issue categories:

- Alternatives
- Cultural
- DEIS Adequacy
- Geographic Areas
- Health and Safety
- Noise
- Oil & Gas
- Other/Genera
- Process Issues
- Recreation
- Social and Economic
- Transportation
- Vegetation
- Water and Air
- Wildlife

Chapter 9 of the FEIS summarizes the comments received and presents the responses to the comments. Appendix G of the FEIS identifies all the respondents and how their comments were This allows the respondents to determine how their comments have been categorized and to find the corresponding response(s) by issue category in Chapter 9.

The majority of the responses favored Alternative 1, no additional leasing. Some not only opposed further leasing but wanted existing leasing halted as well. Numerous respondents requested that further oil and gas leasing not be considered until the Forest Plan revision was completed. Many respondents expressed concern regarding impacts to threatened and endangered plants and animals such as the California condor and the San Joaquin kit fox as well as other wildlife found in LPNF. Many respondents were concerned about the impact further oil and gas development could have upon their recreational opportunities, from developed sites to roadless and wilderness areas. Oil and gas development in Inventoried Roadless Areas is a particularly sensitive issue. Many respondents requested that certain geographical locations not be leased. Still others expressed concern regarding impacts to the scenery and watershed values which are present on LPNF.

S.6. ALTERNATIVES ADDRESSED

Based on and in response to the issues identified in the 1995 scoping effort, the Forest Service developed a range of reasonable alternatives that met the purpose and need. The alternatives respond to the issues by leasing or not leasing land and including (or not including) various lease terms and stipulations designed to provide protection for, or enhancement of, lands and resources important to the respondents.

After consideration of the scoping input, the forest interdisciplinary (ID) team structured the range of reasonable alternatives to consider alternatives ranging from no oil and gas leasing to maximum oil and gas leasing. Two intermediate alternatives were designed to: 1) meet current forest plan direction, and 2) to provide increased protection for other resources.

The geographically specific alternatives were developed, based on the objectives of each alternative leasing scenario, using the LPNF geographical information system (GIS) database. GIS was used to estimate environmental sensitivity to oil and gas leasing, develop mitigating stipulations, and estimate Forest Plan compliance.

Under any alternative, the existing leases will continue in force as long as they produce oil and/or gas and meet existing lease conditions. These existing leases are a part of the "affected environment," and their environmental effects will occur regardless of whether or not any additional future leasing occurs.

S.6.1. Types of Lease Terms and Stipulations

BLM's leasing form contains Standard Lease Terms (SLTs) for mitigating environmental impacts. In addition, the Forest Service may develop Information Notices to interpret applications of SLTs and special lease stipulations to further mitigate impacts. Lease stipulations include such measures as "No Surface Occupancy," "Limited Surface Use," or "Timing Limitations." The leasing process and the types of various lease terms, briefly described below, are described in more detail in Appendices A and B.

BLM Standard Lease Terms (SLTs)

The BLM lease form (BLM Form 3100-11) provides Standard Lease Terms to be used in leases for oil and gas development on federal lands.

The SLTs stipulate that all existing laws and regulations, including the Endangered Species Act, National Environmental Protection Act, National Historic Preservation Act, and others are fully enforced. Any future land disturbances are required to be fully restored under the standard lease terms. SLTs enable the BLM to require operators to take special measures to protect wildlife, wildlife habitat, soil and watershed, and other resources.

No Lease (NL)

The Forest Supervisor can make a decision not to lease any portion of LPNF, not already leased, based on discretionary authority as the surface resource manager. Only lands that can reasonably be accessed will be leased.

No Surface Occupancy (NSO)

No Surface Occupancy stipulations prevent the use and occupancy of the surface for any ground disturbing oil and gas activities. Directional drilling from nearby private lands or from NFS lands where surface occupancy is allowed could access the oil and gas resources. For the purpose of this analysis it has been assumed that the economical distance for directional drilling on LPNF is one-half mile.

Limited Surface Use (LSU)

Limited Surface Use stipulations constrain use and occupancy of the surface for oil and gas activities to assure a certain concern is met or impact is mitigated.

Timing Limitations (TL)

Timing Limitation stipulations specify no surface occupancy or limited surface occupancy or activity for a period of time greater than 60 days.

Information Notices (IN)

Information notices (IN) do not impose further restrictions on oil and gas activities. These measures fall within the definition of "reasonable measures" as explained in Section 6 of the Standard Lease Terms of BLM Form 3100-11, "Offer to Lease for Oil and Gas." These measures would be implemented under all alternatives. The purpose of an IN is to further clarify or specify how the conditions of the BLM Standard Lease Terms and applicable laws and regulations are to be applied in a particular situation. Information notices may be developed at any time as needed to clarify the application of SLTs and applicable laws and regulations.

S.6.2. Range of Reasonable Alternative Scenarios

The following alternatives represent the range of reasonable oil and gas leasing scenarios for LPNF system lands that are not withdrawn from oil and gas leasing. These alternatives are described in detail in Section 2.7 of the FEIS. Detailed maps have also been made for five of the alternatives, numbers 3, 4, 4a, 5 and 5a. These maps are located in the map packet which accompanied the DEIS. Alternatives 1 and 2 were not mapped because Alternative 1 does not designate any new lands as available for leasing and Alternative 2 designates all land not withdrawn from mineral entry available for leasing with the BLM Standard Lease Terms and

no additional stipulations. Maps of specific areas that would be leased for the new preferred alternative are located in Chapter 2 of the FEIS as figures 2-3 through 2-7.

S.6.2.1. Alternative 1 – No Action, No New Leasing

The first step in identifying the range of reasonable leasing alternatives was to determine the bounds of the leasing scenarios. This alternative represents one bound of the range of alternatives that can be considered. It also represents the National Environmental Policy Act (NEPA) requirement to consider a "no action" alternative, which in this situation is considered to be a continuation of the current management situation. No new leasing is allowed under this alternative. Alternative 1, as do all alternatives, recognizes the existence, and possible future development, of the 21 existing leases on 4,863 acres. Alternative 1 projects activities that are reasonably foreseeable to occur on the existing leases in the future under the existing lease terms and conditions. This alternative serves as a basis of comparison for the other alternatives and is the minimum (no additional) amount of leasing that can occur.

S.6.2.2. Alternative 2 - Emphasize Oil & Gas Development

Alternative 2 represents the other end of the range of reasonable alternative leasing scenarios. This alternative represents the maximum amount of leasing that can be done, with the minimum amount of constraints upon the leases. Alternative 2 would allow leasing of all Los Padres National Forest System lands, not legally withdrawn from mineral entry, with BLM "Standard Lease Terms" as mitigation. Only Forest Service-identified "Information Notices" which interpret the BLM Standard Lease Terms would be added to the Standard Lease Terms.

S.6.2.3. Alternative 3 - Meet Forest Plan Direction

This alternative was developed as a result of the analysis of Alternative 2. Alternative 3 answers the question, "What changes need to be made to Alternative 2 to bring it into compliance with the standards, guidelines and direction in the Los Padres National Forest Land and Resource Management Plan (Forest Plan)?" These changes would take the form of lease stipulations, in addition to the BLM Standard Lease Terms, which would provide additional mitigation. This alternative would, by definition, be in line with direction contained in the current Forest Plan; it is also consistent with the Southern California Conservation Strategy (See Section 1.7).

S.6.2.4. Alternative 4 - Emphasize Surface Resources

This alternative builds upon Alternative 3, adding further stipulations as mitigation measures to emphasize rehabilitation and enhancement of the surface resources. Alternative 4 provides for mitigation or avoidance of identified potentially significant impacts.

S.6.2.5. Alternative 4a – Alternative 4 With Roadless Area Emphasis

Alternative 4a is Alternative 4 but with all inventoried roadless areas (IRAs) given a "No Surface Occupancy" (NSO) stipulation.

S.6.2.6. Alternative 5 – Combination of Alternatives 3 and 4

Inside High Oil and Gas Potential Areas (HOGPAs), Alternative 3 watershed, recreation, and scenic lease stipulations would apply; Alternative 4 biological stipulations would also apply (see Table 2-8). All Alternative 4 lease stipulations would apply outside of HOGPAs. No Surface Occupancy (NSO) areas that are considered inaccessible by standard drilling practices on LPNF would not be leased under Alternative 5. These are lands that are otherwise in NSO areas and are more than one-half mile away from a location from which slant drilling under ground could be accomplished.

S.6.2.7. Alternative 5a – Alternative 5 with Roadless Area Emphasis

Alternative 5a is the same as Alternative 5, but with all inventoried roadless areas (IRAs) given a No Surface Occupancy (NSO) stipulation. As with Alternative 5, NSO areas that are considered inaccessible by current drilling practices on LPNF would not be leased. Significant portions of the IRAs would not be leased and the remainder of the IRAs accessible by slant drilling would have the NSO stipulation applied.

S.6.2.8. New Preferred Alternative

Alternatives 5 and 5a were listed as preferred in the DEIS. However, a new Preferred Alternative was developed in response to the comments received on the DEIS and the comparison of the alternative leasing scenarios considered. The preferred alternative combines Alternative 1 and Alternative 5A.

The new Preferred Alternative would make portions of the Sespe, San Cayetano, and South Cuyama High Oil and Gas Potential Areas available for oil and gas leasing and authorize BLM to lease lands in accordance with identified stipulations. The remainder of the HOGPAs and the Non-HOGPA area would not be available for leasing.

The study area considered in this analysis covers 766,867 acres. In this alternative 714,792 acres of the study area are not available for lease and another 47,798 acres would only be leased with a no surface occupancy stipulation. This leaves 4,277 acres, or roughly 0.5 percent of the area studied where oil and gas activities could occupy the land surface.

S.7. COMPARISON OF ALTERNATIVE LEASING SCENARIOS

This section compares how the alternative leasing scenarios meet the purpose and need for the proposed action and how they respond to the significant issues.

S.7.1. <u>Response of Alternatives to the Purpose and Need</u>

The needs of the proposed action are threefold:

- 1. Identify LPNF lands available for oil and gas leasing and stipulations;
- 2. Decide on Outstanding Lease Requests; and
- 3. Determine Future Availability of Currently Leased Land.

And, in accomplishing these needs, the selected alternative should:

- 4. Minimize Impacts to and Maintain the Long-Term Health of the Environment
- 5. Meet Forest Plan Direction

Table S-3 summarizes how each alternative responds to the purpose and needs.

TABLE S-3: RESPONSIVENESS OF ALTERNATIVES TO PROJECT PURPOSE AND NEED

	Needs				Purp	oose					
Alternative Leasing Scenario	1. Identify LPNF lands available for	2. Responds to	Determines		4. impacts to ar g-Term Heal Environment	th of the	5. Meet				
	oil and gas leasing and stipulations (acres)	Outstanding Lease Requests	of Existing Leases Once Terminated	Surface Area That can be Occupied (acres)	Area Disturbed After Rehab (acres)	Risk of Significant Impacts	Forest Plan Direction				
1	0			0	0.0	Low	Yes				
2	766,867			766,867	70.1	High	No				
3	766,867	Yes						254,568	31.5		
4	766,867		Yes	245,329	31.5						
4a	766,867		res	res res	63,576	17.5	Low	Yes			
5	634,136		Ţ		247,456	31.5	LOW	168			
5a	443,092			64,067	17.5						
Preferred	52,075			4,277	14.5						

S.7.1.1. Response of Alternatives in Meeting Needs

All alternatives meet the identified needs (#1, #2, and #3). Since each alternative makes leasing availability decisions for the area of LPNF that can be considered for leasing availability, each alternative:

- Identifies Land Available for Oil and Gas Leasing and Lease Stipulations;
- Responds to Outstanding Lease Requests; and
- Determines Availability of Existing Leases Once Terminated.

Table S-4 summarizes, by alternative, the acreage of LPNF that would not be available for lease and the acreage under each type of stipulation for the lands that would be available for lease. Table S-5 shows the same information displayed by percent of LPNF.

TABLE S-4: COMPARISON OF LEASE DECISIONS BY ALTERNATIVE FOREST-WIDE (ACRES)

	Lease Decision and Terms/Stipulations (acres)						
Alternative Leasing Scenario	No New Leases	No Surface Occupancy	Limited Surface Use	Limited Surface Use & Timing Limits	Timing Limits	Standard Lease Terms	
1	1,775,744	0	0	0	0	0	
2	1,008,877	0	0	0	0	766,867	
3	1,008,877	512,299	126,932	8,025	1,507	118,104	
4	1,008,877	521,538	188,019	8,725	21	48,564	
4a	1,008,877	703,291	47,868	3,559	7	12,142	
5	1,141,608	386,680	174,819	8,776	21	63,840	
5a	1,332,652	379,025	47,117	3,628	7	13,315	
Preferred	1,725,105	47,798	2,658	183	0	1,436	

TABLE S-5: COMPARISON OF LEASE DECISIONS BY ALTERNATIVE FOREST-WIDE (%)

	Lease Decision and Terms/Stipulations (percent)						
Alternative Leasing Scenario	No New Leases	No Surface Occupancy	Limited Surface Use	Limited Surface Use & Timing Limits	Timing Limits	Standard Lease Terms	
1	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2	56.8%	0.0%	0.0%	0.0%	0.0%	43.2%	
3	56.8%	28.8%	7.1%	0.5%	0.1%	6.7%	
4	56.8%	29.4%	10.6%	0.5%	< 0.1%	2.7%	
4a	56.8%	39.6%	2.7%	0.2%	< 0.1%	0.7%	
5	64.3%	21.8%	9.8%	0.5%	< 0.1%	3.6%	
5a	75.0%	21.3%	2.7%	0.2%	< 0.1%	0.7%	
Preferred	97.1%	2.7%	0.1%	< 0.1%	< 0.1%	0.1%	

Table S-6 displays, by alternative, lease availability decisions and stipulations regarding applications for and expressions of interest in leasing and future lease availability decisions and stipulations for currently leased areas once the existing leases terminate.

Maps showing the geographic location of lands available and where the stipulations apply are contained in the DEIS map packet for alternatives 3, 4, 4a, 5, and 5a. Maps for the New Preferred Alternative are in Figures 2-3 through 2-7. These maps are also displayed on the LPNF web page. Maps are not necessary for alternatives 1 and 2 since these alternatives make either make none of the study area available for new leasing (Alternative 1) or all of the study area available under standard lease terms only (Alternative 2).

Alternative Leasing Scenario	Existing Leases - Future Leasing Status			Applicat		Expressions C Leasing Statu		- Future		
	NL *	NSO	LSU & TL	SLT	Total	NL	NSO	LSU & TL	SLT	Total
1	4,863				4,863	28,602				28,602
2	376			4,487	4,863				28,602	28,602
3	1,804	2,225	594	240	4,863	6,370	12,678	4,823	4,731	28,602
4	1,804	2,363	544	152	4,863	6,370	12,885	7,218	2,129	28,602
4a	1,804	2,526	515	18	4,863	6,370	20,215	1,819	198	28,602
5	1,809	2,211	615	228	4,863	10,349	8,878	6,822	2,553	28,602
5a	1,826	2,383	568	86	4,863	15,704	10,862	1,826	210	28,602
Preferred	1,826	2,383	568	86	4,863	22,522	5,934	65	81	28,602

TABLE S-6: FUTURE AVAILABILITY OF EXISTING LEASE LANDS AND LAND WITH LEASE APPLICATIONS OR EXPRESSIONS OF INTEREST BY ALTERNATIVE (ACRES)

S.7.1.2. Response of Alternatives to the Purpose

The alternatives vary in the degree to which they meet the project purposes (# 4 and #5).

S.7.1.2.1. Response of Alternatives to Purpose # 4.

Proposed action purpose # 4 is to minimize impacts to and maintain the long-term health of the environment. Table S-3 summaries how much of LPNF would be available for leasing and how much would be subject to surface occupancy under the various alternatives. It also indicates, for each alternative, the estimated acres disturbed after rehabilitation and whether or not potentially significant impacts are expected to occur.

Alternative 1 would not lease any additional land and thus would not result in any additional environmental impact. Alternative 2 would make the entire study area available for leasing with no additional stipulations to accompany the BLM standard lease terms. Alternative 2 is the only alternative expected to result in potentially significant impacts to air, watershed, fisheries, vegetation, scenic, and recreational resources.

Alternative 3 stipulations provide the measures to mitigate most of the potentially significant impacts identified in the analysis of Alternative 2. Analysis indicates that short-term potentially significant impacts to ozone levels could occur but this is under a worst-case assumption that all activities occurred at the same time. These are likely to be spread out over a much longer period of time.

Alternative 4 would apply all the stipulations of Alternative 3 plus additional stipulations to emphasize protection of surface resources and provide for some rehabilitation of existing impact areas. Alternative 4 results in less area available for surface occupancy than Alternative 3. As a result Alternative 4 provides more environmental protection than Alternative 3.

^{*} Includes lease LA 0165125 (376 ac) located entirely in the Sespe wilderness.

Alternative 5 is the same as Alternative 3 in HOGPAs where development is projected and is therefore expected to have similar long-term environmental impacts. However, since areas otherwise NSO that can't be accessed by slant drilling are not available for lease, there are fewer acres available for lease.

Alternatives 4a and 5a are the same as Alternatives 4 and 5 respectively except that Inventoried Roadless Areas (IRAs) are given the protection of the no surface occupancy (NSO) stipulation. Only the portions of IRAs in Recreation Opportunity Spectrum (ROS) class semi-primitive non-motorized (SPNM) were given an NSO stipulation in Alternative 3. Furthermore, in Alternative 5a, areas otherwise NSO that can't be accessed by slant drilling are not available for lease. There is significantly less area where the surface can be occupied in Alternative 4a and 5a and less area available for lease in Alternative 5a.

The New Preferred Alternative leases portions of the three HOGPAs where the oil and gas potential is the highest, i.e. the Sespe, San Cayetano, and South Cuyama HOGPAs. These are in the vicinity of the currently producing oil and gas leases. This alternative greatly reduces the amount of land available for lease and the lands where the surface can be occupied. This alternative is projected to have the least amount of environmental impact of all the action alternatives.

S.7.1.2.2. Response of Alternatives to Proposed Action Purpose # 5.

Proposed action purpose # 5 is to meet Forest Plan direction. Whether an alternative meets Forest Plan direction is evaluated relative to the discretionary action the alternative leasing scenario proposes. There are existing conditions on LPNF that do not meet Forest Plan direction. For example, there are areas in currently leased lands that do not meet the visual quality objectives and Recreation Opportunity System class standards. These oil fields pre-date the current Forest Plan standard and guidelines. Existing oil and gas lease terms are set and cannot be changed without lessee consent. This proposed action would not affect existing lease terms.

Alternative 2 is the only alternative that would not meet the Forest Plan direction. Alternative 2 has no lease stipulations. Standard lease terms allow for moving any proposed activity up to 200 meters in distance or delaying it up to six months in time. However, GIS analysis of the suitability of the study area, assuming standard lease terms, indicates there are numerous areas where moving an activity 200 meters in distance or delaying it six months is not sufficient to meet the Forest Plan direction for watershed, recreation, biological, and scenic resources.

Alternative 1 would meet Forest Plan direction. Since no additional leasing would occur no additional impacts to other resources, other than those already occurring, would result.

Alternative 3 is developed specifically to meet the Forest Plan direction. Stipulations were developed as a result of the analysis of Alternative 2 to address areas where standard lease terms (Alternative 2) are not expected to meet Forest Plan direction.

Since all other alternative add additional stipulations to Alternative 3 and alternatives 5, 5a, and the New Preferred Alternative make less land available for leasing they too meet the Forest Plan direction.

S.7.2. <u>Summary of Alternatives Responsiveness to Significant Issues</u>

Tables S-7 through S-9 summarize how each alternative responds to the significant issues identified in scoping.

TABLE S-7: COMPARISON OF ALTERNATIVES BY PHYSICAL ISSUE AREAS

Physical 1	Environment
Air Quality	Watersheds, Wetlands, Riparian, & Floodplains
Alternative 1 could produce a short-term, significant unavoidable impact to regional ozone levels in Ventura and Santa	Low risk of cumulative watershed effects (CWE) forest-wide. There are no significant unavoidable impacts expected to watershed
Barbara counties during maximum development activity.	resources from the reasonably foreseeable additional development of existing leases.
Alternative 2 could produce a short-term,	Fifteen sub-basins have potential for significant long-term impacts if all the oil
significant unavoidable impact to regional ozone levels in Ventura, Monterey, San Luis Obispo, and Santa Barbara counties during maximum development activity.	and gas development for the area were to occur in just one sub-basin. In eleven of the sub-basins, this potential impact can be avoided by dispersing development proportionately between the sub-basins.
Could another a short term simificant	
unavoidable impact to regional ozone levels in Ventura, San Luis Obispo, and Santa Barbara counties during maximum development activity.	Low risk of cumulative watershed effects (CWE) forest-wide. Any new leasing under
	Alternative 3, 4, 4a, 5, 5a or the New Preferred Alternative would not result in
	significant unavoidable impacts to watershed resources.
The New Preferred Alternative could produce a short-term, significant unavoidable impact to regional ozone levels in Ventura and Santa Barbara counties during maximum development	
	Alternative 1 could produce a short-term, significant unavoidable impact to regional ozone levels in Ventura and Santa Barbara counties during maximum development activity. Alternative 2 could produce a short-term, significant unavoidable impact to regional ozone levels in Ventura, Monterey, San Luis Obispo, and Santa Barbara counties during maximum development activity. Could produce a short-term, significant unavoidable impact to regional ozone levels in Ventura, San Luis Obispo, and Santa Barbara counties during maximum development activity.

TABLE S-8: COMPARISON OF ALTERNATIVES BY BIOLOGICAL ISSUE AREAS

Alternative Leasing	Biological Environment ½					
Scenario	Wildlife	Fisheries	Vegetation			
Alternative 1 No Action – No New Leasing (3.0 acres disturbed)	No significant irreversible or irretrievable impacts are anticipated from Alternative 1. No species will be lost or will be put in greater peril due to this alternative, and no resource production will be lost.					
Alternative 2 Emphasize Oil & Gas Development (163.3 acres disturbed)	Given implementation of mitigation measures, no significant irreversible or irretrievable impacts are anticipated from this alternative scenario. No species will be lost or suffer reduced viability due to this alternative, and no resource production will be lost.	Potentially significant impacts to steelhead trout in lower Sespe Creek (as a result of adverse CWE).	Depending upon the location of activities, potentially significant impacts could occur to sensitive plant species.			
Alternative 3						
Meet Forest Plan Direction (45 acres disturbed)						
Alternative 4						
Emphasize Surface Resources (43 acres disturbed)						
Alternative 4a						
Alternative 4 With Roadless Conservation Area Emphasis (23.5 acres disturbed)	No oddicional improvedible on i		1			
Alternative 5	Alternatives 3, 4, 4a, 5, 5a, or	rretrievable impacts to biologica the New Preferred Alternative.	ir resources are anticipated from			
Combination of Alternatives 3 and 4 (45 acres disturbed)						
Alternative 5a						
Alternative 5 With Roadless Conservation Area Emphasis (23.5 acres disturbed)						
New Preferred Alternative						
Combination of Alternatives 1 and 5a (20.5 acres disturbed)						

^{1/} Threatened and endangered species would be protected under provisions of the Threatened and Endangered Species Act under all alternatives.

 $TABLE\ S-9: COMPARISON\ OF\ ALTERNATIVES\ BY\ SOCIAL\ AND\ ECONOMIC\ ISSUE\ AREAS$

Alternative	Social an	nd Economic Issue Area	s page 1 of 4
Leasing Scenario	Heritage Resources	Socioeconomic Impacts/Growth	Social Impacts Private Property & Noise
Alternative 1		-	No significant impacts are
No Action – No New Leasing (3.0 acres disturbed)			projected.
Alternative 2			Greater potential for significant
Emphasize Oil & Gas Development (163.3 acres disturbed)			impacts associated with San Cayetano, Sespe, and South Cuyama HOGPAs.
Alternative 3			Some impacts could occur but
Meet Forest Plan Direction (45 acres disturbed)			they are not expected to be significant.
Alternative 4			Some impacts could occur but
Emphasize Surface Resources (43 acres disturbed)	No significant impacts are		they are not expected to be significant.
Alternative 4a	projected for any alternative.	No significant economic or	More off-Forest development
Alternative 4 With Roadless Conservation Area Emphasis (23.5 acres disturbed)	Avoidance and/or mitigation would occur at next stage of process.	growth impacts are projected	would be expected than in Alt. 4, so there is a higher likelihood of operations being closer to sensitive human receptors.
Alternative 5			Some impacts could occur but
Combination of Alternatives 3 and 4 (45 acres disturbed)			they are not expected to be significant.
Alternative 5a			More off-Forest development
Alternative 5 With Roadless Conservation Area Emphasis (23.5 acres disturbed)			would be expected than in Alt. 5, so there is a higher likelihood of operations being closer to sensitive human receptors.
New Preferred Alternative			Off-Forest development would be expected to be similar to
Combination of Alternatives 1 and 5a (20.5 acres disturbed)			Alternative 5a but only for the Sespe, San Cayetano, & South Cuyama HOGPAs.

TABLE S-9: COMPARISON OF ALTERNATIVES BY SOCIAL AND ECONOMIC ISSUE AREAS (CONTINUED)

	Social an	d Economic Issue Area	s page 2 of 4
Alternative Leasing Scenario	Access/Traffic	Land and Resource Management Plans Forest Plan; County General Plans	Oil & Gas Development Development Constraints; Industrial Infrastructure
Alternative 1 No Action – No New Leasing (3.0 acres disturbed)	None of the Alternatives would generate enough traffic to cause any of the routes to exceed Level of	Existing leases do not meet all Forest Plan standards and guidelines. County general plan requirements are met.	Projects development of 1.2 BOE.* No significant impacts on infrastructure are projected.
Alternative 2 Emphasize Oil & Gas Development (163.3 acres disturbed)	Service (LOS) D that are not already doing so. Significant impact with or without the project are occurring where major links are entering urban areas. This is occurring where Highway 33 enters Ventura and Highway 126 enters Fillmore. The segment of Highway 33 into Ventura would only be utilized for traffic from the Piedra Blanca HOGPA in Alternative 2. No traffic is projected for this section under any other alternative. Significant impacts are also occurring on Highway 126 in the vicinity of Fillmore without any additions from the project. Tanker traffic from the San Cayetano HOGPA and commuter traffic from the Sespe HOGPA would use this segment in all alternatives. This represents less than one percent of the peak hour traffic. However, this would be in addition to an already significant impact. Scheduling the traffic off of the peak hour by allowing crews the use of flexible work schedules would mitigate these impacts on Highways 33 and 126.	SLTs are not sufficient to meet numerous Forest Plan standards and guidelines. Not consistent with some requirements of general plans for San Luis Obispo, Santa Barbara and Ventura counties.	Projects development of 90.2 BOE.* No significant impacts on infrastructure are projected.
Alternative 3 Meet Forest Plan Direction (45 acres disturbed)			Projects development of 21.4 BOE.* No significant impacts on infrastructure are projected.
Alternative 4 Emphasize Surface Resources (43 acres disturbed)			Projects development of 17.4 BOE.* No significant impacts on infrastructure are projected.
Alternative 4a Alternative 4 With Roadless Conservation Area Emphasis (23.5 acres disturbed)		Except for existing leases, mitigation meets all Forest Plan standards and	Projects development of 17.3 BOE.* No significant impacts on infrastructure are projected.
Alternative 5 Combination of Alternatives 3 and 4 (45 acres disturbed)		guidelines. Consistent with requirements of all county general plans.	Projects development of 21.4 BOE.* No significant impacts on infrastructure are projected.
Alternative 5a Alternative 5 With Roadless Conservation Area Emphasis (23.5 acres disturbed)			Projects development of 17.3 BOE.* No significant impacts on infrastructure are projected.
New Preferred Alternative Combination of Alternatives 1 and 5a (20.5 acres disturbed)		of the peak hour by allowing crews the use of flexible work schedules would mitigate these impacts on Highways 33	Projects development of 17.0 BOE.* No significant impacts on infrastructure are projected.

 $^{*\ \}textit{millions of barrels of oil equivalent}.$

TABLE S-9: COMPARISON OF ALTERNATIVES BY SOCIAL AND ECONOMIC ISSUE AREAS (CONTINUED)

Alternative	Social and Economic Issue Areas page 3 of 4			
Leasing Scenario	Scenic Resources	Safety and Hazards Fire, geologic, spills	Recreation Off-road vehicle use, developed sites, primitive use, wilderness areas, roadless areas	
Alternative 1 No Action – No New Leasing (3.0 acres disturbed)	San Cayetano, South Cuyama & Sespe HOGPAs all have existing significant impacts which could increase if developed further. Also, South Cuyama could have 7.3 acres of new disturbance.	The likelihood of any adverse impacts associated with safety and hazards are directly related to the projected amount of oil and gas development and any mitigation measures taken. The following measures will mitigate or prevent adverse safety and hazard impacts: Geologic hazards consist of lands prone to landslides, erodable soils, and seismic hazards. Such areas are considered in the Cumulative Watershed Effects (CWE)	Existing impacts to recreation opportunities resulting from leases in the Sespe HOGPA would continue.	
Alternative 2 Emphasize Oil & Gas Development (163.3 acres disturbed)	A great deal of development projected in the HOGPA areas is expected to result in potentially significant scenic impacts.		Projected development could result in significant direct impacts on the recreational setting (ROS classes) and on the Inventoried Roadless Areas (IRAs) in large portions of the HOGPAs. Significant indirect impacts on Wilderness, Wild and Scenic rivers and developed sites could also result.	
Alternative 3 Meet Forest Plan Direction (45 acres disturbed)	Forest Plan adopted VQOs would be met and no additional scenic impacts would occur. However, some development could result in a change to a human-dominated landscape.	analysis and, where feasible, such areas are avoided. Seismic events, however, cannot be predicted or avoided. Standard lease terms require preparation of a fire prevention and suppression plan. The preparation and enforcement of a "fire plan," decreases the likelihood that an escaped wildfire would become a major fire.	There would be no significant impacts on recreation opportunities, Wilderness, Wild and Scenic Rivers or developed sites except as they result from existing leases. There could be some development in IRAs.	
Alternative 4 Emphasize Surface Resources (43 acres disturbed)	Forest Plan scenic requirements would be met, no additional significant scenic impacts would occur, and some existing landscape impacts could be rehabilitated.	40 CFR Part 112 sets in place EPA's oil spill prevention, control and countermeasures (SPCC) plan. These plans have been effective in minimizing adverse effects of spills on LPNF.	There would be no significant impacts on recreation opportunities, Wilderness, Wild and Scenic Rivers or developed sites except as they result from existing leases (Alternative 1). Some recreational settings could be rehabilitated/enhanced. There could be some development in IRAs.	

TABLE S-9: COMPARISON OF ALTERNATIVES BY SOCIAL AND ECONOMIC ISSUE AREAS (CONTINUED)

	Social and Economic Issue Areas page 4 of 4			
Alternative Leasing	Scenic Resources	Safety and Hazards	Recreation	
Scenario		Fire, geologic, spills	Off-road vehicle use, developed sites, primitive use, wilderness areas, roadless areas	
Alternative 4a Alternative 4 With Roadless Conservation Area Emphasis (23.5 acres disturbed)	Forest Plan scenic requirements would be met, no additional significant scenic impacts would occur, and some existing landscape impacts could be rehabilitated.	See previous page.	There would be no significant impacts on recreation opportunities, Wilderness, Wild and Scenic Rivers or developed sites except as they result from existing leases. Some recreational settings could be rehabilitated/enhanced. There would be no development in IRAs.	
Alternative 5 Combination of Alternatives 3 and 4 (45 acres disturbed)	Forest Plan adopted VQOs would be met and no additional scenic impacts would occur. However, some development could result in a change to a human-dominated landscape.		There would be no significant impacts on recreation opportunities, Wilderness, Wild and Scenic Rivers or developed sites except as they result from existing leases. There could be some development in IRAs.	
Alternative 5a Alternative 5 With Roadless Conservation Area Emphasis (23.5 acres disturbed)	Forest Plan adopted VQOs would be met and no additional scenic impacts would occur. However, some development could result in a change to a human-dominated landscape.		There would be no significant impacts on recreation opportunities, Wilderness, Wild and Scenic Rivers or developed sites except as they result from existing leases. There would be no development in IRAs.	
New Preferred Alternative Combination of Alternatives 1 and 5a (20.5 acres disturbed)	Forest Plan adopted VQOs would be met and no additional scenic impacts would occur. However, some development could result in a change to a human-dominated landscape in South Cuyama HOGPA.			