SANTA BARBARA COUNTY
BOARD AGENDA LETTER

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Agenda Number:	
Prepared on:	4/4/02
Department Name:	Planning and Development
Department No.:	053
Agenda Date:	4/16/02
Placement:	Departmental
Estimate Time:	1 hour
Continued Item:	YES
If Yes, date from:	3/26/02

TO: Board of Supervisors

FROM: John Patton, Director
Planning and Development Department

STAFF CONTACT: Susana Montana, Deputy Director, Comprehensive Planning Division, 568-2068
Doug Anthony, Energy Specialist, Energy Division, 568-2046

SUBJECT: Los Padres National Forest, Oil & Gas Leasing, Draft Environmental Impact Statement

---

Recommendation(s):

That the Board of Supervisors: Authorize the Chair to execute the attached letter to Ms. Jeanine Derby, Forest Supervisor (included herein as Exhibit A) for the purpose of commenting on the Draft Environmental Impact Statement prepared by the U.S. Forest Service's Pacific Southwest Region to consider various options for oil and gas leasing in the Los Padres National Forest, including areas of the forest situated within Santa Barbara County.

Alignment with Board Strategic Plan:

The recommendation primarily aligns with Goal No. 5: A High Quality of Life for All Residents.

Executive Summary and Discussion: The Los Padres National Forest recently issued a Draft Environmental Impact Statement (DEIS) that assesses seven different oil and gas leasing options in the forest, including a no new leasing option. Comments on the various options and the DEIS are due on April 19, 2002. Staff of the Planning and Development Department's Comprehensive Planning Division and Energy Division, and the Public Works Department, Roads Division, has reviewed the DEIS and offer the following report for the Board's consideration.

Background – Previous Oil and Gas Leasing & Production in Los Padres National Forest:

Oil and gas development began in Los Padres National Forest area in 1887 with the discovery of the Sespe oil field near Fillmore, Ventura County. Between 1920 and 1987, the U.S. Department of the Interior, Bureau of Land Management (BLM), administered all aspects of oil and gas leasing and production in national forest lands, pursuant to the 1920 Minerals Leasing Act. The Los Padres National Forest, which covers portions of Ventura, Santa Barbara, Kern, San Luis Obispo, and Monterey Counties, currently hosts 22 existing leases, covering 14,618 acres. About 90% of current production comes from Sespe field in Ventura County. This field is now mature (i.e., nearing depletion). The rest of the current production comes

from the South Cuyama field in Santa Barbara County. These fields are also mature. During the 1980s, lessees drilled an average of 5-6 wells annually. Since 1990, only two wells overall have been drilled.

The 1987 Federal Onshore Oil and Gas Leasing Reform Act modified the authorities of federal agencies with regard to oil and gas leasing decisions in national forests, giving U.S. Forest Service (USFS) a larger decision-making role that includes the responsibilities to:

1. identify national forest lands available for leasing,
2. authorize specific lands for leasing, and
3. approve or disapprove a Surface Use Plan of Operations at the time BLM considers an Application for Permit to Drill.

Meanwhile, BLM still administers all leasing & oversight of oil & gas development. For instance, BLM will decide whether or not to offer specific national forest lands for lease should the USFS, through this current process, identify such lands as available for leasing. BLM typically bases leasing decisions on interest that the oil industry expresses for any particular area, if any. Prior to BLM leasing, USFS states that it will examine specific parcels that the BLM identifies for competitive bidding to determine if:

1. the effects of oil and gas leasing have been adequately addressed in a NEPA document;
2. the proper stipulations are included to mitigate environmental impacts; and
3. the proposed lease sale is consistent with the Forest Plan.

Los Padres National Forest, Oil and Gas Leasing Options Examined in the DEIS

The oil and gas leasing options currently under consideration in the DEIS would represent the first leasing program pursuant to the 1987 Federal Onshore Oil and Gas Leasing Reform Act.[1] Los Padres National Forest staff began preparing this leasing program in 1995. Planning and Development staff commented on the scope of the EIS in October of 1995. The USFS staff released the DEIS in late 2001 and subsequently conducted five workshops between Jan. 14-18 of 2002, on in each of the five counties. The workshop held in Goleta was the only one well attended – general response from attendees was in opposition to leasing. On a separate track, the update for the Los Padres National Forest Plan, just kicked off. The schedule for the updated Forest Plan calls for issuance of a separate DEIS in late 2002 or early 2003, with completion in late 2003.

The DEIS examines the following seven leasing options, further summarized in Exhibit B of this memo:

ALTERNATIVE 1: No new leasing; development of existing leases continues. **Development projected to occur under this alternative results in the least amount of potential surface disturbance (8.3 acres initially), due to further development of existing leases.**

ALTERNATIVE 2: New leasing of all Los Padres National Forest lands not withdrawn from consideration. Withdrawn lands account for 1,008,877 acres and include designated wilderness areas, the Santa Ynez Watershed, and Big Sur Coastal Zone. The remaining 966,867 acres represent the "lease study area" for this alternative. **Development projected to occur under this alternative results in the largest amount of potential surface disturbance (163.3 acres initially), due to new drill-sites, and new service roads and pipelines to those drill-sites.**

[1] Those forests with existing oil and gas development and potential additional reserves were identified as priorities for developing leasing programs pursuant to the 1987 legislation.

ALTERNATIVE 3: New leasing similar to alternative 2, but further limited in accordance with the requirements of the current Forest Plan. **This alternative results in the second largest amount of potential surface disturbance (45 acres initially) due to new drill-sites, and new service roads and pipelines to those drill-sites.**

ALTERNATIVE 4: New leasing similar to Alternative 3, but further limited by additional stipulations designed to add more protections for surface resources and to add off-site mitigation of adverse impacts caused by previous and current oil and gas development. **This alternative results in the third least amount of potential surface disturbance (43 acres initially) due to new drill-sites, and new service roads and pipelines to those drill-sites.**

ALTERNATIVE 4A: New leasing in accordance with alternative 4 modified to eliminate development of roads within "inventoried roadless areas,"[2] which extends "no surface occupancy" restrictions to several areas of the Los Padres National Forest. Along with Alternative 5a, **this alternative results in the second least amount of potential surface disturbance (23.5 acres initially) because new leasing is limited to areas where access already exists.**

ALTERNATIVE 5: New leasing under a hybrid of Alternatives 3 and 4. Areas identified as having a high potential for oil and gas are limited in accordance with the requirements of the current Forest Plan (Alt. 3) plus Alt. 4 stipulations for protection of biological resources. **This alternative results in the same projected amount of potential surface disturbance (45 acres initially) as Alt. 3, due to new drill-sites, and new service roads and pipelines to those drill-sites. USFS has identified this alternative and Alternative 5a as the preferred alternatives.**

ALTERNATIVE 5A: New leasing in accordance with alternative 5 modified to eliminate development of roads within "inventoried roadless areas," which extends "no surface occupancy" restrictions to several areas of the Los Padres National Forest. Along with Alternative 4a, **this alternative results in the second least amount of potential surface disturbance (23.5 acres initially) because new leasing is limited to areas where access already exists. USFS has identified this alternative and Alternative 5a as the preferred alternatives.**

Projections of potential oil and gas development that might occur under each alternative is further based on geologic estimates of areas with a high potential for oil and gas reserves. There are four such areas in Santa Barbara County:

1. ***RINCON CREEK AREA.*** An area that is situated southeast of Toro Canyon in Montecito and southwest of State Route 33 (between matilija Reservoir and Ojai. One-third of this area is located within Santa Barbara County. Access would occur from State Route 33. Preliminary estimates of reservoirs indicate a range of 0-16.3 million barrels of oil, with a low mean value of 0.4 million recoverable barrels.

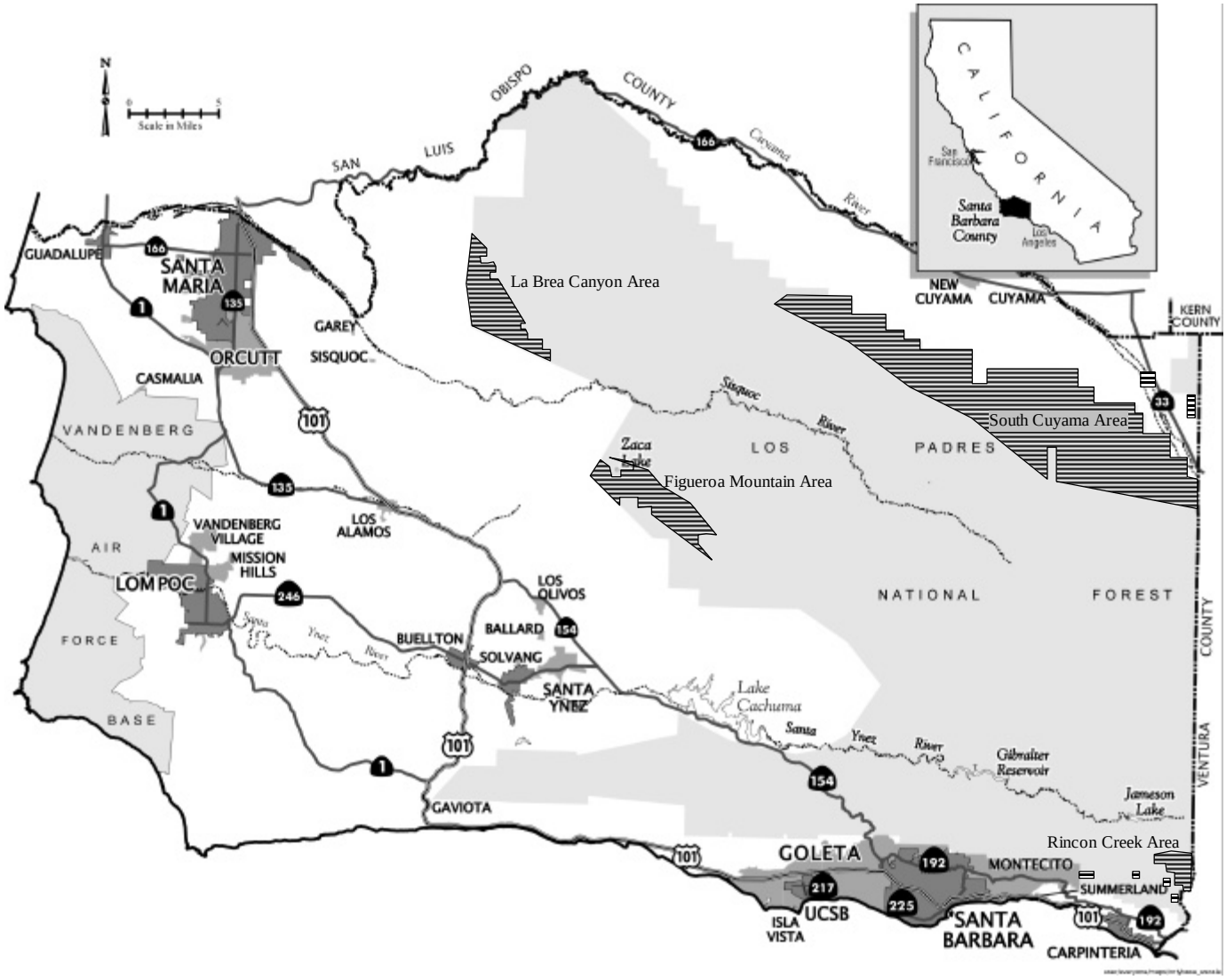
2. ***FIGUEROA MOUNTAIN AREA.*** This area is situated northeast of Solvang, between Cachuma Creek and Lookout Mountain, on a geologic trend with the abandoned Sisquoc Ranch Field. Access would occur via Figueroa Mountain Road. Preliminary estimates of reservoirs indicate a range of 0-7.7 million barrels of oil, with a low mean value of 0.3 million recoverable barrels.

[2] These areas stem from the Roadless Area Conservation Rule, issued by Executive Order on January 12, 2001.

3. ***LA BREA CANYON AREA.*** An area situated southeast of Santa Maria, around Tepusquet Peak. Access would occur via Tepusquet Road. Preliminary estimates of reservoirs indicate a range of 0-0.8 million barrels of oil, with a low mean value of 0.8 million recoverable barrels.

4. SOUTH CUYAMA AREA. This area expands the current leased area in the northeast corner of Santa Barbara County. Access would occur via State Route 166. Preliminary estimates of oil reservoirs indicate a range of 0-210.8 million barrels, with a low mean value of 26.8 million recoverable barrels.

Areas of High Potential for Oil and Gas
(according to preliminary geologic projections by USFS consultant)



Adequacy of the DEIS:

Exhibit A represents staff's recommendations to improve the DEIS in order to provide adequate environmental information to the decision-making process. Three points merit emphasis here. First, the DEIS provides a very general, broad-brushed examination of potential impacts that might occur from the decision to make additional lands within the Los Padres National Forest available for leasing. It defers more detailed environmental analysis to future decisions, based on the reason that no ground-disturbing activities would result from the decision being analyzed in the current DEIS.

This general approach raises a primary concern about the adequacy of the DEIS to fully inform a phased decision process. Essentially, the decision to approve leasing has been perceived as tantamount to a decision to development the leases because the exchange of large sums of money to purchase leases carries with it the expectation that development will follow where commercial quantities of oil and gas are found.

This situation is similar to concerns to those expressed at many levels about the phasing of oil and gas leasing on the Outer Continental Shelf (OCS). As the National Resource Council described in its 1989 report, examining the adequacy of environmental analysis for OCS decisions:

> *Second, by the time producing reservoirs are identified, the industrial lessor typically has committed enormous amounts of money to the lease. DOI* [Department of the Interior] *has never implemented the procedures provided in the OCS Lands Act Amendments of 1978 (OCSLAA) for lease cancellation, and so a decision to lease is generally perceived as tantamount to a decision to develop and produce, provided that commercial reserves are found in a lease area. … As DOI's EISs point out, it is often not possible to do adequate assessment before leasing. However, once it does become possible to generate the needed information and analysis, a decision not to proceed with development has already been effectively precluded.*[3]

The report further finds that this foregoing perception – that leasing implies development and production if economically recoverable reserves are subsequently discovered – is widespread. It cites a 1984 Supreme Court decision, in which the majority opined: "*… a lease sale is a crucial step. Large sums of money exchange hands, and the sale may therefore generate momentum that makes eventual exploration, development, and production inevitable."*[4] The phased, decision-making process being undertaken by the USFS and BLM, appears even further complicated by the sharing of the process between to federal departments.

Second, the current alternatives analyzed in the DEIS appear to present an "all-or-nothing" approach to leasing High Oil and Gas Potential Areas. We recommend revisions that allow more flexibility in the decision-making process, including the elimination of some areas, such as the Figueroa Mountain Area, from further consideration where adverse environmental impacts appear to outweigh any perceived benefit to developing relatively small volumes of estimated reserves.

Third, the DEIS contains two primary, but incorrect, assumptions that inappropriately skew the analysis and conclusion of environmental impacts. The first assumption substantially misunderstands current technical capabilities of extended-reach drilling. Wherein such capabilities can reach fields as far away as 5 miles from the drill-site, the DEIS assumes only ½ mile, based on limited, outdated experience in Los Padres National Forest. This flaw disallows proper consideration of leasing alternatives that could result in much less surface

---

[3] National Research Council, *The Adequacy of Environmental Information for Outer Continental Shelf Oil and Gas Decisions: Florida and California*, (Washington, D.C.: National Academy Press, 1989), page 6.
[4] *Secretary of the Interior v. California*, 104 S. Ct., 656.

disturbance. (essentially use of current technology would reduce the number of new drill-sites, pipelines and service roads in some areas) and could allow drilling from more accessible sites in other areas.

The second questionable assumption misunderstands the regional oil market for California, incorrectly postulating there six of the state's oil refineries are idle due to lack of crude oil supply, and incorrectly assuming that California's heavy oil is more competitive than non-state sources. Actual data, and historic trends that have characterized the crude oil market since 1986, show otherwise. On the one hand, staff from the California Energy Commission, which is charged with monitoring input and output of California's oil refineries, has confirmed that no refineries have been idled due to lack of oil. Such refineries are occasionally idled for one of two reasons: routine maintenance or to repair damage from accidents.

On the other hand, California's oil market has been characterized by low and unstable prices since 1986, due to both international and regional factors that have adversely affected the market competitiveness of California oil producers in the market. As a result, many oil-producing wells were shut-in for many years. In 2001, 21,989 wells were idle, 7,478 of which have been shut-in for over 15 years. One of the benefits of lifting the export ban in 1996 on Alaska's North Slope oil production – invigorating California's domestic producers by diminishing supplies to California – has not materialized. Instead, as the following table shows, reductions in supplies of Alaska oil delivered to California has been filled by increases in oil from other foreign sources, largely Indonesia. Meanwhile, California producers continue to be adversely affected by low and unstable oil prices, and California's predominantly heavy oil often entails higher costs to produce.

SOURCES OF OIL SUPPLIED TO CALIFORNIA REFINERIES
Source (millions of barrels)

	Alaska	California	Foreign	TOTAL	% Alaska	% California	% Foreign
1982	196,462	365,962	33,553	595,977	33	61	6
1983	189,538	377,068	47,991	614,597	31	61	8
1984	210,450	369,225	53,262	632,937	33	58	8
1985	210,647	398,280	35,408	644,335	33	62	5
1986	237,508	403,477	36,877	677,862	35	60	5
1987	260,843	386,676	33,395	680,914	38	57	5
1988	306,247	365,354	37,217	708,818	43	52	5
1989	328,407	337,489	46,707	712,603	46	47	7
1990	320,873	336,083	39,454	696,410	46	48	6
1991	316,115	336,620	30,723	683,458	46	49	4
1992	299,652	331,638	33,056	664,346	45	50	5
1993	285,565	342,762	43,359	671,686	43	51	6
1994	297,017	319,193	49,192	665,402	45	48	7
1995	264,520	320,824	56,864	642,208	41	50	9
1996	268,804	316,203	63,996	649,003	41	49	10
1997	244,444	322,198	78,108	644,750	38	50	12
1998	221,983	317,817	104,653	644,453	35	49	16
1999	188,743	306,856	140,599	636,198	29.7	48.2	22.1
2000	163,233	326,371	169,105	658,709	24.8	49.6	25.7

Given the foregoing issues, and several others that are detailed in Exhibit A, staff recommends that the Board of Supervisors authorize the Chair to sign the attached letter, which identifies improvements to the DEIS and requests re-circulation of a revised DEIS with more analysis and correct base assumptions for public review

in the future. We are also confused about the timing of this DEIS in relation to the update of the Los Padres National Forest Plan. It seems that the latter update should precede prior to this DEIS, since several alternatives are based requirements of the Forest Plan. Under the current schedule, the oil and gas leasing decision shapes the decision about new Forest Plan's requirements, as opposed to the latter leading the former.

Mandates and Service Levels: The 1987 Federal Onshore Oil and Gas Leasing Reform Act delegates authority and responsibility to the U.S Department of Agriculture, Forest Service, for identifying national forest lands that are available for oil and gas leasing, and to authorize specific lands for leasing. (Previously, the U.S. Department of the Interior, Bureau of Land Management conducted such tasks.) The DEIS represents a step towards satisfying these responsibilities.

The County of Santa Barbara has no explicit mandate to comment on the DEIS; however, certain leasing options could result in a decrease in levels of service on certain County roads, could degrade sensitive species' habitat, could increase fire hazards, and could cause adverse visual impacts to valuable open-space resources.

Fiscal and Facilities Impacts: Staff time to review the DEIS and draft comments is funded through the department's General Fund allocation. As mentioned above, certain oil and gas leasing options identified in the DEIS could adversely impact County roads , fire suppression levels of service and water quality.

Special Instructions: The Clerk of the Board will transmit the attached letter to the addressee and all CCs.

Concurrence: Public Works, Roads Division, Traffic Section.

F:\\GROUP\ENERGY\WP\POLICY\INTERAGENCY MISC\LPNF O&G DEIS.BoS staff rpt.doc

Exhibit A

Recommended Letter to the Forest Supervisor

April 16, 2002

Ms. Jeanine Derby, Forest Supervisor
Los Padres National Forest
6755 Hollister Avenue, Suite 150
Goleta, CA 93117

RE: Draft Environmental Impact Statement for Oil and Gas Leasing

Dear Ms. Derby:

On behalf of the Board of Supervisors, County of Santa Barbara, I thank you for the opportunity to comment on the seven oil and gas leasing options under consideration for Los Padres National Forest in the Draft Environmental Impact Statement (DEIS). The Board of Supervisors extends its appreciation to you and your staff for conducting several public workshops on the DEIS, and for extending the period of review considerably beyond the time required by law so interested citizens have ample time to review and comment on the entire DEIS. We agree that any decision about opening new areas in Santa Barbara County to oil and gas leasing merits ample public review and input.

We recognize that the Los Padres National Forest staff is obligated by the 1987 Federal Onshore Oil and Gas Leasing Reform Act to identify leasing options and examine these options in the DEIS. We also recognize that this is your staff's first occasion to prepare such a plan and that your staff's expertise primarily lies in the management of our local forest resources, and not in details of oil and gas development.

In this context, we would like to submit the following comments for your consideration, many of which are based on Santa Barbara County's extensive experience with both onshore and offshore oil and gas development. The remaining portion of this letter presents four overall concerns with the leasing options and the DEIS, while the attachment provides more detailed comments for your consideration.

First, we simply do not understand the benefit of opening up new, pristine areas of Santa Barbara County, such as the Figueroa Mountain Area, to oil and gas development while California is still experiencing depressed market conditions for in-state oil and gas producers. We understand your process is driven by federal legislation adopted in 1987, which your staff describes as a response to the oil crisis of the 1970s. However, today's market is considerably different. Low and

unstable oil prices due to an oversupply of oil have characterized the California heavy crude oil market since 1986. These competitive market conditions have led many onshore wells to be abandoned prematurely or shut-in for prolonged periods – some for more than 15 years. Low oil prices have also diminished the pace and amount of offshore oil and gas development considerably, compared to pre-1986 projections. Many offshore leases have terminated without any development whatsoever and 36 of the 79 remaining leases have remained undeveloped even though they were issued several years ago, between 1968 and 1984.

Actions to revive California's domestic upstream oil market have not been successful. For example, the federal government lifted the export ban on Alaska's North Slope crude oil, in part, to reduce supplies of Alaska oil delivered to California. However, this action has done little to revive California's domestic production due to continued low and unstable prices. More competitive foreign sources have filled the void, as shown in the attachment.

We are, therefore, concerned that the DEIS renders a notably inaccurate picture of the California crude oil market, and in so doing, gravely misinforms the decision-making process. Actual market conditions do not support a finding that the benefits of opening new areas such as the Figueroa Mountain area to new oil and gas leasing outweigh the resulting adverse environmental effects.

Second, we are concerned about the organization of the DEIS, which appears to seriously undermine the flexibility of the decision-making process. Essentially, the DEIS presents a "all-or-nothing option with regard to leasing High Oil and Gas Potential Areas (HOGPAs). Alternative 1 addresses no leasing of any such areas while all other alternatives address leasing of all such areas. No alternatives are presented to eliminate one or more HOGPAs, such as the Figueroa Mountain and La Brea areas, due to extenuating environmental circumstances without eliminating all new leasing.

Third, we are concerned that the DEIS does not recognize the current technological capabilities of extended-reach drilling or the environmental benefits thereof. Such technology, as noted frequently by agencies such as the Minerals Management Service, has the ability to considerably reduce the number of drill-sites required to recover reserves, which reduces adverse environmental impacts. Indeed, such technology is known to reach and produce oil from fields located as far as 5 miles from the drill-site, which is substantially farther than the ½ mile assumed by the DEIS.

We can only surmise, given the broad generality of the DEIS, that this discrepancy alone may substantially overstate the number of drill-sites – and, therefore, the number of acres – that would be required and disturbed, respectively, with any new leasing and development. It also may preclude the identification of less environmentally sensitive locations from which reserves might be tapped. Current and future directional-reach drilling conceivably can reduce the number of drill-sites, pipelines, and service roads require to develop suspected reserves, and may allow some of these reserves to be developed from existing, already disturbed sites, or locations outside of the national forest.

Third, we are concerned about the phased structure of decision-making with regard to oil and gas development in Los Padres National Forest because it promotes overly general and vague

environmental analysis during the first phase of decision-making. Such is the case with the current DEIS, which essentially offers a very brief and overly general analysis of environmental impacts while deferring more detailed analyses of environmental impacts to the time when specific drilling projects are proposed. By this time, however, oil producers would have already invested substantial amounts of money into their respective leases, with the clear expectation of developing oil and gas should they discover such reserves in commercial quantities. To borrow the words of a 1984 Supreme Court decision, which are quite relevant here: *"…a lease sale is a crucial step. Large sums of money change hands, and the sale may therefore generate momentum that makes eventual exploration, development, and production inevitable."* (Quoted from the majority opinion in *Secretary of the Interior vs. California,* 104 S. St. 656.) *"Approval for exploration and development is obviously the expected and intended result of leasing; if it were not, the Secretary would not bother to lease and the lessees would not bother to bid."* (Quoted from the minority opinion in *Secretary of the Interior vs. California,* 104 S. St. 656.)

Although the foregoing excerpts applied to oil and gas leasing and development on the Outer Continental Shelf (OCS), their wisdom applies to Los Padres National Forest equally as well. Our experience with OCS leasing tells us that the current, pending decision about leasing options will have a very strong influence over the ultimate extent of oil and gas development. Essentially, the decision to open new lands in the Los Padres National Forest to oil and gas leasing appears to be tantamount to approval of development.

In this light, we find the DEIS in its current form to be seriously inadequate to sufficiently inform and support your pending decision whether to not to open new lands to oil and gas leasing. We respectfully request that you direct your staff to revise the DEIS and re-issue it for additional public comment. In so doing, we ask that the revised DEIS adhere to the following four guidelines.

1. PROVIDE MORE FLEXIBILITY TO THE DECISION-MAKING PROCESS. As currently structured, the DEIS does not appear to allow sufficient flexibility in decision-making to exempt certain areas from leasing because the extent of adverse effects on the environment outweighs the benefit of adding a very limited amount of oil and gas to the market (i.e., cost-benefit comparison). For example, the significant impacts of adding industrial-related traffic to Happy Canyon Road appears to us to be more than sufficient justification to eliminate any further consideration of leasing the Figueroa Mountain Area. Unfortunately, the DEIS appears to be organized in an "all-or nothing" manner that precludes such flexibility in the decision-making process, and clearly does not go into sufficient detail or analysis of impacts in order to consider eliminating certain areas of high oil and gas potential due to the significance of particular impacts.

2. PROVIDE MORE ACCURATE INFORMATION TO THE DECISION-MAKING PROCESS. As exemplified in our foregoing comments and in our attachment, the current DEIS carries some serious flaws that misinform the decision-making process considerably. For example, it misunderstands California's oil market, it misrepresents demand and supply of crude oil to California's oil refineries, and it is 20 or more years outdated in its representation of extended-reach drilling capability. These circumstances, unfortunately, preclude sound and sufficiently informed decision-making.

3. PROVIDE MORE DETAILED INFORMATION AND ANALYSIS TO THE DECISION-MAKING PROCESS. As noted previously, the DEIS is overly general and vague, deferring more detailed analyses to subsequent decisions in a phased decision-making process where leasing occurs prior to a well-informed understanding about the environmental effects of oil and gas development. While a project-specific level of analysis is not realistic, the DEIS could and should provide more analysis to inform the current decision. Please see our attached comments.

4. LET THE UPDATE OF THE FOREST PLAN DRIVE YOUR DECISION ABOUT OIL AND GAS LEASING RATHER THAN THE REVERSE. We support your efforts to update the Forest Plan, but urge you to re-schedule your planning activities, timing the decision about opening new areas to oil and gas leasing to follow, rather than precede, the update of the Forest Plan. It stands to reason that, under the current schedule, your decision to open new areas to oil and gas development will adversely influence the update of the Forest Plan. Essentially, sound planning calls for the updated Forest Plan to be binding on the decision about oil and gas leasing rather than the reverse situation. There currently is no substantive reason not to delay the oil and gas leasing decision, given current market trends.

In conclusion, we believe an improved DEIS will show little benefit, it any given current market trends, to opening up areas such as the Figueroa Mountain area to oil and gas leases, given their environmental and recreational attributes, not to mention unacceptable level of impacts to County roads. Thank you for the opportunity to participate in the decision-making process at hand. We hope you will continue to seek our input as the decision-making process proceeds.

Please feel free to contact our staff should you have any questions or desire more information. Primary staff contacts include Ms. Susana Montana (805/568-2068) and Mr. Doug Anthony (805/568-2046).

Respectfully yours,

Gail Marshall, Chair
Board of Supervisors

Attachment: Specific Comments on the DEIS

CC: U.S. Representative Lois Capps
State Senator Jack O'Connell
State Assemblyperson Hannah Beth Jackson
State Assemblyperson Abel Maldonaldo
California Secretary of Resources Mary Nichols
California Coastal Commission
Mr. Al Hess, Project Manager, U.S. Forest Service, Los Padres National Forest

Attachment

Additional Comments on the Draft Environmental Impact Statement

A. EXECUTIVE SUMMARY

Page S-27: The first full paragraph sets forth the assumption that existing facilities such as pipelines and processing facilities will be used to handle any production resulting from new leases. Please clarify which laws or regulations ensures shared use of such facilities if owned and operated by parties different that the new lessees.

Page S-26: As noted in other comments below, the DEIS reflects a serious misunderstanding about the California crude oil market. See, in particular, our comments for subsection 3.3.6, below.

Chapter 1: Purpose and Need

SECTION 1.2: GENERAL BACKGROUND: LEGISLATION AND POLICY

Please expand the description to better describe the actions that would be taken by the U.S. Department of the Interior's Bureau of Land Management. As currently written, the reader only learns about USFS's role.

SECTION 1.5: PROPOSED ACTIONS – DECISIONS TO BE MADE

The first paragraph on page 1-11 states, among other things, that the pending decision by the USFS cannot preserve oil and gas deposits for the future. As currently written, this sentence suggests that the USFS cannot legally choose alternative 1 (the no leasing alternative). Please elaborate on the legal parameters of the decision and explain if the law prohibits USFS from denying access to a particular area for purposes of oil and gas development should the adverse environmental impacts outweigh the benefit of oil and gas development.

Additionally, this paragraph notes that the federal government has a financial interest in leasing that might be jeopardized should drainage of federal deposits occur from wells drilled on private lands. Please elaborate which policies guide the decision in choosing a drill-site should the environmentally superior location be on private lands, but would result in drainage of federal deposits.

SECTION 1.6: REASONABLE FORESEEABLE DEVELOPMENT (RFD) SCENARIO

The first full paragraph on page 1-15 outlines, but does not explain, the basis for determining the RFD; that is, historic oil and gas information, geologic information, and projected market trends. However, we find the DEIS to carry some critical errors in determining the RFD. For instance, the consultant misunderstands the current technological capability of extended reach drilling, instead using assumptions based on technological capabilities 20 or more years old. We also find that the projection of market trends is seriously flawed. Consequently, we request considerable expansion of this section to provide a more detailed explanation of the information and assumptions used to develop the RFD. We also believe that use of more accurate information and assumptions may lead to a notably different RFD.

SECTION 1.7: FEDERAL MANAGEMENT OF LEASES AND DEVELOPMENT

Subsection 1.7.3.3 (page 1-19) states that this EIS and associated Record of Decision do not authorize any ground-disturbing activities. It further states that the FS cannot conduct adequate NEPA analysis to make decisions regarding specific operations on a leasehold. We strongly disagree with this assumption, for it implies that leasing, and the monetary investment made thereof, does not provide a reasonable expectation of development and associated ground-disturbing activities. As our first comment under Chapter 4 (below) illustrates, leasing is perceived to be tantamount to development, and the Record of Decision to make lands

available for leasing does, therefore, result in ground-disturbing activities because it provides sufficient expectation of development by virtue of exchanging large sums of money for the purchase of a lease. While this DEIS cannot address project-specific activities in detail, it could and should go much further in recognizing the importance of the decision at hand and the environmental impacts that would likely result. This DEIS should also explore under what realistic circumstances the Forest Supervisor might disapprove development of an area altogether at the SUPO decision, and under what realistic circumstances the lessee would be entitled to compensation if an area were disapproved for development.

Chapter 2:Alternatives

SECTION 2.2: SCOPING

Thank you for a very informative description of the scoping process.

SECTION 2.3: ISSUES

Thank you for a very informative description about the comments received during he scoping process.

SECTION 2.4: ALTERNATIVES

Please restructure the alternatives to provide more flexibility. As they stand now, alternative 1 is the only alternative that allows for the elimination of any High Oil and Gas Potential Area (HOGPA) from consideration. This "all-or-nothing" approach does a disservice to the decision-maker because some HOGPAs may be suitable for leasing while others may not be due to unmitigable environmental impacts. Please adjust the DEIS so that it provides sufficient flexibility, backed by adequate environmental information, to identify and eliminate certain HOGPAs if the adverse environmental impacts outweigh the benefits of development. We believe the Figueroa Mountain and La Brea HOGPAs would qualify, provided that adequate environmental information is made available.

Regarding Table 2-1 on page 2-15, we offer the following considerations. First, the burial depth of pipelines should take into consideration the rate of surface erosion so that burial depths would be deeper in highly erosive areas. Otherwise, unplanned exposure of pipelines would likely occur during operations. Also, please adjust this assumption to explain if USFS policy requires removal of buried pipelines after their use has terminated. If abandonment in-place is permitted, then burial depth should be sufficiently deep in highly erosive areas (such as stream beds) to avoid daylighting and subsequent environmental damage (e.g., destruction of stream banks, damming and subsequent flooding). We also recommend that construction of pipelines be assumed to occur in a manner that maximizes shared use of pipeline corridors and maximizes pipeline transportation of all gas and liquid products (i.e., natural gas, natural gas liquids, and crude oil). Lastly, we believe the last row of this table substantially underestimates the time and effort typically involved in land reclamation, which based on our experience, typically includes remediation of contaminated soils and, occasionally contaminated water.

Subsection 2.4.6.4 provides an inadequate explanation for dismissing a "no new access" alternative from further consideration in the DEIS and appears to dismiss alternatives 4a and 5a altogether from further consideration. First, we again request the DEIS be organized in a manner that does not unduly reduce the flexibility of the Forest Supervisor to make a decision that is fully informed by environmental information. The "all-or-nothing" organization of the DEIS with regard to HOGPAs does a disservice to the decision-making process. Do not eliminate the option for the Forest Supervisor to remove one or more HOGPAs from

further consideration for leasing due to extenuating environmental circumstances, while allowing other HOGPAs to be open to leasing.

Second, the current explanation inaccurately implies that, if new development without new access could result in unmitigable significant impacts to scenic and recreational resources since it would be directly visible from the transportation system, then new development with new access would avoid such unmitigable significant impacts. A more accurate explanation would recognize that:

(1) New development in some areas could occur without new access and not result in unmitigable significant impacts to scenic and recreational resources where the existing access is not used by the public to access scenic and recreational resources; and
(2) Providing new access does not remedy the issue. Rather, in some or all cases, new access also results in unmitigable significant impacts to scenic and recreational resources because (a) it also relies, in part, on existing roads (e.g., Figueroa Mountain Area) and (b) it expands the transportation system, bringing to the new oil and gas development, both of which also could result in unmitigable significant impacts to scenic and recreational resources.

We request that this section be re-written with more supportable analysis and that the option of eliminating certain HOGPAs from consideration for new leasing be carried forward should new access result in unmitigable significant impacts that outweigh the benefits of developing the area.

SECTION 2.4: MODELING OF ALTERNATIVES CONSIDERED IN DETAIL

We request deletion of the BOE, since it has already been inappropriately used in workshops to imply that both oil and gas production from Los Padres National Forest can be used to provide electricity to California. The gas could be used to generate electricity in California only if developed and shipped to a public utility's transmission system, which is unlikely given the high cost of building the pipeline compared to the small amount of reserves (and therefore return on investment) projected for most HOGPAs. The oil, which is more likely to be developed and marketed, is not used to generate electricity, but rather to refine into gasoline and other byproducts or into asphalt.

Additionally, we request revision of the models because the current modelling is based on the incorrect and gravely outdated assumptions that extended reach technology is limited to a distance of ½ mile from the drill-site. Rather, current capabilities can reach as far as 5 miles from the drill-site (see the attached figure). The Department of the Interior's Minerals Management Service frequently explains how this technology substantially reduces environmental impacts by reducing the number of drill-sites required to develop oil and gas reserves. Fewer drill-sites would reasonably result in fewer miles of new roads and pipelines, further reducing unnecessary disturbance to the surface of forest lands. Moreover, current technology allows larger buffer zones between environmentally sensitive resources such as anadromous fish streams and drilling activities, including service roads. Several examples of the use of such technology exist locally. Both Unocal and ExxonMobil have been able to reduce the number of drill-sites originally projected to develop offshore reserves. Several other offshore lessees are now proposing to develop undeveloped fields from existing platforms, situated over producing fields because extended reach technology now allows such development from a distance up to five miles.

Decisions about leasing based need a broader base of supporting information rather than reliance on outdated oil and gas technologies that are considerably more damaging to the environment. This oversight alone provides sufficient justification to revise and re-circulate the DEIS.

Chapter 3: Affected Environment

SECTION 3.1: PHYSICAL ENVIRONMENT

1. As noted in other comments, the decision and act of leasing entails investment-backed expectations by lessees due to the large sums of money they pay to the federal government. Therefore, there is a clear expectation that leasing will result in development, provided that commercial quantities of oil are discovered. The probability of such discoveries are heightened in this decision document because it identifies HOGPAs.

   Given this context, we question the conclusion drawn in the second full paragraph on page 3-16 that air emissions cannot be predicted at this time and, as a result, a conformity determination lies beyond the scope of the DEIS. In fact, the DEIS does predict air emissions (see Table 4-3, for example). We request you revise this section and rely on the best predictions available.

2. We question the treatment of oil and gas development as being a short-term impact, as it is classified in several subsections (e.g., subsection 4.3.2.5.5) that compare short term impacts to long-term impacts. Other sections of this DEIS seemingly contradict this representation, instead showing oil and gas development in Los Padres National Forest to be a long-term activity that dates back over a century. This long-term use may preclude other uses such as expanded recreational use of a particular area, resulting in a long-term impact.

3. Subsection 3.3.2, Socioeconomics/Growth, inappropriately ignores data for Kern County even though the largest projected development resulting from leasing HOGPAs would result in the South Cuyama area, and the Traffic/Access analysis (subsection 3.3.4) indicates all commuter and commercial traffic serving South Cuyama field development to originate and terminate in Kern County. It stands to reason that, given the proximity of the Suoth Cuyama field to support services in Kern County, as well as proximity to experienced oil and gas workers, socioeconomics and growth is more attributable to Kern County than Santa Barbara County. Please re-write this section, giving appropriate attention to socioeconomic characteristics of Kern County.

4. Subsection 3.3.2, Socioeconomics/Growth. The DEIS was issued in late 2001; however, the most current data used in this subsection 1995, over six years old. Please update this section with relevant, current data, including use of 2000 census data.

5. Subsection 3.3.6, Oil and Gas Development. The first paragraph of subsection 3.3.6.4 (Industrial Infrastructure) is substantially inaccurate, thereby providing a very inaccurate assessment of the costs and benefits of opening new forest lands to oil and gas development. We have verified with staff of the California Coastal Commission that no refineries in California have been idled for lack of crude oil. Refineries are temporarily idled for two reasons: (1) planned maintenance (called turnarounds), and (2) unplanned repairs, largely due to unexpected accidents that have damaged key equipment and plants. We have also confirmed that there is no excess capacity that results in unfilled demand. Such circumstances would result in investigations by the Attorney General's office and clearly be prevalent in the media (i.e., market manipulation to raise the price of crude oil products).

   Rather, the California oil market, and the heavy crude market in particular, has been characterized by low and unstable oil prices since 1986, when Saudi Arabia terminated its role as a swing supplier.[5]

[5] See, for example, U.S. Department of Energy, Energy Information Agency, *Oil Market Basics*, section titled "Global Oil Supply by Region (eia.doe.gov). "The higher oil prices of the 1970s and early 1980s afforded a strong economic incentive to explore for

This situated was further exasperated for California producers when Congress repealed the Windfall Profits Tax as part of the Omnibus Trade and Competitiveness Act of 1988. This action resulted in increased delivered of Alaska North Slope (ANS) crude oil to the West Coast, instead of more distant markets, including the Virgin Islands and Puerto Rico, and the Gulf of Mexico and East Coast.[6]

The ANS crude displaced California producers to some extent, many of which either plugged and abandoned several wells prematurely (in the sense that more oil could have been extracted under better economic circumstances) or shut them in while awaiting oil priced to recover and stabilize for a period of time. Although oil prices have spiked occasionally, as in 2001, they have not stabilized at a higher price for any substantial amount of time to re-instill confidence in California's domestic upstream market. The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources reports 21,989 shut-in wells statewide during 2001, 9,034 of which have been shut-in for 5-10 years, 5,477 of which have been shut-in for 10-15 years, and 7,478 of which have been shut-in for more than 15 years.

Former Governor Pete Wilson, with support from the state legislature and California Energy Commission, sought to lift the export ban on ANS oil so that it would flow to markets in East Asia rather than California, thereby re-generating more demand for California's domestic production. The ban was lifted in 1996.[7] As shown in the table below, however, the anticipated benefit to California producers did not materialize. Instead, the decrease in ANS crude oil to California was filled with imports from foreign sources, as crude oil prices remained low and unstable.

The data presented in the following table does not support the assumption presented in subsection 3.3.6.4 that new production from Los Padres National Forest would displace feedstock from foreign markets. The increase in foreign sources of oil, rather than California's domestic sources, likely results from both price and quality of oil factors. At this point, there is no apparent evidence that opening new onshore areas of California to oil development will reverse this trend. Any assumption to the contrary in the DEIS requires adequate supporting data and analysis.

---

and produce oil, and production rose in many areas. At the same time, oil demand declined – the expected response to the high prices. Saudi Arabia became the "swing supplier," reducing its production as necessary to balance supply and demand. Its rejection of that role in mid-1985 – its output had fallen to about 25 percent of its 1980 peak – brought the full force of the supply/demand imbalance onto markets and resulted in the price collapse of 1986. Prices did not return to the pre-1986 level until the Persian Gulf conflict of 1990-91, and then only briefly. When, in 1998, Asian demand faltered with the region' s economies, and northern hemisphere demand faltered with the warm winter, the high production levels resulted in another price collapse. The market reaction in 1998, however, was not the same as in 1986 – demand did not recover as quickly and supply did not fall as quickly. Hence, the low price period lasted longer and showed lower prices in 1998 than in 1986. In early 2000, oil prices exceeded the levels of the Persian Gulf conflict in nominal terms. Sharp as the price increases were in early 2000, however, crude oil prices remained less than half of the early 1980s peak in terms of real buying power." Prices subsequently collapsed again, showing the volatility of the market and serving as additional disincentive for California producers to bring wells back into production. Also see Rognvaldur Hannesson, *Petroleum Economics* (Westport, Conn: Quorum Books, 1998), page 8-9.

[6] See, for example, U.S. Department of Commerce, Bureau of Export Administration, *Report to Congress on U.S. Crude Oil Exports*, August 1989, page III-22: "While in effect, the Windfall Profits Tax allowed the integrated firms (Exxon and Sohio) to deduct the incremental cost of shipping ANS crude to the Gulf Coast from the federal and state tax liabilities. This resulted in a substantial reduction in transportation charges. However, once the WPT subsidy became ineffective because of substantially lower oil prices in 1986, the integrated firms had a reduced incentive to sell ANS crude on the Gulf Coast. The result is that today the integrated firms prefer to sell ANS crude on the West Coast because of the lower transportation charges."

[7] The ban was eliminated in April 1996, and shipments began one month later with the first (a 1.3 million barrel contract) sent by British Petroleum to the Chinese Petroleum Corporation of Taiwan. Additional contracted shipments to two South Korean firms followed with ANS exports averaging 70,000 barrels per day from July 1996 to June 1997 (The Oil Daily 9-24-97, p.3). BP also completed an agreement with China' s petroleum company (SINOPEC) for 7.2 million barrels through 1998 (an average of 15,000 barrels/day) and is currently exporting 80,000 barrels per day, or 15 percent, of its Alaska production to Taiwan and Korea (NEWS IN BRIEF, North America, Petroleum Economist, London, UK, *Petroleum Economist* Jan. 1998, p. 51).

SOURCES OF OIL SUPPLIED TO CALIFORNIA REFINERIES Source (millions of barrels)							
Year	**Alaska**	**California**	**Foreign**	**TOTAL**	**% Alaska**	**% California**	**% Foreign**
1982	196,462	365,962	33,553	595,977	33	61	6
1983	189,538	377,068	47,991	614,597	31	61	8
1984	210,450	369,225	53,262	632,937	33	58	8
1985	210,647	398,280	35,408	644,335	33	62	5
1986	237,508	403,477	36,877	677,862	35	60	5
1987	260,843	386,676	33,395	680,914	38	57	5
1988	306,247	365,354	37,217	708,818	43	52	5
1989	328,407	337,489	46,707	712,603	46	47	7
1990	320,873	336,083	39,454	696,410	46	48	6
1991	316,115	336,620	30,723	683,458	46	49	4
1992	299,652	331,638	33,056	664,346	45	50	5
1993	285,565	342,762	43,359	671,686	43	51	6
1994	297,017	319,193	49,192	665,402	45	48	7
1995	264,520	320,824	56,864	642,208	41	50	9
1996	268,804	316,203	63,996	649,003	41	49	10
1997	244,444	322,198	78,108	644,750	38	50	12
1998	221,983	317,817	104,653	644,453	35	49	16
1999	188,743	306,856	140,599	636,198	29.7	48.2	22.1
2000	163,233	326,371	169,105	658,709	24.8	49.6	25.7

6. Subsection 3.3.8, Safety and Hazards, does not appear to consider risks of transporting natural gas liquids by road/highway. Nor does it touch upon potential hazards of hydrogen sulfide. Please address such hazards.

Chapter 4: Environmental Consequences:

We strongly disagree with the premise proffered in the first paragraph of this section, particularly the supposition that "*… no ground-disturbing activities would result from the leasing decisions that this document addresses.*" (Page 4-5.) Essentially, a decision to lease is tantamount to an approval for oil and gas development. We offer opinions of the U.S. Supreme Court and the National Research Council as evidence. These opinions were rendered in consideration of the adequacy of environmental information for OCS oil and gas decisions, but are equally applicable to oil and gas decisions in Los Padres National Forest.

We refer you to the National Research Council's report, titled *The Adequacy of Environmental Information for Outer Continental Shelf Oil and Gas Decisions: Florida and California*, 1989. Pages 6-7. We quote at length from a critical analysis about the separation of leasing from development and production:

One matter of underlying concern to the committee and panels involves the phasing of OCS leasing, exploration, development, and production as currently practiced. Studies by MMS's Environmental Studies Program and the assessment found in DOI's environmental impact statements have focused almost entirely on the lease sale stage. Two fundamental problems result from this practice. First, the exact location of oil and gas reservoirs is unknown at the prelease state. As a result, it is impossible to identify the specific future location of facilities and to predict specific environmental impacts of development. Equally important, the uncertainty about actual oil and gas reserves at the prelease state makes it difficult to balance the national benefits of production against the environmental risks. Second, by the time producing reservoirs are identified, the industrial lessor typically has committed enormous amounts of money to the lease. DOI [Department of the Interior] *has never implemented the procedures provided in the OCS Lands Act Amendments of 1978 (OCSLAA) for lease cancellation, and so a decision to lease is generally perceived as*

tantamount to a decision to develop and produce, provided that commercial reserves are found in a lease area. … As DOI's EISs point out, it is often not possible to do adequate assessment before leasing. However, once it does become possible to generate the needed information and analysis, a decision not to proceed with development has already been effectively precluded.

*The perception is widespread that leasing implies development and production if commercial quantities of hydrocarbon resources are found. In a 1984 Supreme Court decision (*Secretary of the Interior vs. California, *104 S. Ct. 656), the majority wrote: "… a lease sale is a crucial step. Large sums of money change hands, and the sale may therefore generate momentum that makes eventual exploration, development, and production inevitable." The minority wrote: "Approval for exploration and development by the lessee is obviously the expected and intended result of leasing; if it were not, the Secretary would not bother to lease and the lessees would not bother to bid." In spite of provisions for a " focusing of analysis and review [that] will occur at later stages in lease sale planning in most states doubt that adequate analysis will be performed, and that decision alternatives will be preserved through the process" (Hershman et. Al., 1988). Many local, state, and federal government officials have expressed similar points of view to the OCS committee and panels. Furthermore, several MMS officials have informed the committee that out of hundreds of OCS development and production plans submitted by industry since 1978, although modifications have been required, none has ever been denied by the Department of the Interior. …*

Unless you can show the phases decision-making process can and does promote denial of development after an areas is leased should the significant environmental impacts outweigh the benefits of oil and gas development from the area, then the premise of this section is incorrect, and misinforms the decision-making process.

SECTION 4.3.2: AIR QUALITY

Table 4-6 does not provide sufficient information to distinguish one alternative from another. Rather, it has the reverse affect – its over-simplification suggests no substantial difference in alternative, including the no-leasing option. Please revise to include more details, including amount of estimated emissions, as provided in previous tables of this section so that this table, which concludes the section with a comparison of alternatives, provides adequate information.

SECTION 4.4.2: BIOLOGICAL RESOURCES

1. Sensitive Species Impacts: The DEIS should analyze the impacts of the proposed project on sensitive species within the project area. Of particular concern are the areas surrounding Cuyama, New Cuyama and Figueroa Mountain. Two U.S. Forest Service documents indicate that there are clusters of endangered, threatened and sensitive species of flora and fauna within those areas. The EIS should review these sources, noted below, and assess any potential threats to sensitive species posed by the project. The sources are:

"Southern California mountains and foothills assessment: Habitat and species conservation issues." , J.R. Stephenson and G. M. Calcarone, General Technical Report GTR-PSW-172. Pacific Southwest Research Station, Forest Service, USDA: Albany, CA.

"Southern California Conservation Strategy Province Consultation Package" , United States Department of Agriculture. 2000. USFS, Southern California Province: San Diego, California.

2. Road Widening Impacts: Please note that the impacts of any road widening necessary for construction, production and maintenance of the Project should be analyzed in the EIS. In particular, this analysis should assess the loss of habitat, impacts to sensitive species, slope stability, erosion, introduction of hazardous materials, increased runoff of toxic materials (oil and fuel) into soil and waterways, noise, and loss of aesthetic/visual resources associated with the use of Figueroa Mountain

Road by large trucks. This road is narrow, winding and for many sections has canopies of mature native trees which could be degraded or altered as a result of large truck traffic.

SECTION 4.5.2: SOCIOECONOMICS / GROWTH

This section inappropriately ignores consideration of socioeconomics and growth in Kern County. Although no HOGPAs are located in Kern County *per se*, the South Cuyama HOGPA has a much more significant socioeconomic affect on Kern County than Santa Barbara County, given South Cuyama's proximity to housing, oil and gas workforce, and supporting industries located in Kern County. In fact, Section 4.5.4, Traffic/Access, correctly connects both industrial and workforce traffic associated with South Cuyama oil and gas development to locations in Kern County, not Santa Barbara County. This error is particular prominent in Table 4-29, which incorrectly allocates benefits to Santa Barbara County (e.g., personal income, employee compensation, indirect business taxes, and employment) that more likely accrue to neighboring Kern County, as the analysis in section 4.5.4 suggests. Please revise the DEIS to attribute more discussion to Kern County socioeconomics, rather than Santa Barbara County.

SECTION 4.5.3: SOCIAL IMPACTS

Please address the extent to which extended reach drilling technology, which can reach as far as 5 miles from the drill-site, can reduce impacts.

SECTION 4.5.4: ACCESS / TRAFFIC

Mr. Court Eilertson, Senior Transportation Planner, of the County's Public Works Department, Roads Division, provides the following comments.

1) The potential mixing of recreational and oil & gas related tanker truck traffic in the regions described in the DEIS is an issue that is not desirable from a traffic engineering/transportation planning standpoint. This point should be further elaborated upon in the DEIS to better inform the decision-making process. Additionally, if specific sites are to be pursued in terms of development, a more detailed analysis should be prepared to account for specific conditions, in addition to mitigation measures for each.

2) The traffic index (TI) of many of these roads (i.e. Happy Mountain Road, Tepusquet Road, etc.) may not be able to handle the types of vehicles associated with these type of heavy tanker and other vehicles. This constraint would be an issue that would require that our department's review and comment accordingly if any of these sites were to be considered for development.

3) The width of the roads discussed in the document are typically sub-standard, and would need to have significant improvements made to them to be able to accommodate the mix of recreational and oil & gas related traffic. Such improvements at many of these locations are infeasible due to steep grades, drainage, and other issues.

Please contact Mr. Eilertson at (805) 568-3042 if you wish to discuss these points further.

SECTION 4.5.5: LAND AND RESOURCE MANAGEMENT PLANS

Road Widening Impacts: Please note that the impacts of any road widening necessary for construction, production and maintenance of the Project should be analyzed in the EIS. In particular, this analysis should assess the loss of habitat, impacts to sensitive species, slope stability, erosion, introduction of hazardous materials, increased runoff of toxic materials (oil and fuel) into soil and waterways, noise, and loss of

aesthetic/visual resources associated with the use of Figueroa Mountain Road by large trucks. This road is narrow, winding and for many sections has canopies of mature native trees which could be degraded or altered as a result of large truck traffic.

SECTION 4.5.6: OIL AND GAS DEVELOPMENT

See comments expressed above regarding subsection 3.6.6.

SECTION 4.5.7: SCENIC RESOURCES

Please address the extent to which extended reach drilling technology, which can reach as far as 5 miles from the drill-site, can reduce impacts on scenic resources. Also address removal of the Figueroa Mountain Area from consideration as a mitigation.

SECTION 4.5.8: SAFETY AND HAZARDS

Please address onsite and offsite hazards of transporting natural gas liquids (which quality as hazardous materials) via county roads and highways. Also address any risk associated with sour gas operations. Additionally, with regard to fire hazards, the DEIS should analyze the potential fire hazards associated with any new human activity, especially those introducing new combustible materials and any incendiary devices (including internal combustion engines) into areas with native species and their habitat. Any new fire hazard to the area should be fully mitigated. Any such mitigation involving removal of vegetation for fuel management purposes should consider the concomitant effects of habitat loss, erosion and visual impacts.

SECTION 4.5.9: RECREATION

Please address the extent to which extended reach drilling technology, which can reach as far as 5 miles from the drill-site, can reduce impacts on scenic resources. Also address removal of the Figueroa Mountain Area from consideration as a mitigation.

Exhibit B

Summary of Oil & Gas Leasing Options

A. ALTERNATIVE 1

1. Continues existing leases with no new leasing.
2. This alternative represents the DEIS baseline according to NEPA.
3. Results in the least amount of new wells, drillsites, roads, and pipelines.

REASONABLY FORSEEABLE DEVELOPMENT FOR ALTER

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	0	0	0	0	0	0.0	
San Cavetano	0	1	0	1	0	0.0	
Sespe	1	4	0	5	0	0.0	
Rincon Creek	0	0	0	0	0	0.0	
South Cuyama	2	12	2	16	2	1.0	
La Brea Canyon	0	0	0	0	0	0.0	
Figueroa Mountain	0	0	0	0	0	0.0.	
Lopez Canyon	0	0	0	0	0	0.0	
Monroe Swell	0	0	0	0	0	0.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	3	17	2	22	2	1.0	

B. ALTERNATIVE 2

1. Continues existing leases along with new leasing of all lands not withdrawn from mineral entry.
2. Withdrawn lands account for 1,008,877 acres, including: designated Wilderness, Santa Ynez Watershed, and Bi
3. The Remaining 966,867 acres represents “lease study area.”
4. Subject to BLM’s Standard Lease Terms
5. This alternative results in the most number of new wells, new drillsites, new service roads, and new pipelines as
6. Assumes no development outside of areas with high oil and gas potential

REASONABLY FORESEEABLE DEVELOPENT FOR A

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	1	6	1	8	1	5.0	
San Cavetano	4	32	3	39	6	4.0	
Sespe	5	40	4	49	7	2.0	
Rincon Creek	1	2	0	3	1	1.0	
South Cuyama	2	35	4	41	6	3.0	
La Brea Canyon	1	4	0	5	1	1.0	
Figueroa Mountain	1	1	0	2	1	1.0	
Lopez Canyon	1	1	0	2	1	1.0	
Monroe Swell	1	1	0	2	1	1.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	17	122	12	151	25	19.0	

C. ALTERNATIVE 3

1. Continues existing leases along with new leasing of all lands not withdrawn from mineral entry, **but in accorda**
2. Applicable Forest Plan Restrictions
   a. Protection of watershed resources
      i. No surface occupancy (NSO) on:
         - extremely unstable slopes over 20%
         - active landslides
         - soils w/ very high erosion hazard ratings
         - slopes over 50%
         - within Casitas Reservoir Watershed
   b. Protection of biological resources
      i. Limited Surface Occupancy (LSO) on:
         - Critical Calif. Condor habitat unless USFWS advises for NSO
         - Peregrine falcon nesting habitat
         - Grassland/sagebrush habitat in San Joaquin kit fox range
         - Up to NSO in 25-acre habitat next to northern goshawk nesting sites
         - Up to NSO in suitable Smith's blue butterfly habitats
         - Up to NSO in potential habitats for sensitive plant species
      ii. NSO in all designated research natural areas & botanical areas
      iii. Timing Limit (LT) Calif. Spotted owl habitat
   c. Protection of recreation
      i. NSO on:
         - w/i ½ mile of developed recreational sites
         - areas designated semi-primitive non-motorized ROS class
         - all designated and study Wild & Scenic River corridors, w/i ¼ mile
      ii. LSO on other Recreation Opportunity Spectrum classed areas
   d. Protection of scenic resources
      i. NOS on:
         - Where O&G facilities (except linear facilities) would be visible & in foreground (w/i ½ mile)
         - Chamise dominated chaparral, grassland, barren area, coastal sage scrub, or great basin sage s pinion juniper, then ½ mile)
         - Slope in excess of 55% gradient

REASONABLY FORESEEABLE DEVELOPENT FOR ALTERN

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	0	0	0	0	0	0.0	
San Cavetano	2	4	0	6	1	0.1	
Sespe	3	10	1	14	3	1.0	
Rincon Creek	1	1	0	2	1	0.0	
South Cuyama	2	30	3	35	5	2.0	
La Brea Canyon	0	2	1	3	1	0.0	
Figueroa Mountain	0	1	0	1	0	0.0	
Lopez Canyon	1	1	0	2	0	0.0	
Monroe Swell	0	0	0	0	0	0.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	9	49	5	63	11	3.1	

D. ALTERNATIVE 4

1. Continues existing leases along with new leasing of all lands not withdrawn from mineral entry, but in accordance with the requirements of the Forest Plan (i.e., Alt. 3) **and with additional stipu impacts**.
2. Examples of additional stipulations:
   a. NSO, except for approved road crossings, w/i 300 feet of anadramous fish streams or w/i 150 feet of all
   b. For any new leases between ½ mile and 1 mile of existing developed recreational sites, lessee rehabilitat
3. This alternative results in the lease amount of surface disturbance among the new leasing alternatives.

REASONABLY FORESEEABLE DEVELOPENT FOR A

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	0	0	0	0	0	0.0	
San Cavetano	2	4	0	6	1	0.1	
Sespe	3	10	1	14	3	1.0	
Rincon Creek	1	1	0	2	1	0.0	
South Cuyama	2	24	2	28	4	2.0	
La Brea Canyon	0	2	1	3	1	0.0	
Figueroa Mountain	0	1	0	1	0	0.0	
Lopez Canyon	1	1	0	2	0	0.0	
Monroe Swell	0	0	0	0	0	0.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	9	43	4	56	10	3.1	

E. ALTERNATIVE 5

1.
A hybrid of Alternatives 3 and 4 that results in the same amount of surface disturbance as alternative 3.

REASONABLY FORESEEABLE DEVELOPENT FOR A

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	0	0	0	0	0	0.0	
San Cavetano	2	4	0	6	1	0.1	
Sespe	3	10	1	14	3	1.0	
Rincon Creek	1	1	0	2	1	0.0	
South Cuyama	2	30	3	35	5	2.0	
La Brea Canyon	0	2	1	3	1	0.0	
Figueroa Mountain	0	1	0	2	0	0.0	
Lopez Canyon	1	1	0	2	0	0.0	
Monroe Swell	0	0	0	0	0	0.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	9	49	5	63	11	3.1	

F. ALTERNATIVES 4A AND 5A

1. Adapt Alternatives 4 and 5 to give emphasis to inventoried roadless areas, providing consistency with the Road
Alternatives 4a and 5a result in less surface disturbance.

REASONABLY FORESEEABLE DEVELOPENT FOR ALTERN

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	0	0	0	0	0	0.0	
San Cavetano	2	4	0	6	1	0.0	
Sespe	3	10	1	14	3	1.0	
Rincon Creek	1	1	0	2	1	0.0	
South Cuyama	1	4	0	5	1	0.0	
La Brea Canyon	0	0	0	0	0	0.0	
Figueroa Mountain	0	1	0	1	0	0.0	
Lopez Canyon	1	1	0	2	0	0.0	
Monroe Swell	0	0	0	0	0	0.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	8	21	1	30	6	1.0	

REASONABLY FORESEEABLE DEVELOPENT FOR ALTERN

High Oil & Gas Potential Areas	Number of New Wells Estimated				Additional Amount of S Disturbance Estimat		
	Dry	Produce	Inject	Total	# of Pads	Roads (miles)	
Piedra Blanca	0	0	0	0	0	0.0	
San Cavetano	2	4	0	6	1	0.0	
Sespe	3	10	1	14	3	1.0	
Rincon Creek	1	1	0	2	1	0.0	
South Cuyama	1	4	0	5	1	0.0	
La Brea Canyon	0	0	0	0	0	0.0	
Figueroa Mountain	0	1	0	1	0	0.0	
Lopez Canyon	1	1	0	2	0	0.0	
Monroe Swell	0	0	0	0	0	0.0	
Non-HOGPA Area	0	0	0	0	0	0.0	
Total	8	21	1	30	6	1.0	